

Emmanuel Niyibizi

Teacher Educators' Subjective Theories about Quality Teaching

A Contribution to Educational Quality by a Case Study of Rwanda



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Directrice de thèse: Prof. Dr. Barbara Drechsel

Directrice de thèse: Prof. Dr. Miriam Hess

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Gutachterin: Prof. Dr. Barbara Drechsel

Gutachterin: Prof. Dr. Miriam Hess

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Supervisor: Prof. Dr. Dr. h.c. Annette Scheunpflug

Supervisor: Prof. Dr. Barbara Drechsel

Supervisor: Prof. Dr. Miriam Hess

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Summary

The study explores subjective theories of teacher educators about quality teaching in the context of their profession. It is undertaken as a contribution to the global scientific, political, and practical discourse of educational quality. Despite the drastic change in access to education due to international commitments like EFA, MDGs and SDGs, (cfr. UNESCO, 2015), education quality in terms of limited competences (World Bank, 2018; UNESCO, 2014) is still an issue of concern worldwide. In Rwanda, the ambivalence of increased access and participation but low quality is likewise observed (Bashir et al., 2018; World Bank, 2018; HEC, 2015). The pedagogical policy-practice gap – advocating for learner-centred education in policy but the persistence of the traditional pedagogy in practice – remains a challenge for educational quality in Rwanda (Otara et al., 2019; van de Kuilen et al., 2019). Quality education is at the heart of SDGs (UNESCO & MGIEP, 2017) and quality teaching and teacher education are irreplaceable pillars in that journey (UNESCO, 2014; Vavrus et al., 2011). Particularly, teacher educators are the driving forces due to their role in the initial and continuous teacher education (EU, 2013; Loughran, 2006). More on that and without disregarding other factors, subjective theories held by teachers and/or teacher educators are cross-dimensional in educational quality since they can be success or risk factors for teaching and teacher education (Martinez et al., 2017; Brinkmann, 2016). Therefore, once made explicit, subjective theories can serve as a basis for educational quality improvement. Though there is extensive scientific literature in the Global North, research on subjective theories of both teacher and teacher educators is quite limited in the Global South including Rwanda.

As a contribution to that research gap, this study set out to answer the general research question: What are teacher educators' subjective theories about quality teaching in the context of their profession? The sub-questions are: What are teacher educators' subjective theories about quality teaching? What are teacher educators' subjective theories about how to train teachers for quality teaching? Due to its exploratory nature, a qualitative approach using semi-structured interviews was used to collect data from 32 teacher educators theoretically sampled. Interviews were transcribed and translated (from Kinyarwanda and French) to English, coded

and inter-coded in collaboration with an interpretation group, through an iterative deductive-inductive process for intersubjective quality control. Through the abductive process, results were generalised by identifying seven criteria as comparative horizons which led to the generation of the typology of subjective theories held by teacher educators. The identified comparative horizons include the purpose of teaching, understanding of teaching, teacher quality, the aim of teacher training, understanding teacher professionalisation as well as theoretical and practical teacher training. Accordingly, the generated ideal typology included four types of subjective theories: (1) formalities by compliance, (2) knowledge by transmission, (3) behaviour by imitation, and (4) competences by co-construction. In the perspective of the subjective focusing on formalities by compliance, quality teaching and teacher training are about unquestionably complying with pedagogical procedures (i.e., strict steps of the lesson), administrative (i.e., fulfilling pedagogical documents) and normative formalities (i.e., subjectively defined clothing standards). Concerning the subjective theories oriented to behaviour by imitation, interviewees believe that students learn, and student teachers learn to teach by unreflectively imitating the behaviour of teachers and teacher educators. In the type of subjective theories oriented to knowledge by transmission, quality teaching and teacher training are about the transmission of the immutably prescribed curricular knowledge. Finally, subjective theories oriented to competences by co-construction, quality teaching and teacher training are about developing competences through active, interactive and reflective approaches.

Reflected from the scientific discourse on teacher education, the study enriches science in the different hypothetical perspectives including but not limited to the multiplicity of subjective theories beyond the dichotomisation of transmission versus constructivist (Fives et al., 2015; OECD, 2009) and plausibility of the possibility of simultaneously holding multiple subjective theories by one teacher educator (Snider & Roehl, 2007; Chen et al., 2009). Moreover, the generated types are seen as either success or risk factors for quality teacher education (Lunenberget al., 2014; Korthagen, et al., 2006), teacher educators' professional development (de Vries et al., 2012:213), inclusive education (Dewsbury & Brame, 2019; Ain-

scow, 2011), digitalisation of education (Sang et al., 2010) and global education (Scheunpflug, 2011). This study stimulates further research including for example the narrative biographical studies to explore the development of subjective theories as well as quantitative study to examine the distribution of subjective theories among a generalisable sample of teacher educators. Moreover, reflections of subjective theories in both content and approach of teacher education are recommended for practice.

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Acronyms

BAGSS	Bamberg Graduate School of Social Sciences
DAAD	Deutscher Akademischer Austauschdienst (German Academic Exchange Service)
EFA	Education For all
ESSP	Education Sector Strategic Plan (Rwanda)
EU	European Union
HEC	Higher Education Council
JICA	Japan International Cooperation Agency
MDGs	Millennium Development Goals
MGIEP	Mahatma Gandhi Institute of Education for Peace and Sustainable Development
MINEDUC	Ministry of Education (Rwanda)
OECD	Organisation for Economic Cooperation and Development
PGDCTLHE	Post-Graduate Certificate of Teaching and Learning in Higher Education
PIASS	Protestant Institute of Arts and Social Sciences
REB	Rwanda Basic Education Board
SDGs	Sustainable Development Goals
SSA	Sub-Saharan Africa
TTC	Teacher Training College
TTC	Teacher training College
UKAID	United Kingdom Agency for International Development
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
WB	World Bank

1 Introduction

In the study at hand, exploring teacher educators' subjective theories about quality teaching in the context of the profession in Rwanda, was embedded in the overall international political, scientific, and practical reflections on educational quality improvement in post-2015 era. In this orientation, quality education is at the heart of achieving Sustainable Development Goals (SDGs) (UN, 2018; Schrieber & Siege, 2016). Despite the multiplicity of interconnected factors of educational quality, quality teachers and teaching remain at the forefront (World Bank, 2018; UNESCO, 2015, 2014, 2004; Hattie, 2012). The quality of the teacher is largely dependent on the quality of teacher education as it can be facilitated by professional teacher educators (Nilsen, Gustafsson & Blömeke, 2016; Baumert & Kunter, 2013; Vavrus, Thomas & Bartlett, 2011). Teacher educators determine the quality of teacher education through their intervention in teacher professional development both at initial and in-service levels (EU, 2017: 4). Moreover, teachers' subjective theories have the likelihood of influencing teachers' decisions and behaviours concerning teaching (Martinez, Castro, Vystrcilova & Magliacci, 2017; Voss, Kleickmann, Kunter & Hachfeld, 2013). This implies that subjective theories held by teacher educators about quality teaching and teaching teachers are likely to significantly influence the quality of the education system. Unfortunately, empirical knowledge on subjective theories of teacher educators about quality teaching and teaching teachers is limited in educational discourse particularly in the Global South.

In the first chapter of the thesis, I start by describing the context of educational quality with focus on quality teaching and teacher education at the international, regional, and national levels (1.1) and frame the research problem underlying this study (1.2). Respectively, this introductory chapter of the study ends with research questions (1.3), an overview of research methods and methodology (1.4), the significance of the study (1.5), and the structure of the thesis (1.6).

1.1 Context of the study

The study of exploring subjective theories of teacher educators about quality teaching and teaching teachers is framed in educational research, particularly in educational quality. With this regard, the overview of international educational development in relation to educational quality is briefly described (1.1.1). Thereafter, a synopsis of the contribution of subjective theories to the educational quality reflections is summarised (1.1.2). Moreover, subjective theories are recognized to be context-bound (Martinez et al., 2017; Li, 2016). Therefore, the context of teaching and teacher education in Sub-Saharan Africa (1.1.3) and Rwanda (1.1.4) are over-viewed. Teaching and teacher education in Rwanda will be outlined in chapter two.

1.1.1 International educational development

Since the end of the first half of 20th century, education is internationally recognised as a basic human right (UN, 2015: 54, 1948). Four decades later, the results were unsatisfactory. Millions of children especially in developing countries did not have access to basic education. The World Conference on Education for All in 1990 (Jomtien, Thailand) observed shortcomings concerning access, quality and equity in education as international issues to be addressed (UNESCO, 1990). The same report shows that, despite the commitments of governments and international organizations, challenges remained alarming though slightly improved. In the World Education Forum (Dakar, Senegal), the same concerns were re-framed in six goals (Education for All, EFA) to achieve in 2015 (UNESCO, 2000). The evaluation of the achievements of EFA shows that access to education has drastically improved worldwide. For example, UNESCO (2015) shows that primary school net enrolment rates raised by 20% in 17 countries of which 11 are from Sub-Saharan Africa (p. xii). However, educational quality and equity remains alarming issues to address. For example, 250 million children who complete primary schooling without basic competences in numeracy and literacy as signs of a global learning crisis (WB, 2018; UNESCO, 2014). Moreover, disadvantaged children in-

cluding but not limited to girls, children with disabilities, from poor families and conflict situations are denied access to education and/or do not learn the basics (UNESCO, 2014, 2015a). Following this, quality and equity are taken into consideration in the international Sustainable Development Goals for 2030 (UNESCO, 2017). It is, therefore, not only education for all but also quality education for all (UN, 2018: 27).

To address the issue of quality and equity, teaching and learning processes are the most important factors to be reflected. In view of this, learner-centred pedagogies are being advocated not only as a means for improving the quality of teaching but also to enhance inclusive practices (UNESCO, 2015: 208). Unfortunately, teacher- and content-centred pedagogies are a reality in schools including teacher education institutions, especially in SSA (Vavrus et al., 2011: 11). In addition to the quantitative qualification of teachers, the qualitative side remains a challenge to be addressed (UNESCO, 2015, 2014). The quality of teaching and teacher largely rely on the quality of teacher professional development at pre-and / or in-service levels which primarily depends on the quality of teacher educators. In some parts of the world including Sub-Saharan Africa, teacher educators do not have any pre-service pedagogical professional training (UNESCO, 2016: 332). Teacher educators across the world play a significant role in the professionalisation of teachers since they intervene in the initial teacher training, curriculum development and evaluation as well as in accompanying teachers along their career through in-service professional development (EU, 2013: 6-7).

Though teacher education is an issue of debate in the global educational quality discourse, the professional identity, subjective theories, and professionalism of teacher educators seem, despite the awareness of their role in the Global North, to be overlooked in educational discourse worldwide, especially in developing countries (UNESCO, 2014; European Commission, 2013; Vavrus, et al., 2011; Villegas-Reimers, 2003). What may be promising especially in the Global North is the existence of teacher educators' associations and networks that are likely to boost scientific reflections on teacher education.

1.1.2 Subjective theories and educational quality

As indicated earlier, the international community is concerned with the quality of life for people in different corners of the world. In this regard, 17 SDGs were set to guide development across the world (UN, 2015). Among others, educational quality is the cornerstone for this end (UNESCO, 2017: 1). Being multidimensional, educational quality can be understood as all resources and processes to equip students with competences to serve and survive in the globalizing world (cf. UNESCO, 2004: 37 – 45). Among other factors, the quality of teaching is the most important determinant of educational quality in any education system (UNESCO, 2014, 2004). Talking about quality teaching would be ambivalent if the quality of the teacher is not reflected. The quality teacher determines the quality of any educational system since she/he is the one who implements all educational policies as she/he interacts with students. Moreover, the quality of teachers largely depends on not only the quality of teacher management policies but also the quality of professional development including pre- and in-service (UNESCO, 2014: 186). This implies that the quality of teachers depends on the quality of teacher educators. Unfortunately, some reflections about quality teaching and teacher education leave out the quality of teacher educators despite their unquestionable role in this regard.

Regarding subjective theories (beliefs), research shows that they constitute the most important aspect of interconnected components of teacher professional competences. They include but are not limited to professional competence (professional knowledge: content, general pedagogical and pedagogical content; beliefs and self-regulation skill; reflective and action-related as well as affective-motivational (personal characteristics: motivation and personality) (Knievel, Lindmeier & Heinze, 2015: 309; Kunter et al. 2013: 67; Baumert & Kunter, 2013: 29). Beliefs held by teachers are crosscutting since they may influence other components. For example, research shows that teachers holding constructivist beliefs are more likely to adopt learner-centred methods than those holding transmissive beliefs (OECD, 2009: 118). Moreover, teachers' beliefs are risk or success factors for implementing learner-centred education for example (Brinkmann, 2016). More to that, the beliefs of teachers about teaching

and learning significantly influence teaching practices and later students' outcomes in mathematics (Voss, Kleickmann, Kunter & Hachfeld, 2013: 263). In the same orientation, findings from the research show that teachers' subjective theories are key drivers of education quality improvement. On the quality of input, subjective theories of teachers and teacher educators influence the quality of teacher professional development (Martinez et al., 2017; Voss, et al., 2013; Mansour, 2009). Moreover, they drive the quality of teaching practices (Martinez et al., 2017; Voss et al., 2013; König, 2012; OECD, 2009; Kember, 1997; Pajares, 1992) and implementation of educational reforms/innovation (Brickmann, 2016) in terms of quality processes. Furthermore, subjective theories influence students' achievement (Hattie, 2012: 20) as far as output/ outcome is concerned.

If teachers' beliefs greatly determine the quality of teaching, one would ask how teacher educators' subjective theories would influence more on the quality of teaching in educational systems. Moreover, teacher education is one of the most important channels through which teachers' subjective theories about teaching are implicitly or explicitly shaped or reshaped (Brandon, 2013:18; Mansour, 2009). This implies that teacher educators, through their teaching practices, convey their personal theories which later shape student teachers' beliefs about teaching. It can be presumed that the quality of teacher educators' beliefs is likely to determine the quality of teaching practices in the whole education system. With this orientation, teacher educators' beliefs about what makes good teaching and teacher education need to be scientifically delineated as a contribution to the scientific reflection about educational quality improvement. (For more details about subjective theories and educational quality, see 3.3).

1.1.3 Teaching and teacher education systems in Sub-Saharan Africa

Teachers' and teacher educators' beliefs are context-bound (Martinez et al., 2017). Since the Rwandan education system has some commonalities with other Sub-Saharan African (SSA) countries, it is worth to give a short note on teaching and teacher education before briefly describing the context of Rwanda.

In traditional SSA, education served as means of both socialization and acculturation. Though uncodified, teaching had socially accepted pedagogy used by parents or traditional social institutions. Scholars acknowledge relevance and learner-oriented teaching as training principle of traditional education (Mathisen, 2012; Obanya, 2010). Authors show that the content was relevant to the context of students and conveyed through active and interactive methods through riddles, telling or re-telling and practical learning as modelled by an elderly experienced teacher. Upon the arrival of colonial power that introduced formal education including teacher education, the situation changed. The content was decontextualized, as it had to respond to the needs of the colonisers sometimes ignoring the local realities of indigenous. Moreover, pedagogy became more authoritarian which is solely transmission of knowledge as means of civilisation of Africans (Vavrus et al., 2011: 29 – 30).

Though African countries attained their independence in the 1960s, despite minor contextualisation, the same pedagogical trends remained unchanged until the 1990s (Mathisen, 2012; Obanya, 2010). In line with international goals of education for all, student-centred methods were recognised as a means of democratisation and socio-economic transformation (Mathisen, 2012; Vavrus et al., 2011) as well as reducing the effects of the global learning crisis (UNESCO, 2014: 191 – 275). Though integrated into national educational policies and theoretically preached in teacher education institutions and in-service training, transmissive teaching is still a reality in schools including teacher education institutions in SSA (Vavrus et al., 2011; Akyeampong, 2002), bringing to the fore, the banking theory (Freire, 2007). One of the most important factors hindering the implementation of learner-centred education is the epistemological beliefs of teachers and teacher educators (Vavrus et al., 2011: 77). Unfortunately, empirical studies on subjective theories of teachers and teacher educators are still quite limited in the region.

1.1.4 Overview of teaching and teacher education in Rwanda

As one of the Sub-Saharan African countries which aspire to reach middle-income economies (GoR, 2020, 2000), access, equity and quality education are thought to be key drivers for the socioeconomic transformation

process in Rwanda (MINEDUC, 2018, 2013). In this framework, a number of educational reforms have been initiated (Gahutu, 2023; Muvunyi, 2014). Accordingly, qualification of teachers has been claimed to be a priority (MINEDUC, 2021, 2018). In the same trends of SSA nations, learner-centred education is promoted and theoretically preached in teacher education and continuous teacher training as one of the key drivers for educational quality improvement (MINEDUC, 2018; MINEDUC-REB, 2015). Moreover, since 2015, a competence-based curriculum was introduced in nursery, primary and secondary education, and later teacher training colleges (MINEDUC/REB, 2019, 2015) for improving educational quality in terms of equipping students with competences for life in a dynamic context.

Increasing the qualification rates of teachers through teacher education institutions (pre- and in-service training) has been among the priority of improving education in Rwanda (ESSP, 2018; 2013; Simpson & Muvunyi, 2013; WB, 2011). Pre-service teacher education is offered in 32 educational institutions including 16 Teacher Training Colleges (TTCs)¹ – at the secondary education level for nursery and primary education and 16 universities² and higher learning institutions for secondary schools (MINEDUC, 2017). Moreover, a postgraduate certificate in education is offered as a form of qualifying in-service unqualified secondary school teachers. The latter includes theoretical courses in the foundations of education. In addition to that, a Post-Graduate Certificate of Teaching and Learning in Higher Education (PGCTLHE) is recommended for university teaching staff (HEC, 2007b & 2007c). With the exception of only one university (University of Rwanda-College of Education) which temporarily prepared teacher educators for TTCs (WB, 2011), there is no specific qualification of teacher educators in the Rwandan context. Though their training is not specified, teacher educators exert great influence on the teaching system in Rwanda. In addition to pre-service teacher education, they intervene in qualifying in-service unqualified teachers, designing curricula as well as teacher professional development. For example, the majority

¹ From www.mineduc.gov.rw

² From www.hec.gov.rw consulted on 27th January 2020

(if not all) of the syllabuses in the competency-based curriculum was designed, revised, supervised, and facilitated by teacher educators (MINEDUC, 2015). This means that what they think to be good teaching is likely going to permeate the Rwandan teaching system.

So far as teaching is concerned, learner-centred education is recommended in policies (HEC, 2007a) and curricula (MINEDUC/REB, 2019, 2015) as a principle of teaching in Rwanda (Mbabazi, 2013, World Bank, 2011; Mugisha, 2010). Though theoretically taught in teacher education and in-service training, teacher and content-dominating methods are widely used in Rwandan schools including teacher education institutions (Sibomana, 2014: 200, 264; Rwanamiza, 2013: 131; Mugisha, 2010: 105). For example, one of the major challenges identified during the quality education awareness campaign in 2018 is the persistence of traditional teaching methods (MINEDUC, 2018: 10) hampering the implementation of a competency-based curriculum. Moreover, in his study on distance teacher education in Rwanda, Sibomana (2014) shows that Freire's banking approach dominates both the design and teaching practices (p.234). It can be deduced that, despite the high qualification rate of teachers in the Rwandan education system, teaching practices are still far from what is expected in educational policies and official curricula. There might be risk factors that prevent teachers from implementing learner-centred pedagogy. If teaching and teacher education shows the same challenges, it would be an alternative to reflect the quality of teaching and teacher education from the perspectives of teacher educators.

As mentioned earlier, how teachers and teacher educators represent teaching is likely to influence their teaching practices. In this orientation, one might assume that teacher educators who theoretically teach learner-centred pedagogies without using them in their own teaching may have underlying subjective theories guiding their teaching practices. In her study on the role of teachers' beliefs in the implementation of learner-centred education in India, Brickmann identified prevalent beliefs i.e., epistemological and about change as risk factors contradicting learner-centred assumptions and correlate with less learner-centred practices (2016: 3). With regard to the context of Rwanda, there might be unexplored beliefs of teacher educators that might hinder the quality of teach-

ing through implementation active and participatory methods. Unfortunately, empirical studies on the teacher educators' beliefs in Sub-Saharan Africa are quite inexistent and likewise lacking in the context of Rwanda. Having found that behaviourist and banking approaches dominate the design and practice of distance teacher education in one of the teacher education institutions in Rwanda, Sibomana (2014: 329-330) recommends a study on teacher educators' beliefs as means of exploring their understandings of good teaching and learning. Within this context, exploring teacher educators' subjective theories about quality teaching comes timely as a contribution to reflection on educational quality improvement in the context of Rwanda and acts as a timely venture to mitigate the gap in the available literature.

1.2 Research problem

The discourse of education in Rwanda shows that there is a paucity of scientific research (Schendel, Mazimpaka & Ezeanya, 2013). Regarding the topic of this study, no study to my knowledge has been done so far on teacher educators' subjective theories about quality teaching and teaching teachers. So far as teachers' beliefs are concerned, one study by Brandon (2013) was done on teachers' enacted beliefs in Rwanda and shows that teachers' subjective theories are related to their teaching. Besides, Brandon indicated that teachers hold beliefs difficult to change though unscientifically tested (about gender and intelligence). Other studies are related to teachers' conceptions of learning (Peeraer, Kabanda, Nzabalirwa, Nizeyimana & Uworwabayeho, 2015), learning strategies (Mugisha, 2010), and student teachers' and teacher educators' perspectives and satisfaction with assessment (Rwanamiza, 2011).

As indicated earlier, the country has invested to improve quality education through reforms i.e., curricula, initiating modern teaching approaches and methods and teacher professional development (MINEDUC, 2018 & MINEDUC/REB, 2015). However, the reality in classrooms is quite far from the expected. There might be underlying subjective theories that may hinder the successful implementation of quality teaching in Rwanda. Based on the fact that teacher educators' beliefs are likely to influence quality teaching within the education system, it is

deemed necessary to conduct an empirical study on the topic to unveil teacher educators' beliefs as a basis for further reflections on educational quality development in the Rwandan context.

The necessity of conducting empirical research on teacher educators' subjective theories about quality teaching and teaching teachers in the context of Rwanda is framed in five dimensions. First, quality teaching is a worldwide concern in the journey of educational quality improvement (UNESCO, 2014) and teachers' subjective theories are determinants in the process of quality teaching improvement (Fives & Gill, 2015; Martinez et al., 2019). Second, most of the studies on subjective theories in teaching were done in the Global North but remain limited in the South, especially Sub-Saharan Africa (SSA). Third, the SSA context including Rwanda goes through different reforms to not only meet the international educational agenda but also equip their population with the necessary competences to boost social and economic development. In this regard, conducting research on subjective theories is a contribution since the latter can be, depending on their nature, success or risk factors for reform implementation (Brinkmann, 2016). Fourth, as teacher matters in educational quality, teacher educator matters more in educational quality improvement as they prepare and accompany teachers along their career (European Commission 2017, 2013). However, empirical research on their role, professionalism as well as subjective theories is very limited in the international educational discourse, especially in Sub-Saharan Africa. The fifth, the policy-practice gap in terms of nationally and internationally advocated learner-centred policy but teaching and teacher education remain dominated by a transmissive approach which is still an ambivalence in educational quality improvement (Otara et al., 2019; van de Kuilen et al., 2019; Vavrus et al., 2011). Therefore, empirical research to delineate teacher educators' subjective theories about quality teaching and teaching teachers can shed light on further reflections on such ambivalence.

1.3 Research questions

In the context of the paucity of empirical educational research and particularly on teacher educators' thinking as a condition of education development in Rwanda, this study aims at exploring subjective theories about

quality teaching in the context of their profession. Teacher educators share the commonality of teaching with teachers. In this regard, the first focus of the study concerns the exploration of teacher educators' subjective theories about quality teaching. Moreover, teaching how to teach constitutes the particularity of teacher educators. More than that, quality teaching should be the aim of teaching how to teach. Accordingly, the second focus of this study concerns the exploration of teacher educators' subjective theories about quality teaching teachers. Therefore, the study seeks to answer the following main research question: What are teacher educators' subjective theories about quality teaching in the context of their profession? Reflecting two interconnected dimensions of teacher educators' profession, two research sub-questions guide this study: (1) What are teacher educators' subjective theories about quality teaching? and (2) what are teacher educators' subjective theories about how to train teachers for quality teaching? The research questions are guided by methods and methodological processes and decisions for the empirical part of this study. Therefore, the overview of the research methods with related methodology is outlined.

1.4 Overview of the methodology and the research methods

Exploring teacher educators' thinking about quality teaching in the context of their profession requires a systematic process to answer research questions. Due to the contextual (i.e., limited research in Rwanda) and content-related (limited research on teacher educators' subjective theories) conditions, a qualitative approach was adopted (4.1). Through theoretical sampling (4.2), semi-structured interviews were used to collect data (4.3) from the theoretical sampling of teacher educators from the initial teacher education institutions. In such an exploratory study, the data were progressively and concomitantly analysed with the data collection process through content analysis. This was done via an iterative deductive-inductive process through coding and inter-coding of the interview transcripts (4.4.2). Moreover, the results of the study were generalised through an abductive process whereby identified criteria as horizons of comparisons led to the generation of the typology of subjective theories (4.4.3). More

than that, reflections on ethical issues (4.5) and quality control in this qualitative study are described (4.6).

1.5 Relevance of the study

The need of conducting a study on subjective theories of teacher educators about quality teaching and quality teaching of teachers in the context of Rwanda relies on the scientific discourse on teacher educators' thinking and professionalism worldwide especially in SSA including Rwanda. Moreover, it is articulated as important due to the role of subjective theories in educational quality discourse (Fives & Gill, 2015; Voss et al., 2013). Within this framework, the study is significant at three levels: Science, policy and practice.

Firstly, the study intends to unveil empirical data about teacher educators' beliefs about what makes quality teaching and teacher education. The findings serve at two levels. First, the results of the study enrich the international scientific reflections on teacher education by delineating the beliefs of teacher educators likely to be at the basis of educational quality improvement. Though the study is done in one case of Rwanda, the findings can inspire other scholars as far as research on teacher educators' thinking and teacher education is concerned. Second, the findings of the study shed light on the limitedness of research in the context of Rwanda on educational quality. The results serve as the basis for further research on educational quality and specifically teaching and teacher education in the context.

Secondly, the study is important and significant at a political level. As seen earlier, teacher educators are likely to influence educational policy in a country through their intervention in educational policy, curriculum development and teachers' professionalization (pre- and in-service). The findings of the study at hand would ignite knowledge that would serve as a basis for reflecting the improvement of educational policies about teacher education and particularly the professionalization of teacher educators.

Thirdly, the results of the study on teacher educators' beliefs about quality teaching and teacher education contribute to the practical reflection of teaching and teacher education in Rwanda and possibly, similar

contexts. What matters for teacher educators might be related to their practices and hence influence student teachers' future practices in their respective classrooms. Therefore, the findings of this study are likely to enlighten further reflections on the practice of teaching and teacher education.

1.6 Structure of the thesis

The thesis has seven chapters. Subjective theories are embedded in the political, cultural and social context (see for e.g., Brinken, 2016). In this framework and in addition to the foregoing chapter, I describe the context of teaching and teacher education in Rwanda (chapter two). The theoretical and empirical state of research on subjective theories in the context of educational quality is reviewed (chapter three). As far as the empirical part of the study is concerned, I describe methods and methodological processes and decisions regarding the empirical research on subjective theories and a justification of the choice of a qualitative approach (4.1). Sample and sampling (4.2), semi-structured interview as a method of data collection (4.3) as well as data analysis and generalisation (4.4), ethical consideration (4.5) and quality control (4.6) are described.

The results (chapter five) report the empirical findings of the study starting from the profile of the interviewed teacher educators in terms of portraits (5.1), proceeding with a description of the abduction process and the structure of subjective theories (5.2); characterisation of the generated ideal types (5.3) and ending with a summary (5.4). In chapter six, empirical results are discussed in light of theoretical and empirical discourse on teacher education. The chapter starts with the summarized results in relation to the research questions (6.1) and proceeds with a theoretical contextualisation in the light of the scientific discourse on teacher education (6.2) and ends with a summary (6.3). In the last chapter seven (outlook), the scientific (7.1), political and practical implications (7.2) of this study are presented.

2 Quality Teaching and Teacher Education in Rwanda

As previously indicated (1.3), this study intends to explore teacher educators' subjective theories about quality teaching in the context of Rwanda. Studies conducted mainly in the Global North show that subjective theories are not universal but are context-bound. They are shaped by educational, professional, and socio-cultural backgrounds. (Mansour, 2013; Zheng, 2013). Though the study does not explore the genesis of subjective theories, it is worth providing the context of teaching and teacher education in Rwanda to understand the types of subjective theories held by teacher educators in the context of the study. First, I start by briefly giving a historical short note on Rwanda (2.1). Second, I show the historical synopsis of the Rwandan education system with an emphasis on teaching and teacher education (2.2). Third, I synoptically describe the conceptualisation of educational quality (2.3) with emphasis on quality teaching (2.3.1) and teacher education (2.3.2). Fourth, I review the current scientific discourse on subjective theories in the context of Rwanda (2.4).

2.1 Rwanda: A historical synopsis and education system

The context of Rwanda cannot be explained outside its historical background. The political and socio-economic situation is directly or indirectly influenced by pre-colonial, colonial and post-colonial contexts. Before its colonization at the end of the 19th century, Rwanda was governed through a monarch system. Through the indirect rule system, the country was colonised by Germany (1899 – 1919) and Belgium (1899-1959). Colonial administration in collaboration with protestant and catholic missionaries introduced formal education. The education system was elitist following the political administration characterised by ethnic and regional discrimination including education especially after independence in 1962. For example, admission to secondary and higher education was based far on merit but on ethnic and regional quotas (Obura, 2003; Hoben, 1989). After the 1994 genocide against the Tutsi, education has been considered as a strategy for reconstruction, reconciliation, and transformation of the country (UNESCO & SIDA, 2017; Rutayisire, 2016). Since then, access to education has drastically improved. However, educational quality remains a

challenge to address. For example, Rwanda was ranked among the top three nations in the SSA to have widened access to primary education by reducing out-of-school children by 85% in less than ten years (UNESCO, 2014: 53). However, the same report and others reveal gaps in terms of learning outcomes in literacy and numeracy (UNESCO, 2014; JICA, 2014).

The government of Rwanda aspires to become a middle-income country through a knowledge-based and technology-led economy (MINEDUC, 2018; GoR, 2017). Among others, education seems to be a key driver for this end. Accordingly, Rwanda's education system itself has gone through different reforms as a means of responding to progressively emerging national, regional, and international demands (Gahutu, 2023). With regard to governance, education is centralized with delegation of responsibilities to local state administration and stakeholders. Churches own most schools in Rwanda. Catholic and protestant churches own half of nursery, two-thirds of primary and three-fifths of secondary schools in Rwanda (MINEDUC, 2018). Despite its centralisation, churches like other stakeholders (MINEDUC, 2021; Niyibizi, Gahutu & Nyiramana, 2021), have an influence on the managerial and pedagogical functioning of schools in Rwanda. It is likely that school ownership may play an important role in school management, conceptions and practices of teaching and teacher education. In relation to this study, a historical overview of the Rwandan education system with a focus on teaching and teacher education is synopsized.

2.2 Historical overview of teaching in Rwanda

Historically, three main periods are known as pre-colonial, colonial and post-independence mark the history of Rwanda. Due to the genocide perpetrated against the Tutsi in 1994, the post-independence time is divided into two periods: pre- and post-genocide (Byanafashe, 2016: 17). In line with the orientation of the study at hand, the organization of education with a focus on teaching and teacher education are taken into account to frame the context of this study.

Education in traditional Rwanda

Being both formal and informal, traditional education was provided both in families and socially established institutions as a means of socialization and acculturation of the young generation. Education was provided by parents and members of the nuclear and extended family. Children were taught through folktales, riddles, telling and re-telling tribal legends and histories as well as famous poets around the fireside (Mathisen, 2012: 52-53). As children grow, education was differentiated. Girls were initiated into domestic work. Boys were initiated into military and masculinised activities for protecting both family and national interests (Mbonimana, 2016: 141-143). Despite its minority, a group of young boys was selected to benefit from special training for military and administrative purposes. In addition to sports and military training, they learnt artistic arts like music, dance, rhetoric and poetry. Moreover, they learnt values like generosity, tolerance and courage (ibid.; Nzahabwanayo, 2014: 20).

Methodologically, research shows that active and interactive methods were used. Teaching and learning by doing, dialoguing and apprenticeship were emphasized through demonstration, observation, imitation and interaction through riddles. The teacher was considered as a more knowledgeable trained adult serving as a role model for students. Taking the content drawn from their natural and social contexts seems to justify its relevance (Mathisen, 2012: 52-53). Due to the limited literature about traditional education in Rwanda, the questions of the dynamicity of the content, reflexivity and reflectivity of teaching methods remain unclear. It might be active and interactive in the form of transmission of existing unquestionable knowledge and values. The extent to which methods used at the time enhance creativity and critical thinking is not clear in scientific discourse on Rwandan traditional education. Due to the absence of scripture, orality and imitation were used as form of socialisation.

Education during the colonial time

The history of formal education is not separated from colonization. Colonisers along with catholic and protestant missionaries introduced formal

education as means of training local cadres to support the colonial administration, evangelization, and civilisation of indigenous. Moreover, they transcribed the local language, Kinyarwanda (Byanafashe, 2016; Rutayisire, 2016). In this orientation, the introduction of scripture was closely linked to formal education implying different forms of learning and approaches of teaching. Due to the close collaboration of missionaries with political colonisers, schools were seen as a means of the conversion of the masses (Mathisen, 2012: 54). This sort of domination has implications on education in terms of content and the teaching-learning process.

Following the same practice in SSA (Varus et al., 2011; Obanya, 2010), schools were imposed a decontextualized content irrelevant to indigenous culture. Despite minor modifications, the content taught in colonies including Rwanda was the same as in metropolitan schools (Rutayisire, 2016: 258). In this regard, the teaching and learning process was more transmission and acceptance. Content and teacher-dominated pedagogies were used during the teaching and learning process (Mathisen, 2012: 55). More on that, indigenous students were imposed to foreign languages as a medium of instruction. During the German colonial power, German, Kiswahili and Kinyarwanda were allowed to be used in schools but the medium of instruction was Swahili. Under the Belgian colonial power, French was imposed as the medium of instruction since upper primary (ibid: 76-77). The introduction of the scripture along with formal education as well as language of instruction other than mother tongue could be at the basis of change teaching approaches during the colonial time.

Education in post-colonial up to 1994

Since independence until 1994, the development of education has gone through a diversity of changes. On the one hand, gross enrolments improved from 46 to 65% and the net enrolment rate reached 63% in primary education (1973-1990). Though the number of secondary schools increased, and the first university opened in 1963, the primary-secondary and secondary-university transitions were insignificantly improved (Obura, 2003: 40-43). Moreover, efforts were made for teacher professional development through pre- and in-service pedagogical training (Jyoni wa Karega, 2016: 432). On the other hand, access to education was

inequitably distributed. The political policy of regional and ethnic discrimination was rampant in the education system as far as admissions are concerned. Ethnic and regional quotas prevented a number of children and young people from access to education (ibid: 44-48). Admissions to secondary and higher education were based on ethnic and regional quotas rather than merit (Rutayisire, 2016; Obura, 2003). It is worth noting that, during the post-independence time, Catholic and Protestant churches owned almost all the schools in Rwanda. They respectively owned 70% and 18% (Obura, 2003: 42).

Teaching practices inherited from missionaries did not change at all. Transmission-oriented teaching with the passive role of students continued (Mathisen, 2012: 22). French was used as the medium of instruction since upper primary education (Mathisen, 2012: 22-23; Obura, 2003). In light of the nationalist movement in Africa and especially education for self-reliance and ruralisation in Tanzania and Burundi, the major reform took place in 1977/1978 as means of the Rwandisation of the education system. The reform aimed at ruralisation, democratisation and vocationalisation of education. Kinyarwanda became the medium of instruction for primary education which was extended to eight from six years. Practical and vocational training were emphasized as means of contributing to rural development (Obura, 2003: 39).

With the reform of 1977/1978, curricula were contextualized by integrating the content related to the local realities. Moreover, the use of Kinyarwanda as the medium of instruction was partly a step toward making education more relevant to students. Despite the rwandisation of education, the reform did not address the issue of the teacher-dominated model of teaching inherited from colonial power. Moreover, the issue of pedagogy did not take attention in the same reform. Student-centred pedagogies were theoretically preached in teacher education institutions (Mathisen, 2012: 60).

Education in post-genocide Rwanda

During the post-genocide period, education is embedded in the overall agenda of social and economic reconstruction and transformation (Kabwete & Mulinda, 2016: 627-637; Obura, 2003: 55 – 68). Accordingly,

a diversity of educational reforms – political, structural, curricular and pedagogical – have taken place.

First, access, equity, quality, and relevance were integrated in education policy (MINEDUC, 2003: 17). Primary education was made free-fee and compulsory by abolishing school fees, especially in line with EFA and MDGs. Accordingly, net primary enrolment rates increased from 63% to 98.3% from 1990 to 2018 (MINEDUC, 2018). To satisfy the high educational demand for secondary education, free-fee education was extended to secondary education as Nine Years Basic Education (9YBE) and Twelve Years Basic Education (12YBE) respectively (MNEDUC, 2008, 2012). This led to an increase in the net enrolment rate from 13.2 (2009) to 32.9% (2016) for example (MINEDUC, 2016; 2011). Regarding higher education, access to higher education has been increased likewise thanks to new public and private universities and higher learning institutions. For example, the number of students become 89,160 students in 2018 as compared to 37,149 in 2006 (MMINEDUC, 2018; 2011).

In addition to quantitative improvement in terms of access, different policies have been formulated and laws enacted as the strategic orientation of education. For example, among others, girls' education policy (2007), teacher management (2007), special needs education (2007) and education quality standards (2021). For example, the conceptualisation of education quality and related quality standards for teaching, learning and assessment as provided (GoR, 2021).

With regard to pedagogical orientations, many changes have taken place in relation to the language of instruction, curriculum and assessment. Due the situation of the aftermath of the 1994 genocide against Tutsi, multilingualism with four official languages: Kinyarwanda (mother tongue), French, English and Kiswahili was adopted (MINEDUC, 2003: 14). English replaced French as the medium of instruction (GoR, 2017; MINEDUC, 2008). The change in the medium of instruction has been a landmark for the Rwandan education system and a challenge for in-service teachers. Regarding curriculum, additional subjects like entrepreneurship, sciences and technology for example were added (MINEDUC, 2008). The major curriculum reform – competency-based curriculum (CBC) – was introduced in 2015 to replace the so-far called knowledge-

based curriculum. Being more pedagogical than content-related, the emphasis of this CBC concerns reforming teaching and learning approaches. Learner-centred pedagogy is considered the preferred principle for the successful implementation of CBC (MINEDUC/ REB, 2019; 2015). Moreover, the adoption of learner-centred pedagogy in Rwanda follows international and regional trends as far as educational quality improvement is concerned (UNESCO, 2014; Vavrus et al., 2011). These initiatives are both stimulated by the international and national development agenda like SDGs and Vision 2050 with emphasis on educational quality (GoR, 2020; UNESCO, 2015).

Before describing quality teaching and teacher education in the context of Rwanda, it is worth to shortly have a short look at the historical overview of teacher education in Rwanda.

2.3 Teacher education system: A historical look

Since its establishment nearly before independence, teacher education is organized at two levels. First, nursery and primary school teachers are initially trained in secondary education. Second, secondary school teachers are trained at the university level. The teacher education system went through different structural, and curricular with fewer pedagogical changes.

Structure and curriculum of teacher education

First, primary education was organized at post-primary levels for two to three (1967), six (1978) and three (since 1994) years respectively at different historical times of the formal education system in Rwanda (REB, 2019: 8; Nzabairwa 2010: 831). Currently, primary teacher education is offered in 16 Teacher Training Colleges (TTCs) for three years post-lower secondary. With regard to curriculum, teachers were prepared to teach all subjects offered in primary education. Since 2008, the primary teacher education curriculum was restructured into three specialisations. They include Teaching Mathematics and Sciences (TMS), Teaching Social Studies (TSS) and Teaching Modern languages (TML) (World Bank, 2011; MINEDUC, 2008). Student teachers learn all subjects but with a high

weight of specialization-related subjects. Later in 2013, a fourth specialisation of Early Childhood and Lower Primary education was first introduced in TTCs (MINEDUC/ REB, 2019: 9). With regard to aligning TTCs and general curricula in Rwanda (MINEDUC/REB, 2015), a competence-based curriculum was likewise introduced.

Before 1994, secondary teacher education was mainly organized at the National University of Rwanda (NUR). At NUR, it was structured for three years as prospective teachers for the first three years of secondary education and five years for upper secondary education. Regarding curriculum, pedagogical and didactical knowledge weighted 12.5% and the rest was deserved to subject knowledge (Nzabalarwa, 2010: 826). Teacher education at the time had three main issues. First, pedagogically untrained teacher educators trained student teachers. Second, the training programme was more theoretical than practical. Third, the training process followed the traditional model of teaching (ibid: 826)

After 1994, secondary teacher education was widened to not only respond to the shortage of teaching workforce but also to contribute to qualifying teachers for mass education at the time. On the one hand, teacher education was initiated at different state higher learning institutions: The National University of Rwanda, the Kigali Institute of Education, and colleges of Education (Nzabalarwa, 2010). Today, these are merged into State University of Rwanda through the College of Education. On the other hand, non-state higher learning institutions were, since then, allowed to train secondary school teachers, too. Currently, 15 non-governmental tertiary education institutions offer programmes of teacher training (HEC, 2019).

So far as the curriculum is concerned, it is individually designed at each HLI and approved and monitored by the Higher Education Council. In addition to the lack of a nationally harmonized policy of teacher education, practices seem to be diversified. For example, research shows that the duration and organisation of an internship are different from one HLI to another (Nyiramana, 2023).

Pedagogy of teacher education

Pedagogical approaches for teacher education had been not far from the pedagogical approaches in the overall education system. On the side of practical teacher education, differentiations are observed between levels and types of teacher institutions, especially at higher education. For pre-primary and primary teacher education, the average of 7.3% annual workload is dedicated to teaching methods. They include practices on lesson planning, microteaching, and weekly practices in a neighbouring school called “demonstration school”. Three months of internship are provided at the end of the initial teacher education (MINEDUC/ REB, 2020: 79). At higher education, there is no harmonisation for practical training at the policy level. Consequently, teacher training system seems to vary from one institution to another.

Concerning theoretical teacher education, active methods were taught as content since the beginning of formal teacher education (Nzabalirwa, 2010). With the introduction of a competence-based curriculum, active and interactive methods are explicitly visible to drive pre-primary and primary teacher education (MINEDUC/REC, 2020). At higher education, the Bologna system was introduced in 2007 through a modular system as a means of internationalisation. The modular system was introduced for different purposes. First, it was initiated as means of facilitating mobility and transferability of students within and between the education system (Mugisha, 2010: 29-30). Second, a modular system leads to the reorganisation of content in modules where each is taught by more than one lecturer. Third, the system was introduced to enhance learner-centred pedagogy and competence-based teaching through defining learning outcomes (HEC, 2007a; 2007b).

Like many other teacher education institutions in SSA, learner-centred pedagogy is theoretically preached but teacher-dominated practices remain a reality (Iwakuni, 2017; Vavrus et al., 2011; WB, 2011: 118-119). This raises an alarming issue of inconsistencies between policy and practice. For example, research shows that distance teacher education is designed and implemented in the banking pedagogical model (Sibomana, 2014: 330). Moreover, in-service teachers indicate that they lack prior experience in learner-centred education during the initial teacher training.

They emphasize the inconsistencies between theoretical courses and practice by teacher educators (O tara et al., 2019: 1).

There might be different reasons to explain the inconsistencies between policy and practice. First, learner-centred education was adopted from outside without prior preparation and contextualisation. Being considered as the best practice (Kuilen et al., 2019: 69-70), sometimes it is accepted per se. Second, the role of teacher educators in fostering the change process is seen as critical. Despite the role in the quality of teacher education, discourse on teacher educators seems to be less discussed in the course of educational quality improvement. One would ask about the status and professionalization of teacher educators in the context of Rwanda.

Teacher educators in Rwanda

From the international discourse, there is a wide category of teacher educators depending on the context of teacher education. Defined as professionals who support teacher professional development (Lunenburg et al., 2014; Celick, 2011: 73), they can be different and have a variety of roles in teacher professionalization. Teacher educators may be those who teach in teacher education institutions, school-based mentors who support student teachers during school visits and practicum as well as professionals facilitating in-service teacher training (European Commission, 2013: 5). Pre-service teacher educators tend to have a huge influence on the educational system because they not only teach student teachers but also intervene in the whole process of teacher professional development beyond pre-service teacher training (op.cit. p.6). In the present study, the interest is about exploring beliefs held by pre-service teacher educators about quality teaching and teaching teachers.

In the context of Rwanda, between 1981 and 2007, primary teacher educators were trained either as general pedagogical specialists or as subject teachers. On the one hand, they were trained as a general pedagogical teacher educator at the Department of Psychopedagogy at the National University of Rwanda. On the other hand, other subjects were taught by subject or subject teacher specialists (Nzabalirwa, 2010: 827). Additionally, since 2011, the Kigali Institute of Education –the today College of

Education at the University of Rwanda—started an initial training for TTC teacher educators. This was initiated in line with the restructure of TTCs in the four options namely: Teaching Modern Languages, Teaching Social Studies, Teaching Sciences and Mathematics and later Early Childhood Education (MINEDUC/REB, 2019: 9).

For higher education institutions, lecturers are trained as subject specialists. Nevertheless, HEC recommends a pedagogical in-service training “Post-Graduate Certificate in Teaching and Learning in Higher Education” as a requirement for teaching in higher education (HEC, 2007: 8). Unfortunately, empirical results about this in-service training are quite missing in terms of pedagogical approaches and competences for example.

Though Rwandan teacher development and management aspires to upgrade the capacity of teacher trainers in TTC (MINEDUC, 2007: 13), mechanisms as well as foci of professional development of teacher educators are quite unclear. Moreover, the policy does not explicitly talk about the professionalization of teacher educators in higher education. Regarding their role, teacher educators are responsible for the continuous professional development of teachers and other educational stakeholders (MINEDUC, 2007: 14). For instance, the University of Rwanda (College of Education, CoE), a government institution takes the lead in the continuous professional development of in-service teachers at all levels of education. In the framework of MINEDUC of enhancing continuous professional development, CoE offers training for school-based mentors, head teachers and deputy head teachers on mentorship and coaching nationwide (MINEDUC, 2007). Moreover, teacher educators lead the process of curriculum design, development, writing textbooks as well as training for teachers and/or regional trainers. Teacher educators from higher education play a determinant in the process of curriculum design and development, writing textbooks as well as training national, district and sector trainers on CBC (MINEDUC/REC, 2019, 2015). This implies that teacher educators, in the same line with the global North (EU, 2013), likely influence the whole education system. However, their professional development remains to be clarified in policy and explored in scientific discourse (WB, 2011: 118). In some cases, as reported by Nzabairwa (2010), teachers are trained by untrained teacher educators (p. 832). Building on the

scientific research evidencing the influence of subjective theories as well as the role of teacher educators in education, their beliefs are likely to have a huge impact on the whole education system.

2.4 Educational quality in Rwanda

As indicated earlier (chap.1), the study on teacher educators' subjective theories about quality teaching and teaching teachers is embedded in the reflection of education quality. Within this orientation, it is worth describing the conceptualization of educational quality in the context of Rwanda. Additionally, I describe how quality teaching and teacher professionalization are contextually defined.

Conceptualization of education quality

Following the international political discourse on educational quality, there is a visibility of political and legal frameworks marking the concern of education quality in Rwanda. First, quality, equity and relevance are framed as key quality dimensions of educational policy since 2003 (MINEDUC, 2003). Teacher training, textbooks, competence-oriented curriculum and examination-led system are reflected in policy as part educational quality improvement (MINEDUC, 2003: 19-20). Unfortunately, standards which can serve for monitoring were not set at the time. Second, educational quality standards with corresponding indicators at all levels of education were enacted in Rwanda in 2009 for nursery, primary and secondary education, in 2010 for higher education and were revised in 2021 (GoR, 2021; 2010; 2009). For example, interactive and participatory methodology, freedom of initiative and expression and respect of students addressing them by their names were enacted as indicators of quality teaching and learning (GoR, 2009: 55). Despite the political orientations via quality standards, quantitative dimensions like internal efficiencies like rates of promotion, repetition, dropout, completion, and transition as well as quantitative teacher qualification, textbooks (input) and on the output side in terms of students' performance in national examinations are primarily given priority (MINEDUC, 2010; 2008; 2004). Third,

quality education standards were revised, and quality education is conceptualized as:

“a combination of courses, education, knowledge and know-how offered to a learner, the capacity of a teacher, the number of inputs in education, the environment of education, mode of knowledge and skills assessment and the outcome of education that enable the learner to develop himself or herself and develop the country” (GoR, 2021: 26-27).

From this conceptualisation, important dimensions like outcome orientation, teacher quality, the quantity of input, context, assessment as well as the purpose of quality education in terms of personal and national development are highlighted.

The focus of the study at hand is on exploring subjective theories of teacher educators about quality teaching in the context of Rwanda. Therefore, it is worth having a look at the context of the discourse of quality teaching and teacher education in Rwanda. As quality in education is primarily reached through quality teaching (UNESCO, 2014; 2004; Hattie, 2012; 2009), the conceptualisation of the latter in the context of Rwanda is overviewed hereunder.

Quality teaching

Quality teaching in the political context of Rwanda may be viewed from two perspectives. On the one hand, it is framed as competence-based teaching embedded in a competence-based curriculum. Interconnected with competence-based teaching, on the other hand, quality teaching is conceptualised as learner-centred pedagogy. The two interrelated aspects of quality teaching are respectively explained in the context of the political and scientific discourse in Rwanda.

Competence-oriented teaching: A policy in a nascent phase

Due to unsatisfactory results of school leavers and graduates' competences (HEC, 2015; JICA, 2014), a competence-oriented education with effects on curriculum, teaching, learning, and assessment was enacted (GoR, 2021). A revised framework of quality education standards indicates areas that quality teaching and learning must develop. They include

knowledge, understanding, practice, knowledge application, generic cognitive skills, communication, ICT, numeracy, autonomy, responsibility, and collaboration (GoR, 2021: 19). The competence-oriented education is reflected in competence-based curriculum in three interconnected basic and generic competences as well as cross-cutting issues. Basic competences are considered necessary for dealing with everyday life including learning. They include for example literacy, numeracy, ICT, citizenship and national identity, entrepreneurship, science and technology and communication. To develop higher-order competences, critical thinking, creativity and innovation, research and problem-solving, communication, cooperation, interpersonal relations, and lifelong learning are cross-subject generic competences to be developed across subjects. The latter are described as transferrable and applicable in a wide range of subjects and contexts and important for quality employment. Third, genocide studies, environment and sustainability, comprehensive sexuality education, peace and values education, financial education, standardization culture, and inclusive education are included in the CBC as cross-cutting issues (MINEDUC/REB, 2015: 19-27).

The curricular reform is still in the early phase of implementation. Though still limited, empirical studies show that the implementation of CBC is challenged by input-related factors including but not limited to quality of in-service training, teacher and teaching facilities. First, in-service teacher training is more content-based than competence-oriented (Ndihokubwayo, Habiyaremye & Rukundo, 2019: 30). Basing on the adage that teachers teach as they were taught not as they were taught to teach (Mayor, 2014; Vavrus et al., 2011), the CBC implementation is likely to follow the traditional model which is still a reality in teacher training in the context of Rwanda (Sibomana, 2014; WB, 2011). Second, Ndihokubwayo et al. (2019) add that teachers' competences in English as a medium of instruction and resistance to change accompanied by negative attitudes toward CBC challenge its implementation. Third, the lack of limited resources including but not limited to textbooks, audio-visuals and ICT tools challenge the successful implementation of CBC in Rwanda. Other empirical studies are needed to explore for example subjective theories of different

education stakeholders like teachers and teacher educators about CBC.

Learner-centred pedagogy: Policy-practice gap

Learner-centred pedagogy is considered the backbone for the success of a competence-based curriculum. It is conceptualised as:

“Addressing learners’ individual needs, interests, abilities and backgrounds, creating an environment where learning activities are organized in a way that encourages learners to construct knowledge either individually or in groups in an active way” (MINEDUC/REB, 2020: 19).

From this conceptualisation, individualities of learners, creation of learning context by engaging them in construction and co-construction of knowledge are central to learner-centred pedagogy in the context of Rwanda.

Learner-centered pedagogy is promoted in curricular and political documents as one of the principles of teaching in Rwanda (MINEDUC, 2018; 2007; MINEDUC/REB, 2019; 2015). Its adoption is influenced by international and regional trends in education. The principle is advocated as means for socio-economic and political transformation (UNESCO, 2014; Vavrus et al., 2011). Though it became the refrain of political speeches about education, the gap between policy and practice is still very large as far as learner-centred is concerned (van de Altinyelken et al., 2019: 64). Transmission models of teaching practices still dominate the teaching practices in schools including teacher education institutions (van de Altinyelken et al., 2019; WB, 2011; Nzabalirwa, 2011). Research shows that three factors may explain the policy-practice gap concerning learner-centred pedagogy in developing countries. First, the initiation of learner-centred reform is imposed and introduced in a complex language to teachers. Second, the lack of resources hampers the implementation of learner-centred pedagogy. Third, socio-cultural beliefs about relations, knowledge and knowledge production hinder the implementation of learner-centred pedagogy in developing countries (Schweisfurth, 2013; Tabulawa, 2013; Vavrus et al., 2011). There is a need of empirical studies on teacher or

teacher educators' beliefs which might conflict with learner-centred teaching in the context of Rwanda for example.

Quality teaching in Rwanda: A overview on the discourse

The concept of quality teaching is limitedly researched in the context of Rwanda. However, there are pioneering studies in this orientation since the last decade. They have been mainly done in the framework of an international master's program "Educational Quality in Developing Countries³". Examples of empirical studies on cognitive activation (Gahutu, 2021; Niyibizi, 2021), constructive feedback (Nyiramana, 2021), learning climate (Ntakirutimana, 2021) were carried in Rwanda. Due to the lack of the concepts of teaching quality in both policy and practice, the aforementioned studies were carried out in a form of controlled intervention. Accordingly, a dimension of quality teaching was introduced through in-service teacher training. The latter was followed by empirical research to explore the success and risk factors of its implementation. Other studies focused on teachers' (Carter et al., 2023), head teachers and government officials' perceptions of quality teaching (Carter, Kategeka & Singal, 2022). The empirical findings show that the interviewed head teachers and government officials perceive quality teaching in terms of input, process and outcomes. The input quality of teaching concerns teacher's qualities like passion, initiative, disposition cultural values i.e., fairness, respect, integrity. Classroom practices in terms of teacher's activities in the classroom like monitoring students' learning, engaging students in learning and time management are examples of quality teaching in terms of process. The outcome quality of teaching concerns academic (performance) and non-academic including independence, motivation, discipline, passion for learning and effective communication (Carter et al., 2022: 10-15).

³ The Program is run by the University of Bamberg (Germany) in collaboration with three universities in Africa. They include Protestant Institute of Arts and Social Sciences (PIASS), Rwanda, Université Libre des Pays des Grands Lacs (ULPGL), Democratic Republic of Congo (DRC) and Université Evangélique du Cameroun (UEC), Cameroun.

The examples of the empirical studies on quality teaching in Rwanda shows a diversity of its conceptualisations. Though teacher educators play a determinant role in education in Rwanda, there is limited research concerning their beliefs, understanding of quality teaching. Quality teaching largely depends on the quality of teacher training. Therefore, it is worth describing quality teacher education in the context of this study, Rwanda.

Quality teacher education in Rwanda

Though it is almost three generations since teacher education was introduced in Rwanda, there is still a lack of a specific policy governing the teacher education system. It is worth mentioning that teacher education-related quality standards are the same as the general education (GoR, 2021) (see 2.3.2) apart from two particularities: alternation of theoretical and practical teacher training as well as professional competences (GoR, 2021; MINEDUC/REB, 2020). First, alternation concern the spread of practical training as lesson planning, microteaching, weekly teaching practices and internship to facilitate the development of the professional competences of prospective teachers. According to quality education standards in Rwanda pre-primary and primary teachers, six qualities of quality teachers were enacted. A quality teacher is seen as:

- expert in implementing CBC;
- educator in terms of planning, teaching, learning and assessment as well as collaboration with stakeholders;
- communicator and connector: communication skills for example choosing and using different media of communication to improve the teaching and learning process and with other education partners;
- guide, organizer, and facilitator: dealing with the heterogeneity of students to facilitate the full potential;
- innovator and reflective practitioner: continuous learning from her/his own practice through reflection and critical questioning to make necessary adjustments; and

- subject expert: subject knowledge and related didactics (MINEDUC, 2020: 46-56; MINEDUC/REB, 2019: 42-52).

It is worth noting that standards for secondary teacher education is still relegated to individual higher learning institutions without harmonised policy. This concerns both choice of content and structure as well as practical teacher education.

Learner-centred pedagogy is politically recommended as the guiding pedagogy of teacher education (MINEDUC/REB, 2019; MINEDUC, 2007). Unfortunately, teacher-training institutions do not yet escape the policy-practice gap concerning learner-centred pedagogy. Research shows that though learner-centred pedagogy is theoretically taught, content and teacher-dominated teaching is a reality in teacher education institutions in Rwanda (van de Altinyelken et al., 2019; WB, 2011; Nzabalirwa, 2010). Moreover, despite the alternation of theoretical teaching and professional practices (MINEDUC/REB, 2019), it is likely to follow the same model of teacher-dominated teaching.

2.5 Summary

The review of the context of teaching and teacher education in Rwanda shows four major concerns. First, Rwandan education is in a transition phase (WB, 2011). Since the introduction of the formal education system, it has gone through several structural, legal and pedagogical changes, especially after the 1994 genocide against the Tutsi. Though such reforms are introduced to some extent to comply with regional and international requirements, they are dominantly imported with limited contextualization and mainly follow the top-down approach in their dissemination and implementation (1.1.4 & 2.2). Second, educational quality with a focus on quality teaching and learning is recently a major concern for Rwanda. The government has set a legal framework for educational quality. The latter has become the refrain of government policies about education. Third, the policy-practice gap persistently remains a pedagogical dilemma to solve if teaching quality has to be achieved. Learner-centred teaching is recommended as the best practice but the teacher-dominated model is still a reality in schools including teacher education institutions (1.2 & 2.4). Finally, teacher education as part of the solution or causing factor to the

dilemma is not ahead to serve as a model for other schools. The specificity of coordinating the policy governing the teacher education system, the professionalization of teacher educators and empirical research on teacher education is to be reflected in the context of Rwanda. Moreover, despite their role in driving the educational quality of the whole system, teacher educators seem to be less recognized in the Rwandan political educational discourse. More on that, there is a lack of research on their status, professionalization and thinking.

Each empirical research builds on existing literature. Therefore, I review the theoretical and empirical discourse on subjective theories of teacher educators about quality teaching and teacher education in chapter three.

3 State of Research: Subjective Theories and Educational Quality

This study on teacher educators' subjective theories about quality teaching in the context of their profession is framed in the overall reflections of educational quality (see chap 1). Despite the paucity of the scientific discourse on the topic in the context of the study, there exists scientific discourse on mainly teachers' subjective theories (Fives & Gill, 2015) which inspire the study at hand. Accordingly, I describe the state of research starting from the conceptualization of subjective theories (3.1). I proceed with a theoretical framework of educational quality with a focus on teaching and learning as well as teacher education (3.2). Before describing the desideratum of the empirical research on teacher educators' subjective theories (3.4), I summarily review the state of literature concerning why subjective theories are important in the educational quality discourse (3.3).

3.1 Concept of subjective theories in the educational discourse

Since the beginning of the second half of the 20th century, the discourse on subjective theories has been prominent in the Global North in the overall reflection of educational research especially teacher's thinking (Fives & Gill, 2015). Since then, subjective theories remain multi-semantic and multidimensional in terms of conceptualizations. In this review, I briefly describe different understandings associated with subjective theories as well as how they should be understood in the study at hand (3.1.1). Additionally, a succinct examination of the characteristics (3.1.2), as well as the functions (3.1.3), as well as the categories (3.1.4) of subjective theories are synopsized.

3.1.1 Conceptualizing subjective theories

The study on subjective theories is framed in the landscape of research on subjective theories of education stakeholders' thinking (i.e., teachers, student teachers, teacher educators and school leaders) (Ashton, 2015; Mogliacci, 2015). The concept of subjective theories seems to be fuzzy in

terms of conceptualisations. Based on the extensive literature on educational discourse, there is no universally agreed meaning of subjective theories. Additionally, there is no clear-cut definition between subjective theories and related concepts like beliefs, conceptions and attitudes in both English and German-speaking literature (Voss, et al., 2013: 249). In the framework of the complexity and multiplicity of conceptualisations of subjective theories, Pajares (1992) when reflecting on beliefs in education, qualified belief to be a messy construct. Therefore, in the context of this study, subjective theories and related terms like beliefs, conceptions, understandings, and perspectives are used interchangeably. Meanwhile, how are subjective theories conceptualised in the educational discourse?

Subjective theories can be conceptualized as a person's set of understandings, assumptions, cognitions, motivations, premises, propositions ideas and suppositions that are held to be true about the self and the world (Voss et al., 2013; Fives & Buehl, 2012; Christmann, Groeben & Schreier, 1999; Richardson, 1996; Pajares, 1992). Subjective theories influence how people perceive their life, work and interactions in the world. This means that they influence people's actions, thinking, reactions, behaviours and interactions (Groeben, 1999; Bandura, 1997). Moreover, they drive people's choices and decisions (Voss et al., 2013: 249). In the context of education, subjective theories can be conceptualized as a teacher's (for example) understanding that is held to be true about teaching, learning, knowledge and self like self-efficacy. Subjective theories are complex in terms of conceptualization. However, literature gives some features characteristic of subjective theories.

3.1.2 Characteristics of subjective theories

Based on the works of different scholars (e.g., Martinez et al., 2017; Fives & Buehl, 2016; Fives & Gill, 2015; Groeben & Scheele, 2001; Dann, 1990; Groeben, 1990), interested in subjective theories, a diversity of features of subjective theories were documented. They include but are not limited to stability and malleability, implicit and explicit, integrative within individual belief system, evaluation, and judgmental orientation as well as motivational dimensions.

First, some educational scholars argue that subjective theories have both fixity and malleability features. On one hand, it is argued that personal beliefs are more stable than pedagogical beliefs (Matinez et al., 2017; Pajares, 1992). On the other hand, however, results from educational studies reveal the changeability and malleability of subjective theories. Research shows that subjective theories change through experiences and particularly reflective practices (Buldur, 2017; Martinez et al., 2017). For example, Martinez et al. (2017: 8-9) indicate a change of epistemological subjective theories among prospective teachers through a self-questioning process regarding their own beliefs.

Second, subjective theories can be implicit or explicit in the sense that they can be easily accessible by the concerned person (teacher for e.g.) in a conscious way. In this regard, people can express their subjective theories through verbalization (Olafson, Grandy & Owens, 2015). On the other hand, subjective theories are implicit in the perspective that they are unconscious and inaccessible to the person. In this perspective, they can be reconstructed through analysing action-guiding descriptions of sampled groups of people (Groeben & Scheele, 2001).

Third, subjective theories are constituted as integrative within an individual belief system. This is based on the argument that human beings have beliefs about everything. Therefore, beliefs about different dimensions are complex, (in) congruent and can be contradictory to one another (Buehl & Beck, 2015; Green, 1971). For example, in educational perspectives, how are teacher's epistemological, pedagogical and didactical subjective theories congruent and contradictory? For example, research shows for example that epistemological beliefs are related to pedagogical and didactical beliefs of teachers about mathematics (Voss et al., 2013). This implies that research on subjective theories should take into account the belief system whereby subjective theories about one dimension like teaching or teacher education can be related to other dimensions within the individual belief system.

Fourth, subjective theories constitute a framework through which events, decisions, actions, and behaviours are evaluated (Pajares, 1992; Nespor, 1987). In this orientation, subjective theories are considered as for example "an individual's judgment of the truth or falsity of a proposition" (Pajares, 1992: 316). In the context of education, subjective theories

are personal theoretical lenses through which teaching is judged to be of good quality or not (Fives, Lcatena & Gerard, 2015). For example, in constructivist beliefs about teaching, the process is seen as active involvement of students. Teachers are considered as facilitator and students are constructors of knowledge. However, in transmission-oriented beliefs, the process is unidirectional where the teacher, considered as expert, is considered as a conveyor of knowledge and students are seen as passive receivers (OECD, 2009: 93).

Fifth, motivational features of subjective theories concern the orientation of intentionality for action, decisions, and behaviours (Fives & Buehl, 2012; Richardson 1996; Pajares, 1992). For example, they constitute motivational constructs that guide teacher's selection of goals and sustain effort toward achieving them (Bandura, 1997). For example, constructivist beliefs about teaching likely influence teacher' action including for example setting tasks by enhancing students' participation (OECD, 2009).

In relation to the afore-described features of subjective theories, the latter fulfil different functions in relation to people' description and interpretation of the world.

3.1.3 Functions of subjective theories

Subjective theories fulfil different functions as far as human social and professional life is concerned. They fulfil functions including but not limited to interpretative-framing, explanatory, predictive, and directive functions (Fives & Buehl, 2016, 2012; Buehl & Beck, 2015; Pajares, 1992). According to these scholars, interpretive-framing function concerns the role of subjective theories in defining, interpreting situations as well as structuring and framing actions and decisions. In teaching and learning situations for example, subjective theories held by a teacher play the role of filtering what is good or not. Moreover, they facilitate the structure of teaching like lesson plans, types of tasks and interactions during the teaching and learning process. The explanatory function concerns the role of subjective theories as framework through which teachers for example explain their past teaching choices, the reasons for choosing one approach over the other. The predictive function of subjective theories is related to

the prediction of future events, behaviour, actions or reactions. Though it is not always unidirectional, basing on the teachers' beliefs, the scenario of teaching can be predicted in terms of preparing how the class should look like. With the constructivist beliefs, there is a likelihood that the classroom situation is interactive between students and teachers for example (Fives & Gill, 2015; OECD, 2009). Regarding directive function, subjective theories guide actions, decisions, behaviours (Buehl & Beck, 2015: 67). In the context of teaching, subjective theories guide how teachers act and behave in the classroom. It is known from research that teachers with constructivist beliefs are more likely to adopt facilitative and dialogic teaching approaches rather than those holding transmission-oriented ones (Buehl & Beck, 2015: 67; OECD, 2009). It is worth noting that the functions of subjective theories are not mutually exclusive. Rather, they can be interconnected to one another.

3.1.4 Categorizing subjective theories in education

The educational discourse shows a plurality of interconnected subjective theories. Among others, two main dimensions are used for categorizing subjective theories in the context of education. They include content (for e.g., subjective theories about teaching) or levels at which they are reflected (for e.g., individual, classroom, and system) (Fives & Buehl, 2016; Levin, 2015: 48; Kunter et al. 2013: 38 & 250; Müller, Felbrich & Blömeke, 2008; Hoy, Davis & Pape, 2006; Calderhead, 1996). By combining the two intertwined dimensions, the following categorisation can be drawn from the above-mentioned authors. They can include for example self-efficacy, professional motivation and subjective wellbeing at the individual level as well as epistemological subjective theories. Moreover, there are subjective theories about students as well as pedagogical and didactical at the classroom level. More on that, there can be subjective theories about the theory of schooling, education policy and the social context of education at the system level.

Subjective theories about the self are related to how capable teachers, teacher educators or others see themselves in relation to performing their profession (Levin, 2015: 48). Moreover, they include motivational beliefs which are related to reasons for choosing and remaining in the teaching

career (Hardré & Hennessey, 2013; Klassen et al., 2008). More to that, subjective wellbeing is another important aspect of subjective theories about the self. For example, research shows that subjective wellbeing is positively correlated with teacher's resilience (Proctor, 2016). Subjective wellbeing includes life satisfaction (work, health and income), affect (happiness, worry, anger – positive or negative) and well-being (meaning & purpose, autonomy, competence) (Song, Gu & Zhang, 2020; OECD, 2013).

Epistemological beliefs are characterised by the structure (simplicity or complexity), stability (stable or tentative and certain or uncertain) and source (omniscient authority or empirical) of knowledge. Additionally, the speed (quick or gradual) of learning, ability (fixed or improvable) to learn and justification and validation (objective immutable procedures or coexistence of multiplicity of theories) of knowledge characterise epistemological beliefs (cf. Voss et al., 2013: 250; Duell and Schommer-Aikins 2001; Hofer and Pintrich 1997). The discourse indicates that epistemological beliefs can be either general or subject-specific like beliefs about the nature of mathematics (Voss et al., 2013: 251) or about science for example (Kampa et al., 2016; Mansour, 2009).

Pedagogical beliefs are about teaching and learning, teacher education in general or general specifics like feedback, assessment and didactical subjective theories that are related to beliefs about subject-didactics (Fives & Buehl, 2016; Baumert & Kunter, 2013: 38; Zheng, 2009; Calderhead, 1996). For example, in the COACTIV⁴ research project, one of its foci was about subjective theories about mathematics teaching and learning (Voss et al., 2013: 252).

At system level, some existing literature, though still limited, indicates twofold subjective theories about education policy and the social context. Subjective theories about educational policy maybe for example beliefs about educational policy in general, curriculum policy or examination policy as well as other policies. Subjective theories about the social

⁴ Cognitively Activating Instruction, and the Development of Students' Mathematical Literacy

context may include aspects like cultural diversity in schools and globalisation (Levin, 2015; Op't Eyn de et al., 2002).

The categorisation of subjective theories in education is summarized in the following table (table 1).

Table 1: Categorisation of subjective theories in education

Content Levels	Category of subjective theories	Sub-Category and / or examples
Self-related (about self)	Self-efficacy	Beliefs about capability in relation to profession
	Professional motivation	Reasons for choosing to become a teacher
	Subjective well-being	Satisfaction with life, job satisfaction, Satisfaction of economic situation and state of mind and emotions
Individuals	Students for example	Beliefs about students' capability
Individual-knowledge	Epistemological	General (nature, genesis, structure of knowledge, validity, process of knowing, subject-specific (like maths, English, History, etc))
Teaching and learning	Pedagogical	General i.e., teaching, learning, teacher education (General-learning to teach and teaching to teach); topic-wise like assessment, feedback, lesson plan, microteaching, to name few
	Didactical	Subject-wise learning, teaching, learning to teach math for example
System	Education policy	Theory of schooling Teacher education policy, curriculum, teacher policy
	Social context	Beliefs about cultural diversity in schools for example

Source: Own design inspired by Song; Gu & Zhang (2020); Fives & Buehl (2016); Zheng (2009); Woolfolk Hoy et al. (2006); Op't Eynde et al. (2002) and Calderhead (1996).

Table 1 gives a synopsis of categories of subjective theories in terms of content i.e., teaching, learning, mathematics, and levels i.e., individual, classroom and system. This gives an example of how subjective theories cross-cut different aspects of education (see for e.g., Levin, 2015: 48).

As the study on teacher educators' subjective theories about quality teaching and teaching teachers is framed in reflections of educational quality, it is worthy to give a short reflective overview of the theoretical discourse of educational quality.

3.2 Educational quality: Theoretical lenses

Reflecting teacher educators' subjective theories about quality teaching is framed in reflections on educational quality. It is important to synopsise the theoretical and empirical discourse on the concept. Educational quality has been a major concern for educational development since the end of the 20th century (UNESCO, 2000; 1990). Due to its complexity especially its multidimensionality, plurality of semantics, multi-contextuality and multifactoriality, educational quality can be conceptualized in different perspectives. In relation to the topic of this thesis, an integrated-multidimensional description of educational quality (context, input, process, outcome) is described first (2.2.1). Second, education quality is reflected from different theoretical perspectives including behaviourist, constructivist, transformational and empirical views (3.2.2) especially with focus on teaching and learning. Furthermore, theoretical models of teacher education are discursively described as theoretical lenses through which quality teacher education can be reflected in 3.2.3.

3.2.1 Concept and dimensionalities of educational quality

Educational quality is at the heart of the sustainable development goals (Schreirer & Siege, 2016). The concept has been conceptualized in different perspectives. The integrated model developed by UNESCO (2005), though it has some limitations, seems to be comprehensive as it represents multiple interrelated factors important for policy makers, researchers, and practitioners. Educational quality can be reflected in two different but related perspectives: descriptive and normative. First, educational

quality can be conceptualized as interconnected characteristics of students' background, input, educational and school context, process (governance and teaching) which lead to learning outcomes in terms of competences for living and serving in the dynamic society (UNESCO, 2005: 36). In line with the UNESCO model, the diversity of students' background can include socio-economic, health, prior learning experiences, cultural and religious backgrounds as well as personal characteristics like social, emotional, and cognitive traits. The context includes political, social, economic, cultural, moral environment that influence education. Contextual characteristics include parental support, globalization, national and international aid education policy, and national governance that influence teaching and learning. While input factors concern material, time and human resources invested in education, process is about the use of those resources in terms of educational governance and teaching (see also Scheerens, 2011a; 2011b; Scheerens, 2004).

Second, educational quality can be conceptualized in an evaluative perspective in the sense of norms through which educational quality can be evaluated. For example, quality teaching can be evaluated through classroom management, individual support, and cognitive activation (cfr. Kunter & Voss, 2013; Kunter, Baumert & Köller, 2007). Despite the likelihood of generic quality characteristics at each individual dimension, educational quality related norms can vary from one context including country, region, and school to another. Quality norms can be evaluated through theoretical and empirical (see 3.2.2) or personal frameworks in the sense of subjective theories. For example, educational quality can be reflected from the perspective of a given theoretical standpoint. Quality teaching can be viewed differently from behaviourist and constructivist theoretical as transmission or construction of knowledge respectively for instance (Fives, Lacatena & Gerard, 2015; OECD, 2009). In the perspective of this study of exploring subjective theories of teacher educators about quality teaching, I review the literature on educational quality from theoretical perspectives with focus on teaching and learning (3.2.2). Moreover, theoretical lenses through which teacher education can be reflected are discursively reviewed (3.2.3).

3.2.2 Educational quality from theoretical traditions

As indicated earlier (3.2.1), education quality can be reflected in different perspectives. Building on the integrated model context, learner characteristics, enabling input and outcome, educational quality is profiled in different theoretical frameworks of behaviourist, humanist, constructivist, transformational and empirical theoretical perspectives (UNESCO, 2005: 32-37). Accordingly, educational quality is reflected through the following comparative horizons of the context, input, teaching, teacher, learner characteristics, outcome, strengths, and limitations.

Educational quality from behaviourist perspective

In the lenses of a behaviourist perspective, educational quality is viewed in positivist understanding with high predictability, stability and immutability of knowledge and behaviour as well as related process to acquire and develop it (Kunter, 2013: 104). In this view, the contextuality of teaching and learning matter less. Standardized curricula are implemented through deductive and didactic teaching approaches. Teachers play the role of knowledge experts and controls students' incremental learning through rewards and punishment based on standardized-knowledge oriented tests (Kantar, 2013: 104; Ertmer & Newby, 2013; UNESCO, 2005: 33). In behaviourist perspective, teaching and learning are structured and easy going for monitoring and evaluation. Unfortunately, its instrumentalization, unidirectionality and monopolisation of teaching as well as mono-epistemologist knowledge contradict the autopoietic and autonomous as well as social nature of learning (cfr. Ertmer & Newby, 2013: 55; Palincsar, 1998; Maturana & Varela, 1991).

Educational quality in humanist theory

From the perspectives of UNESCO (2005) on the basis of theoretical and empirical discourse on teaching and learning (Kalpana, 2014; Sjøberg, 2010; Cooperstein & Kocevar-Weidinger, 2004) educational quality is characterized by a flexible curriculum. Additionally, teaching is seen as reflective and interactive where teachers and students are engaged in

knowledge construction and co-construction through facilitative teaching approach (Bada, & Olusegun, 2015; Ertmer & Newby, 2013). In the same view, students are considered as self-motivated to learn and therefore are active collaborators in the teaching and learning process. Assessment is seen as an integral part of teaching and learning process whereby self- and peer assessment are strongly encouraged for the personality development. It is worth noting that humanist approach is closely related to the constructivist theory (see for e.g., Terhart, 2003) and social constructivist (for e.g., Liu & Matthews, 2005) which emphasize active, participatory, and interactive approaches in teaching. Humanist theory has been recognized for enhancing autonomous and self-responsible learning which fits the unique nature of human being as well as the promotion of cooperative learning as a prerequisite for social, personal and professional development (cfr. McPhail, 2016: 34-35). However, humanist theory has been criticised to be confusing in terms of monitoring and assessment of learning progress (McPhail, 2016 & Osborne, 1996).

Educational quality through the lenses of transformational perspectives

In reaction to critics of humanist and behaviourist theories, critical and indigenous approaches emerged against tenets of colonial dimensions and inequality-enhanced educational systems (for e.g., Nyerere, 1967; Freire, 2005). From the perspective of the proponents of these theoretical frameworks, the centrality of education is about the transformation of the society especially social change (Freire, 2005) and self-reliance (Nyerere, 1967). On the one hand, education aims at social change by critical analysis of power relations. In this regard, it can contribute to alleviation of inequalities. On the other hand, education is seen as a tool for self-reliance with focus on local realities. Therefore, the social, political, cultural and economic context is important in terms of reflecting and critiquing inequalities or designing education by local people for local realities.

In transformational perspectives of educational quality, standardized curricula and textbooks are criticized to vehicle social inequalities especially by following mono-epistemic monopoly of knowledge production. In this perspective, indigenous knowledge is valued, and curricula are,

instead of being imported, locally designed and local members of the community are involved in its implementation. Additionally, project-based learning is seen as important to foster autonomy and self-responsibility as a means for likelihood of critical analysis of power relations. In this theoretical understanding, teacher is seen either as an activist facilitating the process of liberation of oppressed or self-reliant student (UNESCO, 2005: 33-34).

It is worth noting that the tenets of this perspective are reflected mainly in the local perspectives like inequality in vicinity-based reflections. Moreover, self-reliance especially by Julius Nyerere was born as a reaction to colonialism with imposed and un-contextualized curricula (Nyerere, 1967). However, issues of social inequality and colonialism, anti- and neo-colonialism cannot be addressed only locally but also globally (Scheunpflug, 2020, 2011). Though it is still an emerging field for empirical research, global learning and global citizenship education aim at reflecting global realities and challenges as well as cross-cultural, cross-border interconnectedness of human being (Pashby, da Costa, Stein & Andreotti, 2020: 156; Bosio & Torres, 2019: 753). Though theoretical foundations of global learning are to be developed from empirical discourse, teaching must go beyond basic tenets of learner-centeredness to change of perspectives especially reinforcing social abstract learning (Scheunpflug, 2022; 2020: 8, 2011: 37; Räsänen, 2009: 36). Therefore, global must be reflected in local and global realities (Niyibizi, 2022; Nyiramana & Niyibizi, 2020).

Educational quality in empirical perspectives

Another perspective of reflecting education is empirical studies on different dimensions of education quality especially in developed societies. The purpose of education quality is about developing evidenced-based and multidimensional competences measured through international large-scale assessments like the Programme for International Students Assessment (PISA) (for e.g., OECD, 2022) and Trends in International Mathematics and Science Study (TIMSS) (Mullis, Martin & von Davier, 2021). For example, quality educational systems are viewed in the lenses of how students perform in OECD member states.

Quality teaching is also viewed from empirically evidenced criteria and indicators like classroom management, individual support, and cognitive activation (Baumert et al., 2013) and the teacher is not only a facilitator but also an activator for competence development (Fullan & Langworthy, 2014; Hattie, 2012). In this orientation, students are seen as autonomous and ready for taking responsibility for their own learning (Hattie, 2012; 2009). Moreover, evidence-based teaching for example inspired by meta-analyses and related publications of John Hattie is given prominence especially in developed world (Hattie, 2012; 2009). In these studies, for examples, factors leading to higher students' learning achievements are ranked on the basis of their effects sizes (Hattie, 2009).

Empirical approach has been given prominence by its influence on educational discourses especially the tentability of measuring competences, the comparability of education systems as well as the enlightenment of educational monitoring. However, for example PISA has been the object of criticism like homogenisation, monolithic view and uncondutive to innovation (Zhao, 2020). Moreover, shortcomings are still observable in terms of measuring complex competences like global competences (Conolly, Lehtomäki & Scheunpflug, 2019; Sälzer & Roczen, 2019). This shows that empirical approaches should embrace and adapt to changing complexities and uncertainties characterising the dynamic globalising world.

Summary

Basing on the diversity of theoretical lenses through which education quality can be viewed, each theoretical perspective, with reflection in its shortcomings, can contribute to education quality in a more comprehensive perspective. For example, standards (behaviourist), active participation and interaction (humanist), reflecting the societal challenges in education (critical and indigenous) as well as evidenced-based can complement each other for a broader and integrative education quality. Theoretical perspectives of reflecting educational quality are summarized in the following table 2.

Table 2: Educational quality through theoretical traditions

	Behaviourist	Humanist/ constructivist	Transforma- tional	Empirical
Context	Not reflected	Not reflected	Context-em- bedded (lo- cal and global)	Evidence- based large scale compe- tence assess- ment
Input	Standardized curricula & tests	Flexible cur- ricula, assess- ment for learning (self & peer)	Critique of standard- ized curri- cula & text- books; lo- cally de- signed cur- ricula,	Standardized world curri- cula
Teaching	Transmission/ deductive and didactic peda- gogy	Construction and co-con- struction of knowledge	Project- based learn- ing to foster autonomy & self-respon- sibility, criti- cal analysis of power re- lations, local practical ac- tivities and community involvement in teaching	Empirically inspired about quality teaching like cognitive ac- tivation, classroom manage- ment, indi- vidual sup- port and classroom climate
Teacher	Knowledge conveyor, con- troller of stim- uli through punishment and rewards	Facilitator, guide	Activist and facilitator for self-reli- ance	Facilitator and activator / stimulator

Learner	Passive / memorization	Motivated to learn & active participation	Oppressed to be liberated & Consideration of her/his socio-cultural context	Autonomous and responsible
Outcome	Knowledge through standardized tests	More focus on personal-ity development	Social change and self-reliance	Competences
Strengths	Structured and easy for evaluation and monitoring of teaching and learning	Enhancing autonomy and self-responsible, collaborative learning	Openness to contextual realities	Comparability of educational systems, monitoring learning achievement
Limitations	Instrumentalization of teaching and learning, reductionist, and passivity of students, mono-epistemologist knowledge	Can be confusing in implementation due to its wide open to contextualization	Solely limited to local realities and ignore global issues	Measuring social and emotional competences, global competences is still a challenge

Source: Zhao, 2020; Scheunpflug, 2020; Conolly, Lehtomäki & Scheunpflug, 2019; Sälzer & Roczen, 2019; Hattie, 2012; 2009; Baumert et al. 2013; Ertmer & Newby, 2013; UNESCO, 2005; Freire, 2005; Nyere, 1967.

The table 2 summarizes the theoretical frameworks through which educational quality can be viewed. In addition to qualities of education quality in each theoretical approach, strengths and limitations are outlined.

3.2.3 Quality teacher education: Theoretical and empirical framework

In this chapter and in regard to the framework of this study, I discursively describe the existing theoretical and empirical discourse through which quality teacher education is understood. Despite the multiplicity of theories of teacher education, technical-rationality, reflective, and critical and transformational theoretical perspectives (Robinson & Mogliacci, 2019; Tezgiden Cakcak, 2016) seem to be comprehensive in terms of theoretical assumptions as well as reflections on practical perspectives. Purpose, assumptions, related concepts and models, teacher to train, process, theory and practice, potentials and limitations served as comparative parameters.

Technical-rationality teacher education

Following a technical rationality, it is assumed that there is trusted knowledge, methods, and techniques that are tenable for quality teacher education. Therefore, the purpose of the technical rationality model is to train knowledge experts and technicist teachers through deductive and structured pedagogy and imitation by means of placements and observations in schools (Tezgiden Cakcak, 2016: 123; Hodkinson, 2011: 200). Theoretical models like master-apprentice (learning to teach through imitating an expert) and applied science (theory for practice) are examples of technical-rationality theoretical model of teacher education (Robinson & Mogliacci, 2019; Zeichner, 2006; Korthagen, Loughran & Russell, 2006). The latter argue that concerning theoretical and practical training, validated immutable knowledge is acquired and must be purely put into practice on the one hand. On the other hand, student teachers learn prescribed and standardized teaching methods through the imitation of “experts” professionals. Despite its potential of structuredness being important for monitoring and evaluation, the technical rationality model is criticized to be simplistic, reductionist, fragmentary and unreflective (Güven, 2008; Tuinamuna, 2007). Moreover, this conception of teacher education was criticized to limit student teachers from learning the complexities of teaching and then facing “reality shock” by getting surprised when deployed in schools (Korthagen et al., 2006: 1021). This is due to a lack of dialogue between theory and practice (Viruru, 2005: 151). This critic,

among others, shows the limitation of this theoretical model regarding the preparation of prospective teachers for the complexity of teaching and the teaching profession.

Reflective perspective of teacher education

Contrary to the technicist theoretical orientation, the process of teacher education is viewed to be active, reflective, reflexive, and interactive through enhancing self-understanding, formulating educational purposes and reflection-in and on action (Lunenberg & Korthagen, 2009; Zeichner, 2009; Tuinamuana, 2007; Loughran, 2006; Schön, 1987). In this view, teacher education aims at training reflective teachers able to consider previous experiences and the contextuality of teacher education (Tezgiden Cakcak, 2016: 127). The reflective model of teacher education has three key principles. They include open-mindedness (tolerance to the diversity of ideas), responsibility (responsible for own actions and decisions) and whole-heartedness (personal commitment to change the situation). According to Dewey (1933/1997), teacher training is not seen as an end, rather a never-ending professional development. Prospective teachers are expected to be lifelong learners from and through their professional career (Johnson, 2009; Villegas-Reimers, 2003). From this perspective, it is assumed that journal writing, case studies, portfolios, and analysis of lessons can stimulate reflective skills among prospective teachers (Robinson & Mogliacci, 2019: 18–19). Moreover, theories are not seen with immutability, rather, they are critically reflected during the teacher training process. Reflective perspectives can be appreciated to reflect aspects important for teacher education like active and interactive approaches to foster professional reflection. However, the conceptualization of reflectivity remains unclear in the discourse and can be difficult to measure and monitor (Robinson & Mogliacci, 2019; Beauchamp, 2015). Moreover, it is more inclined to inward individual reflection (Eryaman, 2007; Zeichner & Liston, 1996; Schön, 1987) over the collaborative nature of teaching and teacher education (Johnson, 2009; Darling-Dammond, 2006). Another issue of the reflective model is that it focuses more on practice and likely forgets the theoretical side (Akbari, 2007:192).

Critical and transformational teacher education

Introduced by Henry Giroux (1988) in addressing the shortcomings of reflective teacher education, critical/ transformational teacher education is seen as a process of training teachers as active, critical and responsible citizens who are activists and social transformation agents (Robinson & Mogliacci, 2019; Apple, 2011). In this orientation, teacher education is framed in the socio-political context of schooling and society contributing to a more just society (Tezgiden Cakcak, 2018; Whitcomb, 2010; Zeichner & Flessner, 2009). Therefore, quality teacher education aims at training teachers capable of understanding and responsibly reflecting the relationship between schooling and global as well as local patterns of power and hierarchy (Robinson & Mogliacci, 2019; Giroux, 1988). In this theoretical model themes like social justice, multiculturalism (Zeichner & Flessner, 2009; Cochran-Smith, 2006), issues of post-colonialism (Viruru, 2005) and decoloniality (Christie & McKinney, 2017) are critically reflected. Concerning the process of teacher training, the transformational model proponents believe the use of dialogue and co-construction in terms of dialogical, self-reflective, collaboration between academics, practitioners, teacher education and communities as important for quality teacher education (Zeichner & Flessner, 2009; Zeichner, 2009). Transformational teacher education is recognized for context-sensitivity and dynamicity as well as relating schooling and the local and global realities and hence critically emphasize both self- and world understandings (Tezgiden Cakcak, 2016: 135). Furthermore, it reflects the change of perspectives through dialogue about emotions and beliefs (Robinson & Mogliacci, 2019: 7). However, it is still difficult to implement and has a risk of politicization of education (Cochran-Smith, 2006: 200).

Table 3 below summarizes the three theoretical models described above.

Table 3: Theoretical models of teacher education

	Technical rati- onality	Reflective	Critical/ transfor- mation
Purpose	Transmitting pre-established knowledge, methods, and techniques in an immutable process	Reflective practitioners considering previous experiences and the contextuality of teacher education	Framed in the socio-political context of schooling and society Training teacher who understands the schooling-global relationship and local patterns of power and hierarchy
Assump- tions	Power of practical experience and trusted knowledge and immutable process	understanding of knowledge and knowledge of self	Teacher education as a preparation for active and critical citizens
Related concepts/ models	Transmission, master-apprentice, applied science, behaviourist	Teacher identity, social constructivist	Social justice, global teacher education, multi-cultural, intercultural & transcultural teacher education, to name few
Teachers to be trained	Knowledge expert/ classroom actor / Production of a technician teacher	Reflective practitioner and life-long learner	Activist / social transformation agent

Ap- proaches/ process	Transmission & placements and observations in schools	Practical reflective practices like journal writing, case studies, portfolios, lesson analysis, action research	Dialogical and co-construction self-reflective opportunities, abstract sociality, collaboration with academics and practitioners, and communities
Theory & Practice	Theory for practice, primacy to practice	Theory -in and -on-practice	Critical analysis of theory
Potentials	A structured process, easy for monitoring & evaluation,	Responsible teacher education	Context-sensitive, dynamic, relating schooling and society (local and global)
Limitations	Reductionist and fragmentary, unreflective imitation	Vagueness of the “reflective” process	Difficult for implementation, risk of politicization of education

Source: Own design based on Robinson & Mogliacci (2019) and Tezgiden Cakcak (2016)

The table summarizes the characteristics of teacher education from the perspective of the three theoretical models: technical-rationality, reflective and transformative. Moreover, potentials and limitations are highlighted. These models are heuristic as far as understanding of the complexities of the reality especially teaching and teacher education in a dynamic world is concerned. Therefore, critical perspective is needed to reflect on which contexts and conditions the afore-described models, together or individually, can inspire quality teacher education.

3.3 Subjective theories and educational quality

As subjective theories are embedded in the overall reflection of educational quality, it is worth discursively reflecting how they constitute a

cross-dimensionality in education quality (3.3.1); subjective theories about teaching (3.3.2) and in teacher education (3.3.3).

3.3.1 Subjective theories: A cross-dimension in educational quality

As indicated earlier in (3.1.1), subjective theories, in the context of education especially teaching and learning as well as teacher education, are about self-representation as teachers, and student teachers, to name but a few. Moreover, subjective theories concern their conceptions about different dimensions of their work (teaching, learning, or teaching teacher, assessment, for instance) and others (like teachers' beliefs about learners for example). Therefore, the cross-dimensionality of subjective theories in educational quality can be visible at the same time through the beliefs of different stakeholders and/ or, about different dimensions of an educational quality integrated model.

The educational discourse shows that subjective theories of different stakeholders including but not limited to teachers (for e.g., Fives & Gill, 2015; Pajares, 1992) student teachers (Dunn & Rakes, 2011) and teacher educators (Ghemu, Sarfo, Adentwi & Aklassu-Ganan, 2020; Maaranen, Heikki Kynäslahti, Byman, Jyrhämä & Sintonen, 2019) are a cornerstone for education quality. Subjective theories are important for educational quality especially quality teaching. For example, subjective theories held by teachers about students' capability frame the structure and practice of teaching especially the pedagogical relation to the student-teacher (Mogliacci, 2015). Moreover, students' beliefs are related to their level of learning engagement and their achievement (Ongowo, 2022; Kaymak & Ogan-Bekiroğlu, 2013; Mugisha, 2010). For example, an empirical study in Kenya shows that students' epistemological beliefs are predictors of their achievements in science (Ongowo, 2022: 287).

Additionally, teachers' subjective theories can not only influence their engagement in professional learning but also their teaching decisions and practices (Martinez et al., 2017; Fives & Gill, 2015). This is likely to be extended to other stakeholders in education about different dimensions. For instance, in their study of student teachers' beliefs about curriculum orientations, Tanrıverdi & Apak (2014) revealed that the latter are im-

portant predictors for their professionalization and achievement. Furthermore, building on the fact that teachers (Hattie, 2012; Gauthier & Dembelé, 2004) and teachers' professionalization are key to educational quality (UNESCO, 2005; 2014), it is worthy to note that beliefs can be a success or risk factors for quality teaching and teacher professionalization (Martinez et al., 2017; Voss et al, 2013; Richardson, 1996; Grotjahn, 1991). For example, research shows that student teachers join teacher education with accumulated beliefs about student, teaching, learning, and student-teacher interactions, to name a few likely to hinder or facilitate their professionalization (Martinez et al., 2017). Therefore, the success of teacher professionalization can depend on the extent to which student teachers' entry-with beliefs are reflected in the process of teacher education. Additionally, subjective theories constitute the determinant part of the affective-motivational dimension of teacher professional competences in addition to professional knowledge (Baumert et al., 2013). For example, without underestimating the role of professional knowledge, subjective theories are a determinant factor of teacher professional competence. Teachers' beliefs crosscut in the sense that they deal with knowledge (epistemological beliefs) by both student-teachers, teachers as well as teacher educators in teaching and teacher professionalization (Baumert & Kunter, 2013; Pajares, 1992).

Regarding input and process of learning, the availability of resources is important. However, the efficient and effective use of the available resources is more important for quality education. Therefore, beliefs about the use of resources like computers in teaching, and beliefs about teaching materials are quite determinant to the learning-oriented integration of physical materials. For example, the availability of material facilities like books and computers is not enough if teachers and students for example do not have positive beliefs about reading and their integration in their teaching and learning. In their study on teachers' beliefs about ICT in education, Jimoyiannisa & Komis, (2007) as well as Eickelmann & Venne-mann (2017), reveal that teachers' beliefs are closely connected to the adoption of integrating ICT in their teaching. Concerning the process, it is noteworthy that there is extensive literature on teachers' subjective theories about different dimensions of education (Fives & Gill, 2015). For

instance, discourse on beliefs about teaching and learning (Fives, La-catena & Gerard, 2015: 249-265), classroom climate (Rubie-Davies, 2015: 266-283), assessment (Barnes, Fives & Dacey, 2015: 285-300) exemplifies their relevance in the overall discourse of educational quality.

Concerning the context, research shows that parents' beliefs are determinants of their (in-) active participation in the education of their children (Elliott & Bachman, 2018; Bubić & Tošić, 2016; Dizon-Ross, 2016). Moreover, collaboration and engagement of education stakeholders can depend on subjective theories about the social, moral, political, and economic value of education (for instance, Aguilar & Richerme, 2016; Drummond & Stipek, 2004). Subjective theories are not only important for education quality in terms of context, input and process. Rather, they constitute the outcome of education quality. If, for example, teacher education is one of the channels through which teachers' subjective theories are shaped (Yuan & Lee, 2014; Tang et al., 2012; Raths, 2011; Richardson, 1996), it implies that subjective theories are part of teacher education outcomes. This is evidenced by the fact that subjective theories are an integral part of teacher competence (Nehls, König, Kaiser & Blömeke, 2020; Baumert & Kunter, 2006). Building on the fact that people including students-teachers, and teacher educators have different subjective theories about different aspects of education (for e.g., Fives & Gill, 2015), subjective theories constitute cross-cutting dimensions to be reflected in the journey of educational quality research, policy, and practice.

In a nutshell, there is discourse showing that subjective theories constitute a cross-dimensionality of educational quality. Subjective theories of different stakeholders i.e., teachers, students and teacher educators, in addition to parents, can be a success or risk factor for education quality. Moreover, subjective theories about different dimensions like teaching, learning, teacher education, and knowledge to name a few constitute a soft support for the success of each of the processes. More than that, subjective theories are an integral part of the outcome of educational quality, for example, teacher professional competences.

3.3.2 Subjective theories about teaching

To reflect subjective theories about quality teaching in line with the focus of the study at hand, it is worth doing it in two steps. First, I start with teachers' subjective theories about teaching and end this section with teacher educators' subjective theories about teaching.

Teachers' subjective theories about teaching

Extensive literature about teachers' beliefs about teaching exists in the educational discourse (Fives & Buehl, 2016; Pajares, 1992). For example, among others, Fives & Gill (2015) summarized research on teachers' beliefs. In the handbook, a diversity of aspects was scientifically documented. They include scientific studies on pedagogical beliefs about teaching (Fives, Lecatena & Gerard, 2015), beliefs about classroom climate (Rubie-Davies, 2015) beliefs assessment (Barnes, Fives & Dacey, 2015). Similarly, teachers' beliefs about domain-specific like epistemological beliefs (Lunn, Walker & Mascadri, 2015), beliefs about reading (Maggioni, Fox, & Alexander, 2015), social studies (Peck & Herriot, 2015), as well as uses of technology (Ertmer, Ottenbreit & Tondeur, 2015) are scientifically summarized. Moreover, research reports research on teachers' beliefs about learners and learning (Willcox-Herzog, Ward, Wong & McLaren, 2015), learners' cultural diversity (Gay, 2015), English language learners (Lucas, Villegas & Martin, 2015), students with special needs and inclusion (Kiely, Brownell, Lauterbeach & Benedict, 2015) as well as teachers' beliefs-practice relationship (Buehl & Beck, 2015).

Though the literature on teacher educators' beliefs is not explicitly documented in the aforesaid literature, it is important to synoptically describe teachers' beliefs about quality teaching likely to inspire reflections on teacher educators' beliefs in this regard. The existing scientific discourse reveals three major findings: dichotomization, multiplicity and contextuality of teachers' beliefs. Firstly, numerous studies, mainly quantitative, have explored teachers' beliefs through dichotomous perspectives: traditional (teacher-centred, transmission) versus constructivist (student-centred) as opposing extremities of one line (Voss et al. 2013; Gillece, 2012; Blömeke, 2012; OECD, 2009). The first is oriented to the

belief that the teacher is an expert who transmits knowledge to passive students. The second sees teaching as an active and participatory domain whereby students are engaged in autonomous and responsible problem-solving (OECD, 2009: 92-93). Further research criticizes dichotomization as simplistic and cannot represent the complexity of teachers' beliefs. The findings, secondarily, were challenged by other findings which show that it is possible that some teachers can simultaneously hold potentially competing dichotomized beliefs (Teo, Chai, Hung & Lee, 2008; Ling, 2003). This implies that existing research is solely limited to either dichotomization or simultaneity of holding both transmission and constructivist. If, thirdly, beliefs are time- and context-bound (Martinez et al., 2017; Samuelowicz & Bain & 1992; Pajares, 1992), one would ask if this dichotomization can remain alone as a framework through which beliefs are conceptualized and reflected in the existing discourse. Therefore, further exploratory qualitative studies in different contexts for delineating the qualities of subjective theories in different political, educational and cultural contexts are important.

Concerning the research on the beliefs-practice relationship, twofold findings are documented in the discourse: reciprocal consistency and inconsistency. Buel & Beck (2015) show, first, a reciprocal relationship between beliefs and teaching practice. This implies that beliefs influence practice and the latter influences beliefs. Second, they indicate that teachers' subjective theories were found to be inconsistent with their practices. For example, it was found that, despite holding constructivist beliefs, teachers still adopt transmission-oriented practices in their teaching (for e.g., Liu, 2011). The research went further and reveals that the beliefs-practice relationship is mediated by both internal (personal) and external factors (Ertmer, et al., 2012; Liu, 2011). Internal factors include other beliefs, knowledge, and levels of self-reflection. Buehl & Beck (2015: 74) summarized external factors as the classroom context with student abilities, attitudes, and class size; school contexts like support from administration, parents, and colleagues, availability of resources as well as political factors like education policies like curriculum, examination policies for example. For instance, it might be difficult for a teacher to adopt learner-centred teaching, though holding constructivist beliefs, in the con-

text of content- and output-oriented curricula and examinations. Reflecting on this mediation, it cannot be easy for changing teacher's beliefs only by focusing on teachers. Rather, a systemic approach can be important for doing research on the landscape of subjective theories held by different stakeholders in education. This can include but is not limited to subjective theories of school administrators, inspectors, examiners and policymakers. Therefore, the mediation can be facilitated by the beliefs of other educational stakeholders (Buehl & Beck, 2015: 74). Accordingly, a systemic approach reflecting different dimensions of a teacher's belief system can be of necessary to understand the complexity of a teacher's beliefs. For example, questions like: how are teachers' epistemological beliefs related to pedagogical and didactical beliefs? How are self-efficacy beliefs related to pedagogical beliefs? Are teachers with high self-efficacy ready to implement constructivist practices? Are teachers with low self-efficacy inclined to be transmission-oriented? The focus of this study is on teacher educators' subjective theories about quality teaching in the context of their profession.

Teacher educators' subjective theories about teaching

Though teacher educators are seen as important to shape teachers' beliefs, research on teacher educators' beliefs about quality teaching is very limited following the same trend of the scarcity of research on teacher educators (EU, 2017; Vavrus et al., 2011 & Villegas-Reimer, 2003). Moreover, discourse on teacher educators still shows an area with a plurality of venues for further research. Concerning this study, there are few studies conducted on teacher educators' beliefs about teaching. Existing studies focus, for example, on teacher educator's beliefs about teaching (Cardenas, Valdes & Quinones, 2017; Abar, Athatar, Abiodullah, 2013), self-efficacy (Gbemu, Sarfo, Adentwi & Aklassu-Ganan, 2020; Batdi, 2014), feedback (Louw, Todd & Jimarkon, 2019), about the use of technology in teaching (Cheok, Wong Ayub, 2016; Bai & Ertmer, 2008), teaching profession (Malm, 2020) and curriculum (Amin, Kalsoom & Islam, 2019). In line with the study at hand, existing research reveals a variety of findings. It is worth noting that the dichotomisation of subjective theories still dom-

inates the discourse related to beliefs about teaching from different perspectives. First, the results reveal a simultaneity of dual beliefs. For example, the results of two studies show that teacher educators hold both learner- and teacher-centred beliefs at the same time (Bai & Ertmer, 2008; Abar, Athatar, Abdullah, 2013).

Unfortunately, discourse, though still limited, on teacher educators' subjective theories about quality teaching is dominantly available in the Global North. Gaps are still to be filled in the Global South including the case of this study, Rwanda. Though a plurality of recommendations for improving teachers' education is addressed to teacher educators (Villegas-Reimers, 2003; Vavrus et al, 2011), research on their own beliefs about different dimensions of education including teaching and teaching teachers, professionalism and professional development about teaching are still limited in the context of the study at hand.

3.3.3 Subjective theories in teacher education

Teacher education aims at developing professional competences among prospective teachers to drive quality teaching. Teacher's professional competences were theoretically and empirically reflected in two major dimensions. They include professional knowledge (content, general pedagogical and content pedagogical) as well as affective-motivational components. The latter include teaching motivations as well as personality as well as beliefs about subjects like mathematics, teaching and learning or the school system (Köning, 2010; Baumert & Kunter, 2006). Without disregarding the importance of each of the dimensions in this model, teachers' beliefs are determinants of teacher professional competences. First, teachers' epistemological subjective theories influence their pedagogical beliefs and practices (Chai, 2011: 128). Teachers' beliefs drive their professional development since they influence how they represent themselves regarding self-efficacy and professional motivation, professional role as teachers, teaching and learning as well as knowledge (Zheng, 2009; Op't Eynde et al., 2002). Consequently, subjective theories are an integral part of reflecting teacher professionalization.

Subjective theories are reflected, in the educational discourse, as success or risk factors for quality teacher professionalization in both initial

and in-service training (Schroeder & Fischer, 2020; Vartuli, 2005). It is known from research that student teachers come to teacher education with deeply held beliefs about teaching (Fives, Lcatena & Gerard, 2015: 257). Therefore, teacher educators are called to integrate student teachers' beliefs in the overall reflections and practices of teaching teachers (for e.g., Gay, 2010; Vartuli, 2005). For educational scholars, teacher education is a process of shaping or changing subjective theories (Biedermann, Brühwiler & Steinmann, 2012; Dunn & Rakes, 2011; Ozgun-Koca & Sen, 2006). For example, a longitudinal study shows that prospective teachers change beliefs from transmission-oriented to student-centred during the initial training (Serkan Buldur, 2017). So far extensive literature focuses on prospective teachers' subjective theories about teaching and learning as well as their implications for teacher training (Domović, Vidović Vlasta & Bouillet, 2017; Dunn & Rakes, 2011; Brownlee, Purdie & Boulton-Lewis, 2001). In numerous studies, teacher educators are continuously recommended to take into consideration prospective teachers' subjective theories for improving the quality of teacher education (Lindstrom et al., 2021; Manderfeld & Siller, 2019 & Sharma & Sokal, 2015). However, little is known about teacher educators' subjective theories about teacher education in an explicit way. It is evident that subjective theories are reflected in the educational discourse as important for quality teacher education especially inferred as recommendations from studies on prospective teachers' subjective theories in general or about teaching. Therefore, a scientific gap is yet to be filled by exploring and analysing subjective theories about quality teacher education from multiple stakeholders including but not limited to teachers, prospective teachers, and teacher educators. Accordingly, this study contributes to filling such a scientific by exploring subjective theories of teacher educators about quality teaching in the context of Rwanda.

3.4 Research desideratum and specification of research questions

After theoretical and empirical mapping on subjective theories and educational quality, it is important to delineate the necessity of empirical research on teacher educators' subjective theories about quality teaching in

the context of Rwanda. Accordingly, the specification of research questions follows.

Reflecting the state of research previously reviewed, the necessity of the study on the topic at hand is threefold. First, research has shown that subjective theories can be a risk and success factor for educational quality due to their cross-dimensionality in regard to other dimensions of educational quality. It is evidenced that subjective theories of and about different stakeholders as well as about multiple dimensions are key drivers for the success or likely failure of educational quality. Subjective theories are, for example, related to decisions about teaching as well as teaching teachers (1.2, 3.3.1). Therefore, empirical research on subjective theories could be a contribution to overall reflections on educational quality improvement.

Second, research shows that teacher educators play a determinant role in influencing the quality of education through multiple interventions including but not limited to facilitating initial and continuing education of teachers as well as curriculum and monitoring and evaluation of different dimensions at different levels. However, there is limited scientific evidence about their professional identity, development is quite limited in the international educational discourse (1 & 2.3). Quality teaching and teacher education are at the heart of post-2015 reflections on educational quality (1.1.1 & 3.2). Teacher educators are at the heart of successful education-related goals through teacher training likely to improve quality teaching. However, research on their perspectives about quality teaching and related teacher education is limited especially in the context of the study at hand. It is evident that numerous studies exist on prospective and in-service teacher's beliefs about different dimensions including but not limited to teaching and learning, teaching subjects like mathematics, and languages, as well as epistemological subjective theories are documented (3.3.2). Studies provide implications for reflections on teacher education. However, research on teacher educators' subjective theories about quality teaching and particularly related quality teacher education is quite limited in the educational discourse.

Third, existing studies on this topic even for teacher and student teachers are mainly from the Global North but still very limited in the Global South. In addition to the shortage of research in general, discourse

on teaching and teacher education from the perspective of teacher educators is very low. No research, to the best of my knowledge, was carried out in the context of Rwanda that gave voice to teacher educators to express their perspectives about quality teaching and how quality-related teacher education should look like.

Therefore, an empirical study on teacher educators' subjective theories is an input for further reflections on education in the context especially the dynamic context facing the persisting policy-practice gaps (1.1.4 & 2.4) as far as pedagogy is concerned.

Based on the existing gaps in terms of the significance of teacher educators' subjective theories in educational quality, the paucity of research on this topic in the context of Rwanda engendered this study in order to fill this gap by exploring subjective theories of teacher educators. This study has two interrelated foci. On the one hand, the study focuses on subjective theories of teacher educators about quality teaching. As the major profession of teacher educators is teacher education, another focus of this study is to focus on their subjective theories about teacher education aiming at preparing teachers for quality teaching.

Being an exploratory study in both content and context, subjective theories are explored through the following interconnected research questions. The main research question is: What beliefs do teacher educators hold about quality teaching in the context of their profession? This research question is operationalised by the following sub-questions: (1) What are teacher educators' subjective theories about quality teaching? And (2) What are teacher educators' subjective theories about how to train teachers for quality teaching? To answer these questions, I describe the empirical process in the chapter on methodology and methods (chapter 4).

4 Methodology and Methods: Exploring Subjective Theories

As a contribution to filling the educational scientific gap (3.4) by seeking to answer research questions (1.3), I describe the methodology and methods concerning the process and related decisions regarding the empirical part of this study. On the one hand, I start by explaining the justification for the choice of qualitative approach (4.1). Subsequently, I describe the sample and sampling strategy (4.2), method and process of data collection (4.3) as well as data analysis and generalisation (4.4). More than that, ethical dimensions (4.5), and mechanisms of quality control (4.6) throughout this study are overviewed. Due to the exploratory nature of this study especially the iterative process which required both back and forth, simultaneity as well as concomitance, the description of the different parts of the methodology and methods does not necessarily reflect the orderly sequences of the research process. Rather, the complexity of the interconnectedness of part of this part is highlighted throughout this chapter.

4.1 Research on teacher educators' subjective theories: A qualitative approach

As previously explained (1.3 & 3.4), there is no scientific study, to the best of my knowledge, so far done in the Rwandan context on subjective theories of teacher educators about quality teaching and teaching teachers. The paucity of scientific research on this topic lends to an exploratory journey. In this regard, the qualitative approach (Howitt & Cramer, 2011: 307) is adequate for this study as means of exploring teacher educators' subjective theories. A qualitative approach is preferred when one seeks to explore how individuals interpret their experiences and the world in which they live (Silverman, 2014: 5; Savin-Baden & Major, 2013: 12-14). It focuses on understanding people's subjective theories, perspectives, experiences, attitudes, opinions, and perceptions about phenomena, situations or issues (Creswell, 2018; McMillan & Schumacher, 2014). Subjective theories are individually and socially constructed (Martinez et al, 2017: 2; Wang, 2016: 50-51). Therefore, the qualitative approach can facilitate the process of exploring subjective theories of people – teacher educators in this study – in the context of their work (Wang, 2016: 49; Phipps & Borg,

2009: 382). This is because subjective theories can be explored through open expression by the concerned target group of this study. Accordingly, teacher educators were given voices to express their subjective theories concerning quality teaching and teacher education. Therefore, the qualitative approach fits this purpose.

As the target group of this study is constituted of teacher educators at initial teacher education in Rwanda (2.3), the sample and sampling strategy are described hereunder.

4.2 Sample and sampling strategy

The exploratory nature of this study (4.1), grounded theory with theoretical sampling was adopted. In this part, first, ground theory and theoretical sampling are explained as well as their relevance to the present study. Second, I describe the theoretical assumptions that guided the sampling of teacher educators as well as the sampling strategy. Third, the sampling criteria as progressively and iteratively identified and guided process of data collection and analysis are outlined.

Sampling: Theoretical foundations and sampling strategy

Originally, grounded theory was developed as means of generating theories from empirical data (Cohen, Manion & Morrison, 2018; Glaser & Strauss, 1967). It is a methodology which seeks to develop a theory which is rooted in – grounded in – data which have been collected and analysed systematically (Strauss and Corbin, 1994: 273). The grounded theory is used for theory generating on unexplored issues (Glaser, 1978; Glaser & Strauss, 1967). In the context of this study, grounded theory adequately fits the purpose of exploring the qualities and structure of subjective theories of teacher educators about quality teaching in the context of their profession in Rwanda. To fit the nature of the exploratory nature of this study, theoretical sampling as one feature of grounded theory was adopted (Cohen et al, 2018; Savin-Baden & Major, 2013). Theoretical sampling consists of progressively selecting cases according to theoretical assumptions concerning the issue under study, data analysis through coding and constant comparison until saturation is reached (Cohen et al, 2018: 714;

Glaser, 2009). In view of Silverman (2005: 130) and relating to this study, theoretical sampling meant progressively selecting teacher educators having the characteristics relevant to the research questions. For Glaser & Strauss (1967: 49), theoretical sampling is used to answer two questions: (1) to which groups does one turn next for data? (b) for what theoretical purposes does one seek further data? In this regard and following the iterativity in the progressive selection of interviewees, data collection and analysis, the sampling started with some teacher educators taking into consideration the sampling criteria i.e., gender, qualification, duration of experiences, area of qualification, location and type of the teacher education institutions (see below *sample and sampling criteria*). The next selection was progressively guided by the variation of theoretical assumptions as well as the already collected and analysed data.

In the perspectives of the grounded theory with theoretical sampling, theoretical assumptions of sampling refer to the characteristics of cases which can likely make a difference as far as the issue under study is concerned (Cohen et al., 2018: 668). The theoretical assumptions for sampling in the course of this study were inspired by the existing literature on research about subjective theories, especially of teachers (3.3.2). For instance, some scientific studies show that subjective theories about teaching might be related to gender (Pettit, 2011, OECD, 2009). For example, female teachers hold constructivist teaching-related subjective theories more than their counterpart male in OECD countries (OECD, 2009: 114). Moreover, subjective theories are context- and time-bound (Martinez et al., 2017; Brinkmann, 2016). Accordingly, the likely vary according to experiences during individual lifespan (Siddiquee, 2014; Mansour, 2009), educational and professional experiences (Siddiquee, 2014: 23; Casella, 2012: 2), contextual factors (Brinkmann, 2016; Mansour, 2009).

In the framework of this study especially the profile of teacher educators in Rwanda (2.3.3), personal, professional and contextual characteristics were considered as theoretical assumptions of sampling concerning the exploration of subjective theories as far as the process of theoretical sampling is concerned. While gender and age are for personal, educational background: qualification and in-service training, working experi-

ence, and subject taught were considered for professional theoretical assumptions. For the contextual background, the type and location of teacher education institutions were taken into consideration.

Following the process of theoretical sampling and as well as progressive variation of theoretical assumptions as sampling criteria, the data collection via a semi-structured interview (see 4.4.1) sampling table was progressively completed (see appendix 6). Theoretical assumptions were progressively considered to select teacher educators purposively and conveniently. The purposive and convenience sampling strategies (Thornberg & Charmaz, 2014: 156) were used to select teacher educators to be interviewed. This means that the selection of interviewees always relied on the variation of sampling criteria as inspired by theoretical foundations for sampling in this study. Moreover, convenience sampling was used when more than one teacher educators fulfilled the requirements of being selected. If there were two or more teacher educators having the same characteristics, convenience sampling was used by selecting who is available at the time of the interview (Kumar, 2011: 189). For example, I was to interview a male teacher educator teaching the subject in the domain of social sciences and having the age of more than 40 years. Unfortunately, the previously contacted one was not available at the time of the interview. In this case, I found another teacher educator in the same domain who was available and accepted to be interviewed.

From the perspective of theoretical sampling, the size of the sample is not pre-determined. Rather, it is determined by the saturation point when no new data is generated (Silverman, 2014; Savin-Baden & Major, 2013). With theoretical sampling, choice of cases, data collection and analysis are done iteratively (Creswell, 2014; Savin-Baden & Major, 2013; Glaser, 2009; Kolb, 2012). Data were collected from a group of interviewees (at least five) and analysed before proceeding with the next groups of interviewees (cfr. Silverman, 2014: 62-63). Next selection of teacher educators to be interviewed was done progressively to explore the variation of the issue (subjective theories) according to theoretical assumptions which were considered as sampling criteria (Rapley, 2014: 58-59). In the context of this study, saturation was reached at the 32nd interview. It was reached at two interconnected levels: sample and content. First, the saturation was reached at the level of sampling criteria. In this regard, saturation was

reached when theoretical assumptions – sampling criteria – were exhausted. At the same time, content saturation was reached when no new codes were emerging from the empirical data (cfr. Glaser, 1978: 53; Glaser & Strauss, 1967: 61-62) The details about the sample and sampling criteria are described hereunder.

Sample and sampling criteria

Following the theoretical assumptions as far as the exploration of teacher educators' subjective theories about quality teaching is concerned, the saturation was reached after iterative and progressive selection of teacher educators to be interviewed on the basis of different sampling criteria. They include personal, educational background and professional experiences as well as contextual criteria.

Personal Characteristics

Following the theoretical assumptions as previously indicated (*4.1 sampling: theoretical foundations and sampling strategy*), gender was taken into consideration in the process of choosing teacher educators in this study. Accordingly, saturation was reached with 32 interviewed teacher educators comprising of 16 females and 16 males. Building on the theoretical assumptions that subjective theories can be related to lifespan experiences (Martinez et al., 2017; Brinkmann, 2016), the criterion of age was considered in the progressive selection of the interviewees. Therefore, teacher educators of different ages were progressively selected and interviewed. Consequently, four interviewed teacher educators were in the age range of 21-30, ten in 31-40, eleven in 41-50 and seven were 51 old years and above (see Appendix 6).

The educational and professional background of the interviewees

The level and type of education, as well as the professional experiences, are related to subjective theories (Levin, 2015; Buehl & Fives, 2009). Therefore, the educational background and professional experiences of teacher educators to be interviewed were progressively considered in the process

of theoretical sampling. Accordingly, the level of education was taken into consideration in the sampling process. In this regard, one interviewee has a diploma (two years of university), 18 hold Bachelor's degrees, nine interviewed teacher educators have got a master's degree and four have a PhD. Like other developing countries where unqualified teachers are still in service to close the shortage of qualified teachers (UNESCO, 2014: 37-38), the choice of teacher educators considered whether they are qualified in teaching or not as well as types and areas of specialization. Interviewees were progressively selected from teacher educators with and without specialization in education. In the sample, 23 interviewees have qualifications in education (2.3, *teacher educators in Rwanda*) and nine interviewed teacher educators have degrees in different subjects other than education.

Concerning the professional experience, number of years as a teacher or/ and teacher educator as well as the types of in-service training was considered. In this regard, respectively six and 16 interviewed teacher educators attended subject and subject didactics in-service training. All interviewees (32) indicated that they attended in-service training for general pedagogy related to topics like inclusive education, ICT in education, participatory and active pedagogy. This implies that interviewed teacher educators had attended in-service teacher training in more than one domain. Professional experience as a teacher and /or teacher educator is likely to make a difference concerning subjective theories held by teacher educators about quality teaching and teaching teachers (cfr. Levin, 2015). Therefore, teacher educators were selected based on the duration of their experience as either teachers or teacher educators. Accordingly, the following interval of years: 1-5, 6-10 and 11 and above was used. Therefore, 25 interviewees served as teachers at different levels of education before becoming teacher educators as compared to seven interviewees without prior teaching experience. Concerning the duration of experience as teachers, seven interviewees taught between 1-5 years, 14 between 6-10 years and eleven taught 10 years and above.

Equally, working in a teacher training college or university can make a difference concerning subjective theories of teacher educators. For example, in addition to teaching and teacher training, universities carry out research that might have an influence on how they understand education and particularly teaching and teacher education. Teacher educators were

then selected from two categories of institutions namely universities and Teacher Training Colleges (TTCs). Accordingly, 14 interviewed teacher educators come from university teacher education and 18 come from TTCs (see 2.3).

Though comparative studies of subjective theories of teachers teaching different subjects are scarce, teaching different subjects like sciences and mathematics, languages, arts and humanities, social sciences, and pedagogical or subject didactics pedagogy can make a difference. Therefore, teacher educators to be interviewed were progressively selected based on the subject they teach. The subjects were grouped as foundations of education and subject didactics, maths as well as arts and humanities, social sciences and languages. The variation of teacher educators to be interviewed until saturation shows that the interviewees teach either one, two or three subjects. For example, while eleven interviewed teacher educators teach only one subject, 16 teach two and four teach three subjects (see appendix 6). In addition to teaching student teachers, additional responsibilities – administrative or academic – of teacher educators were considered as sampling criteria. For example, it was assumed that serving as dean of the faculty, in-service teacher trainer, head of research unit or head of department can make a difference in terms of subjective theories held by teacher educators about quality teaching and teacher education. Therefore, more than half (18) of the interviewed teacher educators have additional academic and administrative responsibilities. This implies that 14 interviewees solely have the responsibility of teaching student teachers (see appendix 6).

Institutional characteristics

As far as Institutional characteristics are concerned, the type and location of teacher education institutions were likewise considered. If subjective theories are related to contextual factors (Martinez et al., 2017 Brinkmann, 2016), it was worth considering the location (rural, semi-urban and rural) and type (state, state-subsidized and non-state) of teacher education institutions during the progressive selection of teacher educators to be interviewed. Accordingly, 14 interviewees teach in teacher education institutions located in rural, ten in urban and in semi-urban areas.

In the same vein of orientation, the status of the institution may influence the working environment and consequently the understanding of their profession. In the present study, it was deemed necessary to include teacher educators from private (non-state), public (state) or semi-public (state-subsidised) teacher education institutions. The diversity and differences of teacher education institutions including for example governance, admission and funding (GoR, 2021) can influence in one or another way the working conditions of teacher educators and likely their conceptions of teaching and teacher education. Consequently, eight interviewed teacher educators work in the state, 17 in state-subsidized and seven in non-stated teacher education institutions.

4.3 Method of data collection: Semi-structured interview

The quality of any scientific work relies on the adequacy of the choice of design and methods (i.e., data collection and analysis) that help to answer the research question (Mayring, 2014: 8). After explaining the qualitative approach adopted for the present study (4.1) and sample and sampling strategy (4.2), I describe and explain the method of data collection (semi-structured interview) as well as the process of data collection (development of an interview guide and conducting interviews).

4.3.1 Semi-structured interview: Justification and development

In this part, I explain, first, the relevance of using semi-structured interview in exploring teacher educators' subjective theories about quality teaching in the context of their profession. Second, explain the process of the development of the interview guide.

Exploring subjective theories: Relevance and use of semi-structured interview

Studying teacher educators' subjective theories is about investigating how they represent their work in regard to teaching student teachers. In this regard, teacher educators' representations and interpretations of what makes good teaching and teacher education are the core of the study at hand. Literature shows that subjective theories are part of interpretations

of experiences and human thinking (Hansen, 2000: 28; Martinez et al., 2017: 4) which are personal. This means that interviews are one method to collect personally related data like subjective theories. Scholars argue that interviews are adequate for studying individuals' views, understandings interpretations, experiences, and perceptions (Mason, 2018: 111). This applies to the case of the present study. With semi-structured interviews, there are possibilities of flexibility to clarify and deepen what the interviewee is saying (Mason, 2018: 110-116; Savin-Baden & Major, 2013: 357-358).

In the study at hand, a semi-structured interview was used to explore subjective theories of teacher trainers about quality teaching and teaching teachers. Being open by means of pre-set questions with the flexibility of asking more questions to get rich information (Mason, 2018: 111; Savin-Baden & Major, 2013: 358) related to the thinking and experiences of targeted group, semi-structured interviews fit to explore understandings held by teacher educators about their work of teaching how to teach. As for Barriball & While (1994: 330), a semi-structured interview is adequate for the exploration of individuals' beliefs about complex issues. The authors refer to the flexibility of probing through additional questions to collect rich data (Savin-Baden & Major, 2013: 359). In this framework, the interview guide as a tool for data collection was developed.

Development of the interview guide

In this part, I describe the content and process of development of the interview guide. This is framed in the sense that an interview is a conversation where the interviewer and interviewee should share and agree before starting the core questions. Therefore, I start by describing the introductory part of the interview and proceed with the development of questions directly related to the research questions of this study. Additionally, I clarify the content of the background information to be collected from interviewees. More than that, I explain the languages in which the interview guide was developed and translated as well as the explanatory reasons. Furthermore, I outline the aspects of the closing words of the session of the interview.

The introductory section of the interview: The introduction of the interview is key to its success. In the context of this study and inspired by Savin-Baden & Major, 2013: 367- 368), aspects of the introduction of the interviewee were reflected and included in the interview guide. They include the self-introduction of the researcher, interest and purpose of the interview, expectations from the interviewee, the context of the interview, ethical issues and request for informed consent. For instance, the researcher's self-introduction to the interviewee by indicating his name and profession was included in the interview guide. Expectations – learning from her/ his experiences – from the interview were equally reflected. Moreover, ethical – i.e., confidentiality, use of the data, and permission to record the interview – were considered. The introductory part of the interview was important, especially giving some tips for building rapport and trust which was a necessity for the success of the interview (Cohen et al., 2018: 518).

Developing questions: In line with the research questions, a semi-structured should have a diversity of questions. They include for example initial questions, questions to gather in-depth data and follow-up questions. Accordingly, a semi-structured interview should start with general questions introducing the interview (initial question), proceed with deep questions related to the issue under investigation (questions for collecting deep data along with possible follow-up questions and end with another general closing question. Initial questions are used at the beginning of the interview to lay the foundation for further questions. Descriptive (i.e., eliciting general information about the interviewee in relation to her/his profession), and narrative (i.e., eliciting stories) questions are important for starting an interview. They serve for laying the foundation for further probing questions. As far as deep questions are concerned, they were set in relation to the research questions of the study (1.3 & 3.4). They are set in a way that they give opportunity for the interviewee to express her/his understandings, beliefs, or experiences in relation to research questions (Savin-Baden & Major, 2013: 364-368). Therefore, they can vary according to the purpose of the empirical study. Due to the nature of the semi-structured interview which assumes that the interview does not necessarily follow the order of the pre-set questions, follow-up questions were reflected

for that end. They are asked to get deep data by probing by asking interviewees to extend, elaborate, add to, exemplify, provide details for, clarify or clarify their answers (Cohen et al., 2018: 514; Savin-Baden & Major, 2013: 366). As a part of probing questions, researchers advise asking a closing question to tie a line of questioning in line with the focus of the interview. In this case, an interviewer can ask the interviewee if there might be information (i.e., ideas, experiences) considered important but not previously shared in relation to the focus of the interview (Savin-Baden & Major, 2013: 366).

In the context of this study, three types of questions (Savin-Baden & Major, 2013: 365-366) were developed as far as the interviewee guide is concerned. For the initial question, the introductory general was set to ask about interviewees' how the interviewee sees her/his job as a teacher of teachers. With regard to teacher educators' beliefs about quality teaching, three questions were developed. One is about how good teaching looks like. This question was asked to understand teacher educators' subjective theories about what good teaching is all about. Subjective theories are experience-related and connected to the professional and personal background (4.2). It was deemed necessary to ask interviewees to give examples from their experiences. The teacher is the most important figure in quality teaching (Hattie, 2012: 22; Gauthier & Démbélé, 2004: 3). Teaching quality and the quality of the teacher are inseparable. With this understanding, questions about what a good teacher looks like or does were set in the interview guide of this study. On the opposite side, a question about how a bad teacher looks like was asked to deepen their understanding of a good teacher by sharing their thinking about the bad teacher. With regard to interviewees' subjective theories about quality teacher training, different questions were set. One is about how they prepare their student teachers to become good teachers. Another is about how and what a good teacher educator looks like or does. The closing question was to share what was not said and what she/ he finds important. For the depth and richness of the interview, some tips for probes were likewise reflected. The draft of the interview was discussed during the weekly seminars PhD learning communities (see appendix 1).

Background information: As indicated in the characteristics of the sample (4.2), characteristics that may make a difference in subjective theories

held by teacher educators about quality teaching and teaching teachers were considered. In this orientation, personal, educational, professional and institutional background information was collected at the end of the interview. Regarding personal information, age and gender were considered. The level of education (qualification) and area of specialization were asked concerning the educational background of the interviewed teacher educators. As far as professional background information is concerned, duration and type of work experience as a teacher and teacher educator, subject taught, and in-service professional development opportunities were asked. Some teacher educators have additional academic and administrative responsibilities. Therefore, this was included in the questionnaire concerning the background information of the interviewees. Finally, it is worth getting information about the teacher education institution. They include the location (rural, urban and semi-urban), type (public (state, private (non-state) and semi-private (semi-state) and level [secondary (Teacher Training Colleges), and higher education. Details about the background information can be found in appendix 4.

Closing the interview: Though it was not included in the interview guide, tips about closing the interview were reflected during the development of the interview guide. They include words of thanks for the interviewee having accepted to take part in and sharing her/his perspectives, understandings, and experiences during the interview. Possibilities of contacting the interviewee in case further information could be needed were reflected. As a recognition for the interviewee, a notebook and a pen were prepared to be given in addition to social appraisal (see 4.3.3).

Interview guide: The language issue

Due to its historical background related to the liberation war and the 1994 genocide against the Tutsi, the Government of Rwanda adopted multilingualism. Kinyarwanda (mother tongue), French, English and Swahili are official languages (GoR, 2015: 10). On the one hand, multilingualism has been promoted as means to meet the linguistic background of former refugees who had lived for many years in neighbouring countries like Uganda, Tanzania, Burundi and the Democratic Republic of Congo. On the other hand, it has been adopted as a means of political and economic

integration at international and regional levels (Mugisha, 2010). English is used as the medium of instruction as a replacement for French since 2009 (MINEDUC, 2008: 11). Moreover, the shortage of teaching workforce in Rwanda led to the recruitment of teachers from foreign countries. With this background, the interview guide was developed and discussed in English as the language in which the PhD is done. To ease data collection, however, it was translated into Kinyarwanda (appendix 2) and French (appendix 3) for two reasons. First, for some (if not many), English is the third language, and they felt comfortable expressing their subjective theories and experiences about teaching and teacher education in their mother tongue. Second, there are some teachers from French-speaking countries teaching in Rwanda. It was then worth translating the interview guide into French. Language-wise, 27 interviews were done in Kinyarwanda, three in English and one in French.

After the interview guide was ready, the process of data collection started. Following the iterative nature of this study (4.1 & 4.2), I explain the process of data collection (4.3.3) which was iteratively connected to data generalisation (4.4).

4.3.2 Data collection process

As indicated earlier (4.2), theoretical sampling was adopted to progressively select teacher educators to be interviewed. The identification of the teacher educators to be interviewed was progressively done by finding the contact of teacher educators following the variation of the sample criteria and asking her/him for permission and an appointment (Savin-Baden & Major, 2013: 316). When I was asking for permission and an appointment, the purpose of the research was explained to the interviewee in the orientation of learning from her/ his experiences related to the topic and agreeing on the time and lieu of an interview. A secure environment without disturbances was to be chosen (Mason, 2018: 93). Safe places were chosen and interviews were done without significant disturbances (see 5.1). Moreover, tools to be used—recorder, laptop, telephone, notebook, and pen—were prepared beforehand. Conducting interviews need concentration. Hence, physical and psychological readiness were considered as precondition for the successful process of conducting interview. This was

considered on the side of the interviewer and checked on the side of the interviewee. No interview was taken when both, the interviewer and interviewee, seemed to be tired and distracted.

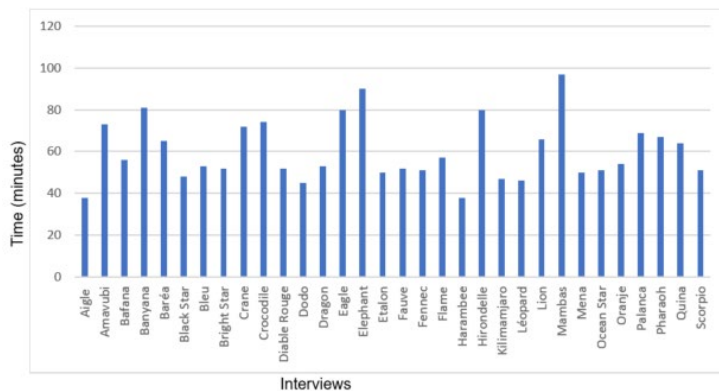
On the day of the interview, I started by introducing myself to the interviewee, explaining the purpose of the research and what I expected from her/him. I also explained the ethical considerations (see also 4.3.2) including free participation and the right to withdraw, ensuring confidentiality and anonymity of data during data analysis and reporting. Moreover, orally informed consent was asked for being recorded during the interview (Mason, 2018: 83 – 106; Savin-Baden & Major, 2013: 325-329; Mack, Woodson, McQueen, Guest & Namey, 2005: 10-11). The purpose of this introduction was to build a rapport with the interviewee. The latter was allowed to ask questions where she/he needed clarification about the interview. Concerning the case of this study, teacher educators to be interviewed asked questions about the output of this study. Accordingly, the framework of this study was explained, and I promised to share the publication at the end of the study. Concerning recording, except for one interviewee who reluctantly accepted to be recorded, the rest easily allowed recording of the interviews. Though the interview guide oriented the process of the interview, the dialogue did not always follow the pre-determined order as prescribed. Rather, it was done in a relaxed atmosphere where I had to ask follow-up and probing questions based on the answers of the interviewee (Savin-Baden & Major, 2013: 365). Further questions mostly depended on the interviewee's answers. Interviews were recorded by means of the audio-recording instrument as well as notetaking by the interviewer. Moreover, the interviewer carefully listens and observes how the interviewee shares her / his experiences and views. For cautious measures, two instruments were used for recording: either an audio recorder and telephone or an audio recorder and recording with a laptop. During the interview, questions that could jeopardise it were avoided. Questions required direct answers (yes/no), questions on different topics, asking questions when the interviewee was still talking, and judgement for instance (Savin-Baden & Major, 2013: 372). Silences were respected. Avoiding interruptions and minimizing distractions (like phone calls), giving advice and being too superficial were avoided during the interview

(Cohen et al., 2018: 520). The use of a recorder was helpful for the progress of the interview in the sense that the interviewer concentrated effort on following the interview without taking much time on taking notes. Only main ideas were written to facilitate for example the interviewer to ask follow-up questions.

After the interactive part of the interview, the interviewer asked questions to complete the background information not mentioned during the interview. Afterwards, each interview was ended by thanking the interviewee for sparing time for the interview, requesting to be available if further information would be needed and giving a small gift for recognition (notebook and a pen) (see also 4.3.2).

For the safety of the data, each recording of the interview was directly saved on the laptop and hard drive. Moreover, the background information was completed with a computer and stored on a hard drive. Major highlights from each interview were summarized and enriched during data analysis to portray it (see 4.4.2). Concerning the context of the interviewing and interviews, interviewed teacher educators were, generally, open to sharing their subjective theories about quality teaching in the context of their profession (5.1). For example, as shown by the figure below (figure 1), the duration of the interviews varied between 38 and one hour and 46 minutes.

Figure 1: Durations of the interviews



Source: Primary data

The figure 1 shows a diversity of the duration of interviews whereby the duration of two interviews is nearly below 40 minutes, 17 lasted between 40 minutes and one hour and 13 interviews were more than one hour. The duration of the interview can depend on different factors including the purpose of the study, openness and interest of the interviewee, probing capacity of the interviewer and context. Scholars argue that an interview of 30 minutes or more can offer possibilities to deepen the topic (Creswell, 2009: 170; DiCicco-Bloom & Crabtree, 2006: 315) through follow-up and probing questions for instance. Therefore, the variety of the duration of interviews shows the openness of interviewed teacher educators since, in general, all interviewees were open to sharing their perspectives regarding teaching and teacher training by providing answers to all questions (5.1).

Note on anonymisation: For ensuring the privacy and confidentiality of interviewed teacher educators, their names and teacher education institutions were anonymised. While interviewees were covered by national football teams (i.e., Amavubi), teacher education institutions were anonymised by corresponding countries (i.e., Rwanda) (see also, 4.5). In this regard, the names of countries mentioned in this study (see for example 5.1), don't indicate real countries, but rather anonymised teacher education institutions. Therefore, they are mentioned with asterisk (*). Names of the national football teams were used in singular without article. For example, the national football team of Ghana is called the Black Star. In this study, Black Star was taken to cover one interviewee (see appendix 5). Moreover, names of other people, institutions, and locations i.e., cities or regions mentioned by interviewees were covered by capital letters.

After the interview, transcription, translation, and coding respectively follow. The following part describes this process. It is important to underscore the fact that, in line with theoretical sampling, a group of interviews was transcribed, translated and coded before proceeding to the next interviews until saturation is reached. In the case of this study, a round of five interviews was progressively conducted, transcribed, translated, coded and inter-coded before proceeding to the subsequent rounds of interviews. In this study, saturation was reached with 32 interviews (4.1).

4.4 Data analysis and generalisation: Content analysis and abduction

Following the iterative nature of this study, I explain the method and process of data analysis (4.4.2) and the generalisation of data through abduction (4.4.3). As the analysis of data is based on the transcripts of interviews, I start by explaining the preparation of the material through transcription and translation of interviews (4.4.1).

4.4.1 Preparation of material: Transcription and translation

After conducting each interview, it was transcribed and translated into English in case it was conducted either in Kinyarwanda or in French. Accordingly, I describe processes of the transcription and translation.

Transcription

The content of the interview cannot be easily analysed in its original verbal form. It is rather transposed to written form-transcription. Scholars show that transcription is the most important step in the context of qualitative content analysis (Kowal & O'Connell, 2014: 64-66). Though transcription does not fully capture the whole interview, it is necessary to make sure that it is done in a way that shows the most important message conveyed during the interview (Mayring, 2014: 43).

Literature shows that there are different systems of transcription (Mayring, 2014: 45-46). The types of meanings to extract from the interviewee in relation to research questions enlighten the choice. As indicated above, subjective theories are personal, contextual and have to be verbalized by an individual. In this context, words cannot suffice to delineate how teacher educators understand good teaching and quality teacher education from their own experiences. Words seem not enough to facilitate the description of meanings teacher educators hold, other means of communication during the interview are to be necessarily considered. The pure verbatim protocol was suitable for that end. The pure verbatim protocol is a system of transcription whereby the transcriber writes word-by-word as

well as other aspects of interviews like prosodic and paralinguistic components as well as non-communication (Mayring, 2014: 45; Kowal & O'Connell, 2014: 72-74). With this system, the transcript nearly reflects the message conveyed by the interviewee and is likely to be useful for facilitating the process of describing the meanings interviewees attribute to teaching and teaching teachers. In order to maximize the pure verbatim transcription, the transcribers⁵ carefully and repetitively listen to the interview in order to listen to what the interview verbally communicates. To understand the process of transcription, orientation sessions for transcribers were organized before starting the process. During the first interview, feedback was given and discussed before proceeding to another interview.

Examples of the transcripts in:

Kinyarwanda

Kumenya kubitanga (5secs), kumenya kubitanga ni methodology (3secs) uhm hari ubwo usanga umuntu azi ikintu atazi ku gitanga cyangwa atazi uburyo agitangamo (uhm). Kumenya kugitanga hari structure agiha icyo ni kimwe, aaah hari no kuvuga ngo ese abo nyiha barakuramo iki? Iyo mvuze ngo ese ibyo mbaha barakuramo iki? Reka wenda mfate urugero rufatika tuvuge wenda nshobora kuba nzi ibintu nkaza nzi ko nawe ubizi kuko mbizi nkagira ngo nawe wabimenye. Nkaza nkamara isaha mbikubwira, ndabizi ariko wowe ntabwo wabimenye. Methodology yo kumenya uko kubitanga n'uruhare wabigizemo n'uburyo nabihayemo nicyo nitaga kumenya kubitanga. Kuko icyo nta ruhare wabigizemo nta kintu kinini uba unkuwemo nubwo nnye mbizi (uhm). (Scorpio: 53-62).

English

“the students we need to teach not only by words mandatorily we teach by who I'm (uhm) and so who I'm inside the classroom and outside the classroom

⁵ The transcription was done by me and Ange Munezero, Magnifique Habumugisha as well as Mugiraneza Schadrack: I thank them for their assistance.

(uhmuhm), this is very important, aaah we need to match our words and our actions (uhmuhm) I saw sometimes I go to the market eeh for example here in xxx and there are, many students are around also some of them are traders (Uhm) and if we say here please respect the people, the values and then I am doing wrong in the market and some of the students listen before me and now they saw something not good, not match and then what can I can I teach? what kind of teacher I am? This is very important, first match our words and our actions inside the classroom and outside the classroom (uhm).” (Ocean Star: 43-52).

French

Être un enseignant des enseignants ? (oui) être un enseignant des enseignants ? (oui) c'est être formateur en quelque chose (oui oui c'est ça), c' être model (uhm), parce que quand on doit être formateur on doit être model, donc c'est-à-dire il faut que les élèves s' inspirent en vous, alors vous ce que vous leur enseignez, c'est ce que eux aussi iront appliquer à l'école primaire. Comme exemple pas seulement au niveau de la matière, il y a des fois lorsqu' on doit entrer en classe, les élèves des fois il y a des élèves qui ont tendance à rester assis, mais que ce qu'on leur dit il faut vous vous levez (hum) pour montrer qu'il y a un changement et pour montrer qu'il y a quelqu'un qui est un peu au-dessus de vous pas une autorité mais il y a quand même un enseignant qui entre, il faut que vous vous levez, et ça a une signification pédagogie (uhm). (Hirondelle: 64-73).

Moreover, note-taking supplemented the transcription by taking notes of some important observations communicated during the interview. As indicated, interviews done in Kinyarwanda and French were subject to translation. In the following lines, I explain the process of translation.

Translation

Translation of transcripts in Kinyarwanda and French were translated into English for two reasons. First, English is the language in which the present research is written. It was therefore important to have the transcripts in English to ease writing. Second, it was for the purpose of communicating with members of the PhD learning community as well as supervisors especially in the process of inter-subjective validation through the inter-coding and abductive process. Scholars indicate that translation is the

most delicate process in the context of qualitative studies involving researchers from different cultural backgrounds (Santos, Black & Sandelowski, 2014: 134). The challenge is that some types of translation may alter the meaning of the original text (van Nes, Johnson & Deeg, 2010: 313; Negmi, Naidoo & Pilkington, 2010). To minimize the risks of losing the original meanings of content, a literary translation that is content-related (Munday, 2012) was preferred in the context of the present study. Since the content of the interview is the major source of subjective theories of teacher educators in this study, translation was made faithful enough to have almost the content communicated through the language used in the interview.

With regard to the control of accuracy of the translation process, a Kinyarwanda native speaker⁶, and expert in English and French with educational background translated transcripts. Moreover, the researcher crosschecks the translated transcripts by comparing them with the transcript in the first language through which the interview was conducted. Additionally, inter-coders likewise checked the quality of translations during the coding process.

Note: In Kinyarwanda, gender is not differentiated. It is not always easy to know if interviewee was talking about female or male. Therefore, the translation took this into consideration. Accordingly, she/he or her/his were used in the translation and hence present in direct citation (see 5.3).

Example of translated excerpts

Kinyarwanda to English

“Knowing how to deliver it (5secs), this is about methodology (3secs) (uhm) sometimes you may find a person who knows something but who does not know how to deliver it (hum). Knowing how to deliver it follows some principles; firstly, she/he gives it a structure (aaah) and then say: “what will my learners get?” Let

⁶ Special thanks to Mugiraneza Schadrack for his assistance regarding translation

me get a concrete example, I may know something and believe that you know it as well as I do! I may spend an hour telling you this; though I know it, you did not understand that! Methodology of delivering content as well your role in this process and the way I transmitted this to you, this is what I called knowing how to deliver it (hum).” (Scorpio: 53-60).

French to English

“Being a teacher of teachers? (yes) to be a teacher of teachers? (yes) is to be a trainer in some domain (yes, yes, that’s it), it’s to be a model (uhm), because when you have to be a trainer you have to be a model, that is to say, you have to make students get inspired from you, so what you teach them is what they will also apply in primary school. As an example, not only at the subject level, there are times when you have to enter the classroom, sometimes there are students who tend to remain seated, but what you tell them is that they have to stand up (hum) to show that there is a change and to show that there is someone who is a little above you, not an authority, but there is still a teacher who comes in, you have to stand up, and this has a pedagogical meaning (uhm).” (Hirondelle: 64-73).

Once the transcript was ready, the following step was to systematically analyse it through coding and inter-coding. Accordingly, the method and processes of data analysis are described hereunder.

4.4.2 Data analysis

As previously indicated (4.4.1), the transcripts of the interviews were the basis for analysis. In this regard, the method of data analysis – qualitative content analysis – is first explained. As indicated in the state of research (3.3), there exist other studies on teachers’ subjective theories about teaching in other contexts, the analysis of data – coding and inter-coding – started by developing a deductive category system (Mayring, 2014: 13). Therefore, the theoretical foundations and processes of deductive categorisation are, secondly, described. Thirdly, I explain the process of data analysis via coding and inter-coding as well as portraying interviews.

Qualitative content analysis

Qualities of teacher educators' subjective theories were systematically analysed via the content of the interview transcripts. In this regard, qualitative content analysis is an appropriate method for data analysis as it is less standardized and suitable for texts that require interpretation (cfr. Schreier, 2014: 170; 2012: 1; Silverman, 2014:116). The qualitative content analysis consists of a systematic descriptive analysis of the written-text or interview transcript- data (Cohen et al, 2018: 674; Graneheim, Lindgren & Lundman, 2017: 29-30). The purpose of qualitative content analysis is about moving from the raw data available in written communicative material – interview transcripts in this study – to structured qualities of the issue under study with a focus on the meanings of texts and their constituent parts (Cohen et al., 2018; Gläser & Laudel, 2013). In the context of this study, the analysis of the content of the interview transcripts was guided by the research questions (1.3; 3.4) that made the qualitative content analysis selective (Schreier, 2012: 5).

To adequately find the structure and types of qualities of the teacher educators' subjective theories about quality teaching and teacher education, required a systematic content analysis in an iterative deductive-inductive process of the interview transcripts in light of the research questions (1.3). Meanings assigned to the segments of the transcripts were coded in categories –deductively and inductively– in relation to related to research questions (Mayring, 2014: 13; Schreier, 2014: 78). Qualitative content analysis can be either deductive, inductive or both (Graneheim, Lindgren & Lundman, 2017; Mayring, 2014). On the basis of previous studies on teachers' subjective theories, quality teaching and teacher education (see Chapter 3), a deductive categorisation in relation to research questions (1.3) was developed. During the coding of the interviews, inductive categories were generated. Therefore, iterative deductive and inductive coding was applied in this study. Accordingly, I describe the processes and deductive coding frame and proceed with the coding process.

Deductive categorisation

Despite the paucity of scientific literature on teacher educators' subjective theories about teaching and teaching teachers worldwide and particularly in the Global South, there is extensive research on teachers' subjective theories (cfr. chapter 3). It was useful to start with what other scholars found out. In this framework, a deductive coding frame was developed based on existing literature in light of research questions guiding this study (see appendix 7). For subjective theories of teacher educators about quality in the context of their profession, four categories were identified: teacher quality, quality teaching, professional teacher educator and quality teacher teaching.

The first category is about qualities of a good teachers as the first category. In this category, personal (e.g., self-confidence, patience, openness, creativity), ethical (e.g., honesty, role model, dressing codes, social (e.g., caring, friendliness, love for children, approachability, supportiveness and encouraging) characteristics (Haidel & Jalal, 2018; Ida, 2017; Cakmak & Akkutay, 2016; Plavsic & Dikovic, 2016; Liu & Meng, 2016; Stronge, ward & Grant, 2011; Rubio, 2010) were considered as sub-categories. Moreover, it was worth considering the belief about the teaching profession (good teachers as born or made) (Trumbull, 2004: 1212). More on that, subjective theories about the qualities of a good teacher may be related to qualifications, knowledge, and competences. In this regard, qualification and professionalism is another sub-category with sub-sub-category: (a) qualification (having a required degree/ certificate to be a teacher in a given country), (b) professional knowledge (general pedagogical (e.g. pedagogy, teaching methods, assessment, classroom management, curriculum, psychology of learners and learning), content, pedagogical content and contextual (governance, cultural, political, international) (Guerrero, 2017; Wang, 2017; Shulman, 1987, 1986), (c) professional competence (Villegas-Reimers, 2003; Shulman, 1987) and (d) professional learning (through different opportunities i.e., in-service, self-development: reading, learning from her /his practice, professional learning communities and/or networks) (Kunter, Kleickman, Klusmann & Richter, 2013: 67). Like other teachers, it is assumed that teacher educators should have the same characteristics as indicated above. In addition to that, they

should have knowledge of teacher professional development (meaning, steps, methods and models) (see Villegas-Reimers, 2003: 11 – 16, 69 – 70) as well as the role of modelling in teacher education (see Lunenberg & Swennen, 2007; Korthagen, Loughran & Russell, 2006; Loughran, 2006). This means that the category of beliefs about professional teacher educators is composed of elements presented for teachers plus knowledge of teacher professional development and modelling (see also 3.2.3).

Like teacher and teacher educator, quality teaching and teaching teachers are assumed to have some commonalities concerning teaching. However, there are additional particularities for quality teacher training. Due to the shortage of literature on subjective theories of teacher educators, the deductive coding frame is based on the existing theoretical framework of teachers' beliefs as well as empirical literature about quality teacher education (see 3.3). Subjective theories about quality teaching are conceptualized in dichotomized perspectives: transmission/ traditional and constructivist beliefs about teaching (OECD, 2009; Fives et al., 2015; see also 3.3.2). While transmission-oriented beliefs are related to teacher-centred models and nearly linked to behaviourist approaches, constructivist beliefs are linked to student-centred models of teaching and humanist approaches (UNESCO, 2004). From this background and in combination with existing scientific discourse, beliefs about quality teaching for the deductive coding system are related to traditional beliefs in relation to preparation/ planning (fixed), teacher-centred methods, learning climate (hierarchical, quiet classroom, failure-related fear), classroom management (highly structured and imposed rules and regulations, use of severe punishments for control behaviours) and assessment (strictly standardized, output oriented). For constructivist beliefs, methods are viewed as a learner- and competence-oriented, learning climate is viewed as more conducive to positive rapport with and within students and the latter can be given the opportunity to take initiatives and responsibilities, inclusive by respecting and responding to diversity/heterogeneity and classroom management is seen as participative (in setting rules and regulations, learning time and de-escalation) and assessment is considered as for learning where self-, peer and formative assessment and constructive feedback are encouraged (see also 3.2.2; 3.3.2). For quality teacher educa-

tion, professional learning (like learning communities, feedback and reflection, professional practice (like micro-teaching, internship) and modelling (implicit, explicit and co-teaching) are added (Darling-Hammond, Hyer & Gardner, 2017; Korthagen et al, 2006; Lunenberg et al., 2007; Loughran, 2006) in the lenses of constructivist beliefs. From the traditional perspectives, professional learning (learning communities, feedback and reflection) is either not reflected or not constructive especially for feedback; professional practice is seen as a reproduction of specific methods of teaching and modelling not reflected (remain implicit). Based on critiques that it may be possible that an individual can hold two beliefs at the same time (Fives et al., 2015: 255), mixed beliefs are included in the coding frame of the study at hand (see also 3.3.3).

Categories, sub-categories as well as sub-sub-categories are named and defined as well as developing coding rules to guide the coding of interviews (Mayring, 2014: 95-98; Schreier, 2014: 89). Deductive coding system served as a flexible and open framework for analysing transcripts.

Familiarisation: Coding process and portraying interviews

The iterative deductive-inductive process precedes the abduction thanks to which results are generalized into types. Some qualitative researchers show that abduction follows three interconnected and iterative phases namely familiarisation, defamiliarisation and formation of types (Zelinsky, 2019 & Timmermans & Tavory, 2012). They indicate that the phase of familiarisation known as “revisiting the phenomenon” (Timmermans & Tavory, 2012: 176) or “mnemonics” (Zelinsky, 2019: 4) is a process of immersion in the transcripts in order to get familiar with the data in light of research questions. This phase enables the researcher to get acquainted with the content of communicative written materials. In the context of this study, coding and inter-coding interviews and writing portraits were helpful in the process of familiarisation with the content of transcripts.

Before describing the process of coding and portraying interviews, it is worth highlighting the role of notetaking and memo writing (Timmermans & Tavory, 2012:169; Thornberg & Charmaz, 2014:163) as a cross-cutting tool for the process of qualitative content analysis. The same authors indicate that it is important to progressively write any observation

(memos) from empirical data during data collection and analysis. Observations may be related but not limited to surprises in terms of novelty or anomalous ideas (Paavola, 2014:6; Timmermans & Tavory, 2012:171) as well as relationships between codes within and/or between interviews. In the context of the study at hand, all emerging ideas from the data i.e., collection of data, transcription, and coding were captured and written down. Manual means (notebook and pen) and memo writing in MAXQDA were used to document any emerging insights from the data.

Coding interview transcripts

Coding consists of carefully reading the transcripts, analysing them and extracting the excerpts corresponding to different qualities in relation to research questions (Mayring, 2014: 66). In qualitative content analysis, coding the interview refers to the process of “assigning segments of texts (i.e., transcripts in the context of the present study) to the categories of the deductive coding frame (Schreier, 2014: 171) (see deductive categorisation, appendix 8) and creating new – inductive – categories missing in the existing coding frame (Mayring, 2014: 97-104). The use of iterative deductive-inductive approaches in the context of the present study is justified by the fact that there is already knowledge existing on the topic under study (see 3.3.3) as well as contextual results that progressively arise during the analysis of interviews. Therefore, interviews were analysed in light of the existing coding frame with the flexibility of inductively adding other emerging categories during the process of coding interviews.

With regard to the context of the present research, interviews were progressively coded by the researcher in collaboration with experts in the areas of education (inter-coding). Each interview transcript was coded by the researcher. Additionally, each interview was coded (inter-coding) by another expert in education and acquainted with the topic under study. The inter-coding was done by the members of the PhD learning community⁷. After coding individually, two coded transcripts were compared and

⁷ I wholeheartedly thank Charles Gahutu, Dr. Onja Raharijoana, Frederick Njobati, Dr. Christine Nyiramana, Etienne Uwajjiwabo, Eraste Bulaya Kakule Jumapili, Claude Ernest

discussed for differences, similarities, divergences and convergences in the coding (cfr. Mayring, 2014: 114 & Cornish, Gillespie & Zittoun, 2014: 81). Based on the comparison and discussion, the coded interview was reflectively revised. In the view of Cornish et al. (op. cit), inter-coding is a process of minimizing risks of subjectivity in the process of assigning meanings of the transcript to different categories.

The analysis process was done manually and by means of software for qualitative research-MAXQDA. On the one hand, nine interviews were coded by the researcher and all interviews were inter-coded manually. This was done by assigning segments of the interview to categories using the track change function in Microsoft Word. Concerning the analysis of the interviews with MXQDA, the deductive coding frame was introduced in the software and inductively updated along with the coding process. After confronting and discussing the manually coded and inter-coded interview, the stabilised coded interview was introduced in the MAXQDA. On the other hand, the transcripts were directly introduced and coded in MAXQDA. In this regard, a comparison with related inter-coded interviews was done by systematically checking the electronically and manually coded transcripts. Accordingly, reflected revisions were done directly within MAXQDA. When saturation was reached after conducting (exhausting the sampling criteria), coding and inter-coding 32 interviews, a deductive-inductive coding system was generated (see appendix 8). It can be observed that new codes like motivation, international orientation of teacher education, training for reading, value-based teaching and teacher training inductively emerged from the empirical material during the process of coding transcripts.

In the same process of familiarisation with the interviews, the portrait of each interview was summarised. Therefore, I explain hereunder what the portrait of the interview entailed.

Njoya, Prof. Dr. Semerita Kavira Kamundu, and Dr. Jean Kasereka Lutswamba for their contribution by inter-coding interviews.

Writing the portraits of the interviews

To understand the overview of the interviews and the contexts in which they were done, each interview was portrayed. Presenting the portraits of the interviews was a process of writing a short description of each interview. This description considers three main aspects: background information about the interviewee (appendix 4), the context of the interview as well as the main message of the interviewee concerning the research focus. In the context of the study at hand, individual characteristics (gender and age), academic information (qualification and area of specialization), professional background (work experience in teaching and teacher education, subject taught, professional development like in-service training), as well as the context of the interview (duration, location and atmosphere), were considered. On the other hand, expressed subjective theories about quality teaching and teaching teachers by each interviewed teacher educator were synopsised. The portraits of the 32 interviews are presented in 5.1.

Following the iterative process of this exploratory study and in close connection with data analysis (4.4.2), the empirical results of this study were generalised through abduction.

4.4.3 Generalisation of data: Abduction

As exploratory research embedded in grounded theory (4.1), this study has a hypothesis/theory-generating nature. Research discourse in social sciences shows that abduction best serves that end (Timmermans & Tavory, 2014, 2012; Reichertz, 2007). From the perspective of qualitative research, abduction is a creative inferential process of generating hypotheses and theories from empirical data (Timmermans & Tavory, 2012: 167). Scholars indicated that abduction is a process through which researchers explore data by discovering new patterns and suggesting plausible hypotheses (Krupnik & Turek, 2014: 37; Yu, 2006: 2-3). Building on the iterative deductive-inductive process through coding and inter-coding of interviews, the subsequent process of generalisation of results started by looking at empirical findings that are de- and reconceptualised to arrive at new structure – typology – of qualities of subjective theories (Reichertz, 2014:

125, 153). Accordingly, it consists of iteratively and innovatively generating the structure and qualities of the issue under study by concomitantly and iteratively forming types and explanatory rules (Zelinsky, 2019; Paavola, 2014). In this study, abduction consisted of the process of creatively and iteratively generalising the results in terms of the criteria and typology of subjective theories held by interviewed teacher educators about quality teaching and teacher training (see 5.2, 5.3). Building on and iteratively interconnected with the familiarisation (4.4.2), the generation of the typology of subjective theories held by interviewed teacher educators was done through two closely interconnected steps: Defamiliarisation and formation of types.

Defamiliarisation and formation of types

Defamiliarization is a process of taking a distance from the data as a researcher (Zelinsky, 2019:4) to get more insights from the data. It consists of revisiting the materials by identifying similarities, differences, logical fallacies, disturbing or anomalous observations, contradictions, surprises, puzzlements, details, patterns, connections, and little clues within and/or between transcripts in textual accounts (Paavola, 2014; Timmermans & Tavory, 2014, 2012). In this regard, defamiliarisation can be regarded as a process of meta-reading where the researcher revisits the already coded transcripts in an interconnected analytical way. As part of the abductive process, looking at empirical findings to arrive at new ideas characterizing the qualities of subjective theories served as a preliminary step of generalisation of results in types (cfr. Reichertz, 2014: 125).

In the context of the study at hand, the researcher revisits the coded transcripts using MAXQDA in order to identify patterns in the data in line with the research questions. Using excel sheets, citations from MAXQDA were iteratively put in different groups depending on how they are related or not. This complex, dynamic, recursive and iterative grouping of citations was done in an open and multiperspective way. For example, citations related to how interviewed teacher educators see quality teaching were put together. Within the same grouping, for instance, citations related to quality teaching in terms of planning, teaching and learning pro-

cess i.e., conditions, methods and assessment were identified and put together. Indeed, citations related to the beliefs of teacher educators about the process of teaching were put in different columns depending on their commonalities or differences. Here, the grouping of citations was done, for example, according to teaching as participation, interaction, transmission, etc. This is a complex process of structuring, restructuring and de-structuring the results by identifying structural lenses, similarities and differences based on coded segments. This process was iteratively done individually and in collaboration with the PhD learning community as an interpretation group⁸ (see also 4.6, quality of interpretation). By this dynamic process of defamiliarization, different perspectives of citations were already identified and constituted a preliminary interconnected step with the formation of types.

Known as alternating casing as used by Timmermans & Tavory (2012: 177), the formation of types constitutes the conclusive phase of abduction (Scheunpflug, Franz & Krogull, 2016: 17). This phase concerns the process of mapping the structure of the issue – subjective theories in this study – in the in light of research questions. This process consists of identifying explanatory criteria and forming types based on revisiting and reflecting on the coded transcripts (see Timmermans & Tavory, 2012). In the same complex, iterative and creative process, the structure of subjective theories by identification of criteria as horizons of comparison which served for generalisation of results in a typology was generated. In this process, criteria structuring the qualities of subjective theories about quality teaching teacher education in the eyes of interviewed teacher educators were creatively identified. Through a process of iterative comparative analysis of coded segments of the interviews, as guided by research questions, different dimensions characterising interviewees' perspectives were identified. The identification of perspectives was done by the close and progressive analysis of each interview through coded interview segments. In

⁸ Special thanks to Prof. Annette Scheunpflug, Gahutu Charles, Dr. Onja Rariojoana, Dr. Christine Nyiramana, Etienne Uwajiywabo, Fredrick Njobati, Dr. Abraham Tangwe Tamukum, Eraste Bulaya Kakule Jumapili, Prof. Dr. Semerita Kavira Kamundu and Dr. Jean Kasereka Lutswamba.

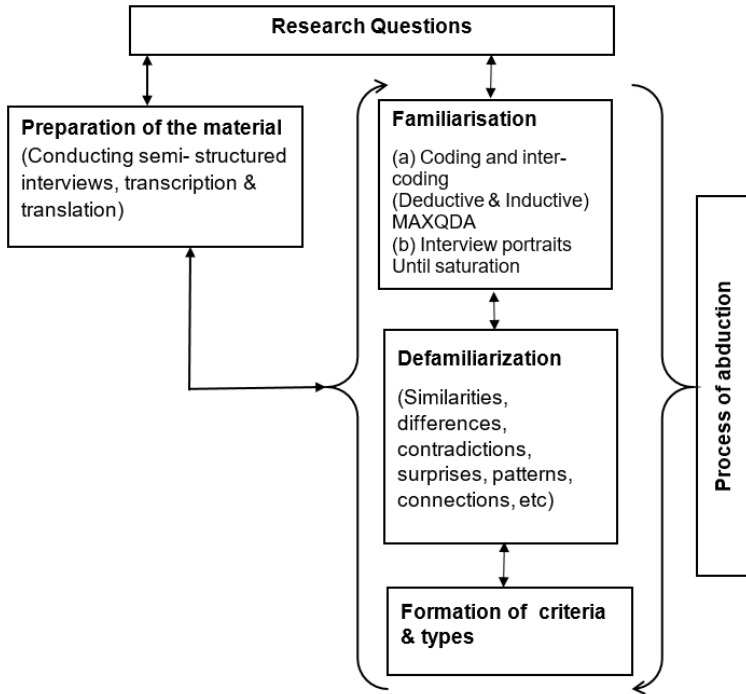
this process, iterative intra-interview and cross-interview analyses were used to identify similar or divergent perspectives within and between interviews using citations coded in MAXQDA. On the other hand, a multi-directional back-and-forth process of comparative cross-quote analysis within an interview and across interviews led to the identification of similarities and differences in terms of interviewees' subjective theories. Through such an iterative process, the perspectives in terms of criteria were identified. It is worth noting that identified criteria serve as comparative horizons which later served to generate different types of subjective theories (see 5.2.1).

The typology-generation process of subjective theories was concurrently done through a process of grouping quotes from interviews via the lenses of previously identified comparative horizons. This process was done both vertically and horizontally in an iterative and interconnected using Excel sheets. Vertically, quotes were grouped according to how similar and different they are within one criterion and between criteria. Concomitantly and based on vertical grouping, quotes were differentiated horizontally. This iterative process was done by looking at grouping related quotes across identified criteria. In this complex, iterative and creative process of this vertical and horizontal grouping, a typology of subjective theories held by interviewed teacher educators was generated (5.2.2 & 5.3).

Summary of data collection, analysis and generalisation

As a complex, dynamic, iterative, and recursive process, the empirical part of this study is summarised in Figure 2. Following the research questions of this study (1.3, 3.4), a semi-structured interview guide (4.3.1) was developed and validated in a PhD learning community (4.3.2). Data collection through semi-structured interviews was done iteratively with familiarisation – coding and inter-coding – and portraying interviews until saturation was reached (4.4.2). Interconnected and iterative with data collection and analysis, the generalisation of results was done through abduction, especially via the process of defamiliarisation and typification whereby criteria as horizons of comparisons were creatively identified (5.2.1) and through which the four ideal types of subjective theories held by the interviewed teacher educators were generated (4.4.3 & 5.2).

Figure 2: Iterative process of data collection, analysis and interpretation



Source: Own design inspired by Zelinsky, 2019; Scheunpflug et al., 2016; Schreier, 2014; 2012; Paavola, 2014; Timmermans & Tavory, 2014, 2012; Reichertz, 2007).

The figure 2 gives a synopsis of the iterative process of the empirical part of this study in terms of data collection, preparation (transcription and translation), data analysis (coding and inter-coding) and generalisation of results by identification of criteria through which types of subjective theories of teacher educators were generated.

During the afore-described empirical process, research-related ethics and mechanisms for quality control were reflected and taken into consideration. Accordingly, the ethical considerations (4.5) and strategies for quality control (4.6) are summarised hereunder.

4.5 Ethical considerations

In the present study, ethical dimensions were taken into consideration concerning data collection and analysis. The rights and freedom of interviewees were respected. In the context of the present study, I describe how freedom of participation was ensured during data collection. Moreover, I show how privacy and confidentiality were taken into consideration during the process of this study.

Based on the freedom of participation that must be ensured in scientific research, I explained the purpose of the research and what was expected from the interviewee (Mack, 2005: 10-11). It was made clear that participation is voluntary as well as the right to withdraw (Cohen et al., 2018: 117). Each interviewee was given the opportunity to ask questions or comment about what was expected and whatever she/he would like to know about the research and her/ his contribution to the study (Creswell, 2014 & Dawson, 2009). A teacher educator who accepted to be interviewed provided oral informed consent (Mack, 2005: 11). Moreover, as means of easing data analysis, permission to record the interview was asked. All interviewees accepted the recording of the interviews. Generally, despite hesitation for one interviewee, interviewed teacher educators found the interviews as an opportunity to express their own beliefs and easily accepted recording.

Interviewed teacher educators were protected from any harm that might be due to the data they provided as well as the respect for their basic rights including privacy and confidentiality (Silverman, 2014: 141; Savin-Baden, 2013: 325). More on that, interviewees were ensured confidentiality and anonymity during the process of analysis and interpretation of data as well as for the publication of results (Mason, 2018: 83 – 106; Savin-Baden & Major, 2013: 319-337). In the context of the study at hand, confidentiality was ensured by the anonymisation of both interviewees and teacher training institutions. As far as interviewees are concerned, I preferred to use the names of national football teams for interviewed teacher educators and the country for teacher education institutions (see appendix 5). For the recognition of the contribution to this study by interviewed teacher educators, each one was given a small gift of a notebook and a pen.

4.6 Quality control

Qualitative research does not escape the rigorous process characterizing any scientific research (Kumar, 2011: 29). Though qualitative research is more subjective, its process has to ensure quality so as to generate inter-subjective knowledge. In the context of the present qualitative study, I explain quality control strategies in the process of this study. I show how quality was ensured in the process of development of the interview guide, sampling, transcription, translation, analysis and generalisation of data.

Quality in the development of the interview guide

Research questions are key to the process of any scientific research (Mayring, 2014: 10). In the context of this study, research questions guided the process of development of an interview guide. To ensure the quality of the interview guide was checked commented and discussed during the weekly seminar by the PhD learning community. For example, the quality was checked if the proposed guiding questions reflect the research questions. Moreover, the quality of questions in terms of simplicity i.e., language, understandability, and stimulation (Cohen et al., 2018: 513). Accordingly, the draft of the interview guide was discussed and commented on by a group of experts in education as well as by the supervisor of this thesis. Comments and suggestions have been progressively and reflectively integrated to improve the draft of the interview guide until it was finalized. As the interview was translated from English to Kinyarwanda and French, one expert in education whose mother tongue is Kinyarwanda did cross-check the translation.

Furthermore, the interview guide was regularly adapted during conducting interview by checking if there are some complex questions or unasked for example. The process of the interview is always reflective and facilitates the process of progressively refining the interview guide for subsequent interviews.

Quality control in sampling

So far as sampling is concerned, the quality was ensured by reflecting and varying the sampling criteria (4.2) during the process of interviewing (see appendix 6). First, the theoretical assumptions which led to sampling criteria were prepared by the researcher and discussed in a PhD learning community and with the supervisor. Comments as questions asked during the discussion enlightened the sampling criteria. Second, the sampling criteria were progressively registered in a sampling table (see appendix 6). Moreover, the process was crosschecked by the same PhD learning community under the facilitation of the main supervisor of this study.

Ensuring quality in transcription and translation

This study is based on teacher educators' subjective theories as verbalized during interviews which were made accessible for analysis through transcription (4.4.1). The quality of the transcription influences the subsequent phases of research. Audio-recorded were carefully listened to in order to capture what the interviewee said. Moreover, another person hired to do transcription was trained in how to transcribe interviews in line with the context of the present research (4.3.3.). More on that, the inter-coding process was referring to the audio-recorded interview, transcripts, and translation to compare if the content of the message conveyed by the interviewee was not lost during the process of transcription and translation. During inter-coding, members of the PhD learning community also checked for language and quality of the transcription.

Regarding quality control of the translation process, a Kinyarwanda native speaker an expert in English and French with educational background translated transcripts. Moreover, I progressively crosschecked the translated transcripts by comparing them with the transcripts and audio-recorded interviews whenever the need arose. External coders in the process of inter-coding likewise checked the quality of translation during coding interviews.

Quality of data analysis: Coding and inter-coding

The quality control in the process of data analysis was ensured through inter-coding (Silverman, 2014: 87; Barbour, 2014: 497; Cornish, Gillespie & Zittoun, 2014: 81). Inter-coding is a process through which different coders are given the same transcript and code it separately (Mayring, 2014: 83). Concerning the case of this study, each interview was coded by the researcher and inter-coded by a member of the PhD Learning Community (4.4.2). Afterwards, coders met and discussed their respective codes assigned to different segments of the verbatim of interview. The inter-coding was helpful to ensure the quality of data analysis about systematicity, clarity, transparency, and accountability (Cornish et al., 2014: 81). The inter-coding was helpful in the sense of the minimisation of subjectivity and monoperspectivity in data analysis.

Ensuring quality in the interpretation: Validation of results

The quality of the interpretation of results in qualitative research is an important step in ensuring academic transparency (Cohen et al., 2018; Birt et al., 2016). Accordingly, the internal and external validation were progressively integrated for quality control in this study. First, members of the PhD learning community ensured quality control by discussing the results of abduction. For example, the progressive drafts of the abduction were presented and discussed with members of the PhD learning community either in small groups or in plenary sessions facilitated by the main supervisor of this thesis until it was stabilised. Second, the results of the study were presented and discussed at different conferences and interdisciplinary seminars. For instance, the results of this were presented and discussed in the Doctorate School on Adult Education on the theme "Global Learning in Transcultural Networks: Changes and Challenges."⁹

⁹ The Doctorate school was hosted by the chair of Intercultural Theology at Ruhr-University of Bochum in collaboration with the chair of Foundations of Education, University of Bamberg and United Evangelical Mission (UEM) on 04-05.10.2021. Special thanks go to UEM

Moreover, the results were presented at the “International Conference on Education for Resilience in Rwanda”¹⁰. The results were likewise presented and discussed during the doctorate School on Adult Education on the theme “Transcultural Networks. Potentials of Global Learning in Religious Networks”¹¹. Moreover, the presentation and discussion of the results of this study during the interdisciplinary weekly seminar organized by Bamberg Graduate School of Social Sciences (BAGSS)¹² had been an anchor for validation by reflectively integrating feedback from a diversity of scholars.

Basing the description of the methodology and methods for the empirical part of this study, the following chapter is dedicated to results.

for the invitation as well as Prof. Dr. Claudia Jahnel and Prof. Dr. Wolfgang Jütte for organisation and facilitation.

¹⁰ The conference was hosted by the Protestant Institute of Arts and Social Sciences (Rwanda) in collaboration with the University of Bamberg (Germany), Université Evangélique du Camérout, Cameroon and Université Libre des Pays des Grands Lacs, Democratic Republic of Congo (21-22.09.2022). It was organised in the framework of the International Master’s Program on Educational Quality in Developing Countries (IMPEQ), funded by Bread for the World.

¹¹ It was hosted by the chair of Intercultural Theology at Ruhr-University of Bochum in collaboration with the chair of Foundations of Education, University of Bamberg, chair for Educational Science, University of Bielefeld, and United Evangelical Mission (UEM) at Ruhr Universität, Germany (05-15.10.2022). Special gratitude to Prof. Dr. Claudia Jahnel for organisation and facilitation. I also thank DAAD for funding.

¹² I thank BAGSS for the organisation of the weekly interdisciplinary seminars (Pillar 1) and particularly Prof. Dr. Cordula Artelt, Prof. Dr. Ilka Wolta and Prof. Dr. Sabine Weinert for their highly appreciated facilitation. I wholeheartedly thank colleagues at the same pillar for their inspiring feedback on this study.

5 Results: Typology of Teacher Educators' Subjective Theories in Rwanda

As previously indicated (chap 1.3), this study seeks to explore subjective theories of teacher educators in Rwanda about quality teaching in the context of their profession. In line with the methodological processes (chap 4), I describe the empirical results of this study. In this framework, I start by briefly portraying interviews (5.1), continue with describing the abductive process of generating the types of subjective theories (5.2) followed by the characterisation of the generated types (5.3) and end the chapter with the summary of results (5.4).

5.1 Profile of interviews

As indicated earlier (chaps 1.1), teacher educators' subjective theories are and should be reflected in their contextual backgrounds including but not limited to biographical, educational, and professional aspects. With this regard, the description of the typology of teacher educators' subjective theories in Rwanda is preceded by the profile of interviewed teacher educators. This is done in two steps. First, I shortly give the personal and professional profiles of the interviewees as well as the context of the interview process. Age and gender are described as personal information. Qualification and area of specialization as well as experience, subject taught, and in-service professional development opportunities are synopsized regarding interviewed teacher educators' educational and professional background. Second, the portraits of the interviews regarding research questions are described too. In this orientation, I give the general picture of the interviewee regarding beliefs of the interviewed teacher educators about quality teaching and teacher education.

Aigle

Being in the age range of 40-50 years, Aigle is a male teacher educator working in a non-stated faith-based rural Teacher Training College (TTC). In addition to his qualification (BA in education sciences), he participated in various in-service trainings including for example ICT in education,

inclusive education and content pedagogical training i.e., training on reading competences in primary schools. Before having served as a teacher educator for more than ten years where he teaches general pedagogical courses, Aigle was a primary teacher for less than five years. In addition to pre-service teacher training, Aigle facilitates continuous primary teacher training in both subject and pedagogy. The interview with Aigle was done in the third quarter of 2018 in a calm place near his home and lasted around 38 minutes. Despite short answers, Aigle was open and provided answers to all questions during the interview.

Aigle believes that good teaching is firstly about mastery of knowledge and the ability to deliver it through clear explanations to students. For this to happen, it must be preceded by careful preparation of content and teaching aids. Moreover, it is characterized by the regularity of assessment followed by feedback which offers learning opportunities to individual students with learning difficulties. Secondly, quality teaching should be characterized by, said Aigle, a good learning climate through creating a friendly classroom environment as well as good relationships with fellow teachers and people outside the school context. Thirdly, good teaching is a matter of classroom management especially time management and management of students' misbehaviour.

Aigle has two major perspectives regarding how good teacher education looks like: focus and process of teacher professionalization. Primo, he emphasizes that quality teacher training should focus on the provision of subject and general pedagogical knowledge as well as practical opportunities including teaching practices and internships. Moreover, the emphasis, according to Aigle, must be put on the transmission "telling" appropriate behaviours for prospective teachers. More on that, quality teacher education is about the integration of ICT into teacher training. Concerning the professionalization of prospective teachers, Aigle believes that implicit role modelling through living the talk in the teaching process as well as relationships with student teachers are important for quality initial teacher training. Additionally, Aigle believes that student teachers must be trained on how to love the teaching profession and ensure professional learning in regard to regularly updating knowledge through in-

dividual or structural efforts. More on that, quality teacher training, according to Aigle, is about professional accompaniment to prospective teachers during and after the initial training.

Amavubi

Amavubi is a young adult (30-40) male teacher educator at an urban religious non-state university for less than ten years. He holds a master's degree in human sciences and education and has attended various in-service trainings in research and teaching-related topics. Additionally, Amavubi served as a secondary teacher for less than five years. Conducted during the end of the third quarter of 2018, the interview with Amavubi was done in a welcoming place in the university city. In one hour and fourteen minutes, the interview was done in a relaxed context and with openness on the side of the interviewee. The interview was done by a fellow doctoral researcher.

Recognizing the practical gap in his educational background, Amavubi expressed his views of teacher education as means of correcting the theoretical training he had undergone. Amavubi understands teaching teachers as involving student teachers in their training. In this regard, he understands that appropriation through contextualization and application of knowledge in their own lived experiences is key to quality teacher training. Reflection leading to creativity and then enhancing skills and attitudes are to be given priority. For Amavubi, teaching teacher should make sure that it implicitly serves as a role model for prospective teachers and enhance active listening as means of triggering the participation of student teachers.

Bafana

Banyana is a young female teacher educator (20-30 years) and has got a bachelor's degree as a teacher educator with a focus on social and human sciences. Banyana teaches social and human sciences and their didactics in a non-state faith-based rural government-aided teacher training College in South Africa* for less than five years. She has participated in continuous training in competency-based curriculum, inclusive education and

ICT in education. The interview was done in a calm place not far from South Africa* in the first half of the fourth trimester of 2018 and lasted 45 minutes. Noisy sounds outside the room where the interview took place did not disturb the process. Despite her pseudo-openness with short answers, the interviewee answered all questions.

Banyana believes good teaching consists of three perspectives: the teacher's personal characteristics, behaviour and professional activities. Concerning personal characteristics, she views good teaching as related to the teacher's commitment. In this regard, she thinks that teaching is a vocation/calling. Moreover, good teaching is viewed as a teacher serving as a role model in relation to her/his behaviour especially her/his relationship with students, fellow teachers and outside school community. More on that, good teaching is characterized by a patient teacher especially dealing with students' misbehaviours in the classroom. With regard to professional activities, good teaching is characterised by formal administrative respect of time like coming to school and finishing the annual curriculum on time. Good teaching is also viewed as implemented by a teacher who not only masters the content but also who regularly updates knowledge beyond the prescribed curricula and who encourages students to do their own research. For her, mastery of content constitutes the main source of the teacher's authority in the classroom. Additionally, she believes that effective teaching is related to administratively providing regular assessments as means for checking for understanding. She likewise indicates that the use of punishment is a must for quality teaching so as to promote students' mental development. Banyana believes that good teaching is about involving students in teaching through field visits, the use of ICT, and the use of a variety of teaching strategies like group works, changing rooms and question and answer in order to avoid them getting bored.

Concerning the quality of teacher professionalisation, she believes that the latter should focus on the transmission of the characteristics of a good teacher like having all skills in drawing, good handwriting, respect of time and punishment strategies. It is also linked to mastery of knowledge by teacher educators and the provision of appropriate learning support to student teachers. Additionally, quality teacher training is

viewed as role modelling especially practicing the talk and more importantly, the regularity of pedagogical documents. For her, learning to teach could be done through imitation of teacher educators' teaching practices like management of students without mastery of the language of instruction by sometimes using the mother tongue.

Banyana

Trained at university (Bachelor of Sciences) as a female science teacher educator who teaches sciences in a rural government aided religious TTC in South Africa*, Bafana is a young teacher educator (30-40 years). Bafana teaches in the same college for less than ten years. Moreover, Bafana participated in various in-service trainings mainly in general pedagogy. The interview with Bafana took place at the beginning of the last quarter of 2018 in one of the relaxing places near South Africa* and lasted for one hour and 21 minutes. Despite the noisy sounds outside, the interview was done in a relaxed, open and friendly environment. The interviewee was open to sharing her insights.

Bafana views good teaching from five perspectives. First, she believes that good teaching is about the preparation of administrative pedagogical documents¹³. Additionally, she thinks that good teaching is about being proactive, especially about questions that might be asked by students. This is complemented by regular updating of knowledge on the side of the teacher through individual research. Second, having good knowledge of the subject is the basis of quality teaching. Third, she thinks that quality teaching is closely related to the personal, ethical and social characteristics of a teacher. By this, she meant approachability and friendliness which enable teachers to identify students' problems and hence facilitate their learning. Furthermore, the teacher's voice is an aspect of good teaching, especially using adequate language adapted to the level of students and without mixing languages. Fourth, effective teaching is viewed by Bafana as involving students in teaching and learning by providing activities

¹³ In the context of Rwanda, pedagogical documents include for example lesson plans, registries for attendances and assessment, class diary and curricula.

which must be regularly monitored. Fifth and finally, she thinks that on-time mark-based feedback is another aspect which would enable both students and teachers to do a self-evaluation.

With regard to the quality of teacher training, she believes that it is a double work where teacher educator has not only to prepare future generations of teachers but also good citizens. In this regard, she thinks that effective teacher education is based on role modelling where teacher educators serve as role models in their own behaviour in the classroom as well as teaching practices. Accordingly, role modelling is seen as strictly following different parts of the lesson, preparation of pedagogical documents and teaching and learning aids considering the level of students. Moreover, quality teacher education is considered as strictly having an appropriate style of dressing inside and outside the school context. In this framework, she believes that good teacher education is likewise discipline-oriented. In her perspective, effective teacher education is based on two elements. First, the participation of student teachers in their training process through debates for example and where teacher educators play the role of social and pedagogical supporters. Second, it is about informally sharing experiences with student teachers about the teaching profession especially teachers' behaviours in schools.

Barea

Respectively trained as a specialist in languages and general education, Barea is an old (more than 55 years) male and experienced teacher and teacher educator for more than eleven years. He teaches language didactics, pedagogy-related courses and languages at a rural State University called Madagascar*. In addition, Barea has participated in various in-service trainings mainly in general pedagogy and educational research. Conducted during the first half of the last trimester of 2018, the interview took place in a secure family place and lasted for one hour and five minutes. The context of the interview was relaxed and friendly. The interviewee was open to sharing his beliefs.

Barea believes that good teaching is characterized by commitment to and love of the teaching profession which are seen as the core of the preparation and process of teaching. He indicates that subject, pedagogical

and didactical knowledge are key features of effective teaching. Therefore, the preparation and transmission of content as prescribed in the official curriculum with clear explanations constitute important aspects of quality teaching. According to Barea, the latter is facilitated by continuous search and use of teaching aids especially updated and relevant literature. More on that, he supports the idea of modern education scholars who stipulate that learner-centred methods are important for good teaching. For him, quality teaching consists of letting the learning responsibility to students. Furthermore, Barea believes that effective teaching is ensured by good relationships with students which push students to like the subject. In this orientation, effective teaching is characterized by a teacher who is approachable, open and humble so that students may feel comfortable with the teacher.

So far as quality teacher training is concerned, Barea believes that student teachers should be taught principles of teaching which they should implement in their teaching. He also indicates that a good learning climate especially respect for student teachers' ideas and making them love the teaching profession is key to effective teaching teachers. Barea is aware of being a role model for student teachers and believes it is not good to give an example of his own teaching practices. Rather, he shows that it is better to let them implicitly observe how teacher educators behave. Moreover, he believes that it is not necessary to serve as a role model when teaching a subject. However, he emphasizes that this should be done in subject didactics.

Black Star

With the age of more than 50 years, Black Star is a male general teacher educator for more than 15 years. In addition, Black Star served as a primary and secondary teacher for less than ten years. He teaches education sciences at one urban non-governmental higher learning institution. During his career as a teacher and teacher educator, he participated in and facilitated various trainings in general education. The interview with Black Star was conducted during the end of the third trimester of 2018 in a relaxed place near Ghana* for 48 minutes. The interviewee was charac-

terized by a more relaxed context. The interview was confident and narrated more about his administrative than pedagogical thoughts. The interview with Black Star was done by a fellow doctoral researcher.

Black Star understands quality teaching in terms of compliance to pre-established principles for example the organization of content. What is more, is developing a conducive social environment through interaction and communication with students. For him, having a degree does always equate to good teaching. With regard to his understanding of quality teacher education, Black Star emphasizes the role of implicit modelling by living the talk through teaching practices, adaptation and contextualization of content to the level of student teachers as well as developing a friendly learning environment. With regard to the latter, Black Star believes active listening, effective feedback, communication and counselling are the basis of effective teaching of teachers. Moreover, he mentions that lifelong learning is considered to be important for student teachers.

Bleu

Bleu is a young adult (30-40) female teacher educator in a religious government-aided rural teacher training college called France*. Trained as a language teacher (Bachelor of Arts), Bleu teaches languages and their didactics for less than ten years. Regarding continuous professional development, she has had opportunities for in-service training in general pedagogical and pedagogical content topics inside and outside France*. The interview with Bleu was done in a calm and environment place for 53 minutes. Despite the rain, the process of the latter was not significantly disturbed.

Bleu believes that quality teaching is related to four main areas: teaching process, knowledge and behaviour of the teacher as well as content. Bleu understands good teaching as the involvement of students in the teaching and learning process via active methods like brainstorming, role-plays, debates and research. Additionally, Bleu believes that quality teaching has to go beyond theories. Good teaching is the one, according to Bleu, that focuses on the contextualization of theoretical knowledge. She believes that quality teaching in which students are involved is mediated by

the quality of the teacher's behavioural qualities inside the classroom: respect, approachability, and friendliness as well as outside the school context. Accordingly, Bleu believes that a teacher has to serve as a role model. Moreover, Bleu believes that quality teaching is characterized by the teacher's understanding of subject knowledge as well as the knowledge of the national context.

Bleu believes that quality teacher education promotes lifelong learning by emphasizing the need for continuous updates of knowledge and skills. Additionally, the preparation of student teachers is viewed as a promotion of student teachers' reflectivity. According to Blue, quality teacher training is about modelling where teacher educators live what they theoretically teach inside the training institution and outside the school context.

Bright Star

Specialized (Bachelor) in and teaches social sciences at a sub-urban and religious non-governmental teacher training called South Soudan*, Bright Star is a male adult (40-50 years) teacher educator. For more than 10 years of experience, he attended and facilitated continuous teacher training on both general and subject didactics, especially active methods. The interview with Bright Star took place in a reading room during the end of the third trimester of 2018 and lasted 52 minutes. It was done in a friendly environment. The interviewee was open to sharing his views about teaching and teaching teachers.

Bright Star views quality teaching as a multidimensional construct and practice with requires reflectivity. First, he understands it in terms of preparation, clarity of explanation and efficient time management on the side of the teacher. Second, effective teaching aims to change both understanding and action. In this regard, Bright Star believes that the involvement of students in the teaching and learning process is of paramount importance. Third, he views good teaching from a reflective perspective. For him, there is no single and well-elaborated meaning of good teaching. In his view, good teaching requires a teacher to critically reflect different aspects which must be put together. They include matching the pre-

scribed curriculum with students' needs (background, level of understanding) which later lead to a reflection on teaching strategies to use for fostering understanding and application of knowledge. For him, the prescribed curriculum is not like a static bible to be implemented per se. Rather it must be related to the student's contextual needs. Accordingly, quality teaching requires reflection on resources inside and outside the classroom which are important for student's learning. In the same vein of reflection, he views teaching as a learning process. Here, he believes that a diversity of students constitutes an opportunity for learning. Fourth, Bright Star understands effective teaching in terms of a learning climate where respect of students' opinions, fair treatment, facilitation of interactions, encouragement of initiatives as well as nurturing good relationships with fellow teachers, love for the teaching profession, and sensitivity to students' needs are very important. Fifth, he views good teaching as a role modelling process. For him, a teacher who does not live the talk inside and outside the school compromises her/his teaching and implicitly communicates that a school is a place where people learn only theoretical and unrealistic knowledge.

For Bright Star, profession of teaching teachers is challenging especially serving as a role model in both behaviours and actions. His beliefs in quality teacher education are oriented to implicit teaching as well as a citizenship perspective. First, he understands that teaching is not teaching what you only know but also who you are. In this regard, teaching teacher has to base on good knowledge of content and proper use of teaching methodology serving as an exemplar for student teachers. Moreover, it should implicitly teach collaboration through engaging student teachers in tasks to be done in groups as well as nurturing good relationships with fellow teacher educators.

Crane

Crane is a male young adult (30-40) teacher educator qualified in foundations of education. In less than 10 years, he has been teaching arts and subject didactics in a semi-urban and religious non-governmental teacher training called Uganda*. Crane has attended and facilitated a number of in-service teacher training sessions in general pedagogy and didactics.

The interview took place in a safe reading room in Uganda* during the end of the third trimester of 2019 and lasted one hour twelve minutes. The interview with Crane was characterized by an open and friendly atmosphere. The interviewee shared his thoughts from personalized perspectives.

Believing in the capacity of students to learn on their own and outcome-oriented teaching, Crane views good teaching from the perspectives of reflective practice, competence-oriented assessment, good learning climate, classroom management and implicit teaching via school environment. He believes that good teaching has to reconcile both needs of the society as expressed in the official curriculum and the ones of students. In this orientation, Crane considers the official curriculum as a teaching aid/guide not to be followed per se. Rather, it should be used to reflect different strategies to be implemented for enhancing understanding and relevance of the content. In the views of Crane, good teaching is characterized by an assessment which is practice-based. Here, he emphasizes the role of alternating theory and practice. For him, each theoretical knowledge should be followed by a practical assessment outside the school context to check if a student is able to use the acquired knowledge in real life. Having such beliefs, Crane is not satisfied with the current evaluation system which is mainly theoretical. Moreover, Crane understands that the practical assessment would contribute to problem-solving in society. Crane extends his understanding by saying that teachers and schools should be evaluated on the basis of practical products made by their students in relation to what they teach.

With regard to learning climate and classroom management, Crane understands that good teaching avoids frightening students (i.e., harsh, discouraging words, fear). For him, such behaviours of a teacher can be a barrier likely to prevent students from actively participating in the teaching and learning process (i.e., fear to ask a question). Rather, effective teaching could tolerate mistakes and provision corrective feedback. Students should be provided with rules and regulations guiding interactions in the classroom and the teacher should play the role of an advisor in this process. Furthermore, Crane believes that students do not learn in the classroom but also in the school context. In this regard, the school environment especially efficient school management and relationships

among teachers is important for good teaching. In this orientation, Crane views the mismanagement of school resources as implicit teaching for students as far as school management is concerned. More on that, Crane understands that quality education is not the sole responsibility of the teacher who is always blamed for bad quality of students. Rather, he indicates that it is a collaborative venture of different sectors other than teachers and the Ministry of Education. He shows that other government bodies like ministries of health and agriculture should play a key role in developing educational quality. In this orientation, he recommends a regular dialogue among different key educational stakeholders as key to reflecting the improvement of educational quality.

With regard to his subjective understanding of quality teacher education, Crane views teacher education as the pillar for not only the whole education system but also the entire community of today and for their future career. On the side of theoretical teacher training, quality teacher education is characterized by the mastery of content on the side of teacher educators. Additionally, the reconciliation of planned curricula and student teachers' needs is said to be considered. In this orientation, student teachers are to be considered as responsible partners who are not always dictated what to do. Rather, teacher educators should have good relationships and collaborate with student teachers. Moreover, teaching teacher has to individually support student teachers in order to cater for the limited prerequisites they might have. In the views of Crane, teacher educators should be role models for student teachers in both inside and outside school contexts. If this does not occur, teacher education would be the transmission of ideal formalities.

With regard to beliefs about practical teacher education, Crane understands that it has to be competence oriented. Each theoretical teaching of the unit must end with practice. For him, teaching the content and its didactics should directly be followed by an application in the classroom. Believing that the overall aim of teacher education is related to teaching-related competences, Crane believes that teaching practice especially micro-teaching should prove if the student teachers are able to teach what they learnt. This alternation of theory and practice, he believes, is important for prospective teachers for two main purposes: identification of challenges and mitigation measures for the progress of student teachers

as well as self-assessment for teacher educators. Unfortunately, he is not satisfied with the teaching and assessment system which, for him, is theoretical.

Crocodile

Crocodile is an adult (50-60) female teacher educator. She studied languages in post-primary general education. Crocodile teaches languages, didactics and humanities at a rural government-aided teacher training called Soudan*. Before joining Soudan where she has been teaching for more than 11 years, Crocodile taught at primary education for less than five years. In her extensive experience, she has attended and facilitated in-service teacher training on various topics on general pedagogy and didactics of languages. Conducted in a safe and calm room at one university in Soudan*, the interview with Crocodile took place in the first quarter of 2020 and lasted one hour and fourteen minutes. The interview was done in a calm and open atmosphere.

She views good teaching as a result of the innate capacity of the teacher. Additionally, mastery of the subject knowledge and regular follow-up of students' learning progress is considered important dimensions of quality teaching. Crocodile believes that teaching through groups is a strategy for provision of the individual support in overcrowded classrooms. Accordingly, Crocodile believes that good teaching is about creating a conducive social environment by closely collaborating with educational stakeholders like parents. Moreover, it is about meeting students' needs through counselling. She likewise sees commitment to the teaching profession and continuous professional learning as important for a quality teacher. For Crocodile, quality teacher education is understood in terms of role modelling especially regular preparation of required pedagogical documents and proving a mastery of content by a teacher educator.

Diable Rouge

Diable Rouge is a young adult (30-40) female teacher educator at a rural and religious non-governmental teacher training college called Congo*.

She was trained as a science teacher and teaches science at the same college for less than five years. Before joining Congo*, she taught the same subjects in non-teacher training secondary education for less than five years. With regard to her professional development opportunities, Diable Rouge has attended a variety of in-service training on general pedagogy and science didactics. The interview with Diable Rouge was done at the beginning of the second half of the first semester of 2020. It took place in a calm room at Congo* for the duration of 52 minutes. The interview with Diable Rouge was done in a relaxed and friendly atmosphere. The interviewee shared her thoughts in an open dialogue.

Diable Rouge views good teaching from four perspectives: fulfilling formalities, personal, social and teaching-learning processes. First, she indicates that good teaching is characterized by regular preparation of required pedagogical documents and strict respect for the three steps of lesson delivery: introduction, development and conclusion. Second, commitment to work, teachers' self-confidence and innovative spirit are seen as features of effective teaching. Third, she believes that quality teaching is characterized by good relationships with both students and fellow teachers as well as humour (laughing). Fourth and finally, teaching for understanding as verified by students' academic performances, respect of time, motivation of students and their concentration as well as participation of students through group work characterize effective teaching.

Diable Rouge believes that quality teacher education is related to role modelling of teacher educators in terms of fulfilling formal requirements: regular preparation of pedagogical documents, personal behaviour and discipline as well as clothing (cleanness and ethically accepted clothes i.e., non-seducing and distracting).

Dodo

Specialized in Humanities (Bachelor of Arts), Dodo is a male young adult (40-50) teacher educator in a rural and religious non-governmental teacher training college called Mauritius*. He teaches social sciences and humanities, languages as well as general didactics. As regards to continuous professional development, he has participated in various in-service

teacher training sessions including general pedagogy and didactics of languages. The interview was conducted at the beginning of the second trimester of 2020 at Mauritius* in a calm room for 45 minutes. Nothing disturbed the process of the interview. The interviewee shared his understanding in an open atmosphere with short answers.

Dodo views quality teaching from different perspectives: personal, social, professional formalities and pedagogical process. First, commitment and passion for teaching are believed as major determinants of good teachers. Second, he believes that good teaching is characterized by a friendly, caring, fair and inclusive environment where every student feels welcome. Third, good teaching, according to him, is characterized by professional formalities including qualification, knowledge of the subject, preparation (pedagogical documents) and following strict teaching methodology. Pedagogically, he believes that good teaching is a process of sharing experiences between students and teachers. In the same perspective, he added that the integration of ICT is a basis for nurturing the process of sharing experiences and knowledge.

In the views of Dodo, quality teacher education is related to training student teachers in professional formalities like preparation of lessons via pedagogical documents, availability of teaching materials and pedagogical infrastructure like laboratories, regular monitoring and collaboration between education stakeholders.

Dragon

Dragon is a male teacher educator at a semi-urban and religious non-state teacher training college called China*. He was trained as a general teacher educator (BA) and has been teaching education sciences and subject didactics for more than 20 years. Before becoming a teacher educator, he taught in primary education for less than 5 years. Dragon has attended and facilitated a variety of in-service nursery and primary teacher trainings in general pedagogy. Lasting for 53 minutes, the interview with Dragon was conducted in a room in China* at the beginning of the second quarter of 2020. Despite work-related interruptions, the interviewee was open to sharing his beliefs.

For him, quality teaching is not inborn but developed through quality teacher education. Dragon believes that appropriate teaching is a meticulous preparation of lessons, classroom management, role modelling and application of knowledge and competence-oriented assessment. For him, searching and understanding the content to be taught, preparation of assessment and the clear structure of the teaching and learning process are understood dimensions of quality teaching. The latter is also characterized by classroom management in terms of instigating the active participation of students, control of the behaviour during the teaching-learning process and support for students with special learning needs like slow learners. Moreover, he views teaching quality as facilitating the application of knowledge in the real life of students by putting them in situations that would activate their capacity to solve problems. In the same vein of the idea, he believes that assessment is part of the learning process.

Dragon views quality teacher training in terms of qualification and teacher training practices. He believes that formal qualification as a teacher educator is a dimension of quality teacher training. Additionally, he asserts that the quality of teaching to teach must be done through frequent teaching practices alternated with theoretical ones.

Eagle

Eagle is a young adult (30-40 years) female teacher at a one-teacher training college (Nigeria*) located in a semi-urban area in Rwanda. She was trained as a language teacher (Bachelor) and participated in various pedagogical in-service trainings. Respectively, Eagle served as a teacher in basic education for less than ten years. As a teacher educator, she teaches languages and related didactics. The interview with Eagle was done during the first semester of 2020 in a prepared room in Nigeria* for one hour and 20 minutes. It was characterized by a relaxed and friendly environment. The interviewee was free and open to sharing her perspectives.

Being knowledgeable of different administrative formalities of teaching, Eagle believes that good teaching is characterized by pedagogical recipes: preparation of pedagogical documents, strict respect for three parts of a lesson (introduction, development and evaluation) and time manage-

ment as well as motivation formulas. Moreover, she views quality teaching in terms of creating a conducive environment like the love of and good relationships with students, teachers and people outside the school context. Finally, quality teaching is characterised by learning outcomes in terms of change of behaviour.

So far as teacher education is concerned, Eagle views it as a process of teaching by example in social and ethical terms: good conduct (behaviour and clothing style) and good relationships with fellow teachers and school authorities. Additionally, Eagle views quality teacher education as the enhancement of mastery of the subject as well as the knowledge of pedagogical principles and techniques.

Elephant

The interview at hand was done with a young (<30 years) male teacher educator anonymized as Elephant. After his university training as a science teacher educator, he teaches sciences at one semi-urban and religious non-governmental teacher training anonymised Ivory Coast* for less than five years. Elephant served as a teacher in basic education for less than five years. As a teacher educator, he has participated in a variety of in-service training on general pedagogy and subject didactics. The interview with Elephant was done during the first half of 2020 in a calm place near Ivory Coast* and lasted one hour and a half. The atmosphere of the interview was characterized by a relaxed, friendly and open environment. The interviewee was free and open to share his beliefs about teaching and teacher training.

Elephant views good teaching in relation to the teacher's characteristics and the quality teaching-learning process. He believes that a good teacher is characterized by punctuality, hard work, love of students, commitment to the teaching profession and mastery of content. The quality of the teaching and learning process is featured by students' engagement, use of didactic material, managing students' behaviour, extrinsic motivation, and learning climate. By the latter, Elephant believes that good teaching is characterized by friendliness with students, the provision of constructive feedback for and from students facilitated by a constant self-evaluation.

Furthermore, the subjective theories of Elephant about quality teacher training are framed in three perspectives: qualities of the teacher educator, role modelling and focus of teacher training. For Elephant, a good teacher trainer is one who has teaching experience. Additionally, she/he should be committed to the teaching profession and be knowledgeable of what she/he teaches. Being aware of teaching the talk, Elephant believes that effective teacher training should be modelled by teacher educators' behaviours and equity in regard to the provision of extra support to students with learning difficulties. More on that, he understands that effective teacher training focuses on teaching subject-related and pedagogical knowledge as well as moulding student behaviour.

Etalon

Etalon is an adult (30-40) male science teacher educator at a rural non-governmental university called Burkina Faso*. He teaches sciences and related didactics for less than five years. Before joining Burkina Faso*, he served as a science teacher in basic education for less than three years. In his professional experiences, Etalon has participated in continuous training on active pedagogy and earth sciences. The interview was conducted during the first quarter of 2020 in a relaxing place for 49 minutes. It was done in a calm, open and relaxed context. The interviewee shared his beliefs in a personalized way.

In the views of Etalon, beliefs about quality teaching are framed in four perspectives: participation and competence-oriented, social and ethical; classroom management and subject knowledge. First, Etalon believes that quality teaching is related to the participation of students through research followed by sharing of experiences, contextualizing the content, especially using context-based questions, training of thinking, self-discovery and self-reflection and application of knowledge to solve problems. Respectively, Etalon thinks that good teaching is about classroom management in terms of controlling students' discipline during the teaching and learning process as well as subject knowledge and its correctness. In addition, he conceives teaching in terms of ethical, social and ethical characteristics: good relationship with students, counselling and being value-oriented especially regarding teaching and living the talk.

Despite his awareness of theoretical teacher training through the provision of content knowledge and teaching-related values, he emphasizes that practical aspects should characterize quality teacher training. In this regard, he highlights his beliefs in practical teacher training through field visits (content- and teaching-wise), extended internships and many opportunities for teaching practice during the initial teacher training. Furthermore, Etalon views effective teacher training in terms of implicit behavioural modelling of teacher educators.

Fauve

Fauve is an adult (40-50) female teacher educator. Trained as a language teacher (Bachelor of Arts), Fauve teaches general pedagogy, languages and related didactics in rural and religious non-governmental teacher training college, Central Africa*, for more than 10 years. Central Africa* is a. Before joining Central Africa, Fauve served as a primary teacher for less than five years. As a teacher educator, she has participated in and facilitated in-service nursery and primary teacher training on various topics including general pedagogical knowledge and subject didactics. The interview with Fauve was conducted at the beginning of the first quarter of 2020 in a relaxing milieu and lasted 52 minutes. The process of the interview was characterized by openness on the side of the interviewee.

Believing that teaching is a vocation, Fauve views good teaching in relation to teacher- and teaching-related administrative and ethical formalities. She shows that good teaching is characterized by a committed, hardworking, dedicated and patient teacher as well as love and respect of students. Moreover, she understands quality teaching as having and nurturing good relationships as well as collaborating with teachers and parents. More on that, fulfilling teaching-related administrative and ethical formalities like keeping pedagogical documents, respect of allocated time and informally defined dressing codes are considered as important qualities of good teaching.

Fauve believes that quality teacher education is characterized by theoretical followed by practical training. On the one hand, Fauve views quality teacher training in regard to the delivery of content and didactics as well as knowledge of students. For Fauve, practical training should, on the

other hand, include practical professional apprenticeship (observation of professional teachers' practices), training for manufacturing teaching and learning materials and strategies of reading different books as well as implicit modelling through professional activities and behaviour of teacher educators especially respect for students.

Fennec

Specialized as a science teacher, Fennec is a young adult (30-40 years) female teacher educator at a semi-urban and religious non-governmental teacher training college called Algeria*. Fennec teaches science-related subjects and didactics for less than ten years. Moreover, she has had opportunities to participate in a variety of in-service trainings on general pedagogy including competency-based curriculum and didactics of sciences. The interview with Fennec took place in a relaxing place near Algeria* during the first semester of 2020 and lasted 51 minutes. The process of this interview was characterized by an open but hesitant environment on the side of the interviewee.

First, Fennec views teaching quality from the perspectives of teacher characteristics: self-discipline, self-control, self-organization, commitment, approachability, humility, punctuality, exemplarity of conduct and love of students. Moreover, good teaching is viewed as nurturing good relationships with students, teachers and collaborating with parents as well as catering for students' needs through counselling. Second, she understands quality teaching process as a formal preparation of lessons, subject knowledge, good learning climate in terms of freedom of expression and varying participative teaching methods like brainstorming, presentation and group work.

In the perspective of Fennec, quality teacher training is seen as process of implicit role modelling through professional behaviour of teacher educators. In this regard, she views quality teacher training in terms of implicit role modelling through routinised aspects of teaching including preparations of lessons, formal steps of lessons, use of teaching aids and a variety of teaching methods and creation of a good learning climate through warmups. Moreover, she views practice-based assessment as an integral part of effective teacher training.

Flame

Respectively trained as social sciences teacher (Bachelor of Arts) and specialist (Master of Arts), Flame is a female young adult (30-40) teacher educator at a non-governmental and religious university located in a semi-urban area anonymised Malawi*. As regards to professional background, she served as a secondary teacher for less than five years. Moreover, Flame has been teaching social sciences, general pedagogical courses and didactics in Malawi* for less than ten years. More on that, she has participated in various in-service training mainly in general pedagogy-related topics including competency-based curriculum and higher education didactics. Conducted during the first quarter of 2020 in a calm place outside Malawi, the interview lasted 57 minutes. Additionally, the process of the interview was characterized by a relaxed and friendly atmosphere.

First, Flame views quality teaching from the perspectives of teacher's characteristics which include innovativeness, exemplarity of behaviours inside and outside the school context and playing parental role (treating a student as your own child and as a human being) as well as equal treatment of students. Second, she understands effective teaching as contextualization of the content and variation of active teaching methods as well as formal aspects of teaching like keeping pedagogical documents, formal steps of a lesson, and objective-standard-assessment linkage. Third, she believes that classroom management in terms of the physical and social arrangement of the classroom, availability of teaching aids and management of students' behaviours are part of quality teaching.

With regard to effective teacher training, Flame believes that it is characterized by implicit modelling through living the talk in terms of professional behaviour. Accordingly, Flame considers that teacher educators should not only teach about planning lessons and valuing the diversity of students but also model these qualities in their own practices so that student teachers imitate them. Moreover, she understands that good teacher education is characterized by the active participation of student teachers in the training process through the use of scenarios and case studies as well as peer learning among student teachers.

Harambee

Harambee is a young adult (30-35 years) female teacher educator at an urban and religious teacher training college called Kenya*. Trained as a language teacher, she respectively served as a secondary school language teacher and teacher educators for less than five years. She teaches languages, arts and humanities. Harambee has participated in a variety of continuous teacher training on didactics of languages and general pedagogy as well as a newly introduced competency-based curriculum. The interview with Harambee was conducted in the first half of the first quarter of 2020 in a safe place near the college. It lasted 39 minutes. Though the physical environment was safe, Harambee was reserved and hesitant while sharing her beliefs.

Harambee understands good teaching as the involvement of students, assessment and follow-up of learning progress as well as the management of students' behaviours combined with formal aspects of teaching like preparation of pedagogical documents and teaching aids. Moreover, she believes that good teaching is characterized by knowledge of the subject and a language of instruction. The beliefs of Harambee about quality teacher education are threefold. First, teaching theoretical knowledge followed by teaching practices in schools. Second, it is featured by implicit modelling through teacher educators' behaviours (i.e., clothing styles). Finally, it is about building the confidence of student teacher through counselling.

Hirondelle

Trained as a science teacher (Bachelor of sciences with education), Hirondelle is a male adult (40-50 years) teacher educator at a religious and urban non-governmental teacher training college called Burundi*. Hirondelle has been teaching natural sciences for more than 10 years at the same college. Hirondelle has participated in a variety of in-service trainings generally on general pedagogy and subject didactics. The interview with Hirondelle was done during the first half of the year 2020 in a safe place at Burundi* and lasted for one hour and twenty minutes. The interview was characterized by a relaxed atmosphere. The interviewee shared

his understanding in an open way. Though he did not expect to become a teacher, Hirondele says that he ended up liking teaching profession and staying such a long time in teacher training college.

The interview shows that he holds mixed beliefs about quality teaching and teacher education. On the one hand, good teaching is considered as compliance to prescribed formalities especially using teaching materials hierarchically recommended by authorities. Moreover, evaluation is a tool for verifying if students understood what they were taught by teachers. On the other hand, Hirondele believes that good teaching is characterized by contextualization through relating the content to the real life of students. More than that, teaching is qualified to be of good quality in terms of outcome especially the rate of employment of graduates as well as their usefulness in society.

With regard to quality teacher education, Hirondele is aware that he should serve as a role model for his student teachers. In this orientation, he believes that he should comply with prescribed standards of teaching like having administrative requested pedagogical documents, structured steps of a lesson, formal use of blackboard and cleanness. He understands that student teachers should be taught how to make didactic materials by only showing how it is done. On the opposite, Hirondele believes that good teacher education should integrate ICT through using videos, involve student teachers through research and presentations. In addition, teacher educator serves as a facilitator in this process. More on that, quality teacher training, he believes, is based on the qualities of a qualified teacher educator who masters the content and who is guided by values like honesty in providing marks for example and professional humility. For the latter, a good teacher educator should be humble and does not pretend to know everything.

Kilimanjaro

With the age range of 50-60 years, Kilimanjaro is a male teacher educator at an urban and religious non-governmental teacher training college called Tanzania*. He specialized in business administration. Kilimanjaro has extended experience as a primary and secondary teacher for more than ten years. Moreover, he has been serving as a teacher educator for

more than 15 years. Kilimanjaro teaches business-related courses and humanities. More on that, he has participated in various continuous teacher trainings mainly on subjects, pedagogy including active pedagogy and competency-based curriculum and subject didactics. The interview was conducted during the first trimester of 2020 in a prepared safe place at Tanzania*. The interview lasted around 47 minutes. This interview was done in an open atmosphere.

Kilimanjaro's beliefs about quality teaching are framed in terms of teachers' characteristics and qualities of the teaching process. Love of children, commitment to the job and self-responsibility are perceived as teachers' qualities. Regarding the teaching process, Kilimanjaro believes that knowledge of the subject and its didactics, participation of students and contextualization of content to students' real life through research and use of teaching aids characterize quality teaching process. For Kilimanjaro, the latter should be done by respecting the official allocated time in a climate of mutual trust and understanding between teachers and students. With regard to Kilimanjaro's beliefs about quality teacher training, he thinks that it is related to the delivery of content and its relevance/usability. Additionally, good teacher education is characterized by teaching behaviours and attitudes as well as implicit modelling through teacher educators' behaviour like preparation, use of learner-centered methods, and management of students' learning diversity.

Léopard

Léopard is an adult (45-50 years) male teacher educator in an urban non-state teacher education institution for less than five years. Holding a doctoral degree in social sciences, he has long experience teaching in higher education for less than 15 years. So far, Léopard has benefited from pedagogy and research-oriented training. The interview was done during the second half of the first semester of 2020 for around 46 minutes. Despite minor disturbances, the interview was done safely. The interviewee, though short, answered all asked questions.

Léopard believes that good teaching is mainly the transmission of updated knowledge and its usability by strictly following the national curric-

ulum as well as motivation through the provision of moral or social rewards. Moreover, he insists on providing research skills as important for quality teaching. Regarding quality teacher education, Léopard understands that emphasis should be put on practice preceded by the provision of theoretical pedagogical and didactical knowledge. Léopard indicates that industrial attachment and its regular supervision, involvement of student teachers in research, their participation in seminar and workshops are important characteristics of quality teacher education.

Lion

Lion is a young male and adult (46-50 years) teacher educator in an urban governmental teacher education college. In addition to having taught at secondary school for less than five years, Lion is specialized in and teaches languages for more than five years. With regard to his professional development, he has attended and facilitated a number of in-service teacher trainings on subjects (Languages), subject didactics and general pedagogy. Moreover, he has extensive publications in either language, didactics of language and general pedagogy. The interview with Lion took place in the second term of the year 2020 in a calm place near his home. The interviewee was relaxed and open to share experiences. The duration of the interview was one hour and five minutes.

Lion expresses his beliefs about quality teaching and teacher education in light of what he calls four major responsibilities of a university teacher: Teaching, academic administration, research and community outreach. So far as good teaching is concerned, Lion expresses his subjective theories in five perspectives: contextualization, professional learning, collaboration, learning climate and classroom management. First, he believes that good teaching is about contextualisation by ensuring the linkage of content with the everyday life of students. For him, knowledge should not be dictated. Rather, teachers should facilitate learning where students are given the opportunity to link content with their real life. Second, he believes that teaching goes hand in hand with learning. For him, teaching is a process of learning which, in return, contributes to the improvement of teaching. Moreover, good teaching is based on openness

and collaboration with colleagues and learning from them. In this perspective, he understands that a good teacher is the one who accepts that each has her/his capacity and is not self-worth but always welcomes support from others. Third, quality teaching is based on acting as parents through active listening to students. This, he believes, is based on knowing students – likes and dislikes – in order to help them accordingly. This aspect is reinforced by the fact that Lion believes that teaching and assessment are not enough if a teacher does not provide what he calls a counselling session to ensure learning-oriented guidance. Lion considers post-teaching counselling as one of the responsibilities of a teacher “academic administration”. Therefore, he believes that quality teaching should be ensured by offering time for individual meetings with students. Fourth, Lion understands that good teaching concerns the respect of allocated teaching time and controls students as a policeman/woman by even providing punishments to students. In this regard, he emphasises what he called “educative punishments” like asking a student to write a composition. So far as research is concerned, Lion says that a good teacher is one who carries out research to understand the impact of her/her teaching by scientifically observing the behaviours and performance of graduates. A good teacher, Lion believes, is the one who contributes to the development of his society starting from where she/he lives especially through participating in community-organized activities. With regard to teacher education, he thinks that it is implicitly done through teacher educators’ daily teaching practices. What I do is another way of teaching teachers, he said.

Mamba

Mamba is an adult (40-50 years) female teacher educator in an urban and non-stated faith-based university for less than five years. Specialized in natural sciences, she has an extensive teaching experience of more than 20 years in basic education. Additionally, she has attended several in-service trainings on both science and general pedagogy. The interview took place at the end of the first semester of 2020 for one hour and 47 minutes. It was done in a calm room in Mozambique*. The interviewee was open to share her personal views about the topic of this study.

Mamba views good teaching as a matter of clear preparation and understanding of the subject as well as how to deliver it, especially using recommended methods by university authorities (student-centred). In addition to that, good teaching is characterized by using a variety of teaching methods engineered by teaching experiences. Mamba believes that teachers who show responsibility for their students' learning are another sign of good teaching. Moreover, she understands effective teaching as being a role model outside the classroom and school context for example in the style of dressing.

Recognizing that teaching teachers is a challenging job and requires commitment and courage, she understands that effective teacher education is mainly characterized by being a role model for student teachers in terms of preparation of teaching, exemplar behaviour outside school and using administratively recommended teaching – learner-centred methods. “Just let students work on their own”, she stipulates. Moreover, she believes that mastery of content and its didactics as well as follow up of student teacher after graduation is the key to successful teacher education.

Mena

With the age of (50-60 years), Mena is a female science teacher educator for more than ten years in a rural governmental teacher education university called Niger*. Before specializing in science education and joining the university where she teaches sciences and their didactics, she served as a teacher in basic education for more than five years. During her career as a teacher and teacher educator, she facilitated and benefited from several general pedagogical trainings like ICT in education, curriculum development and online teaching. The interview with Mena was conducted in the second semester of 2020 in a calm place not far from her home for about 50 minutes. The interviewee was open to share her thoughts in line with this topic.

Regarding quality teaching, Mena holds mixed beliefs about quality teaching. On the one hand, she appreciates learner-centred methods as a strategy for creativity especially job creation by graduates. Moreover, she views good teaching as a process of stimulating curiosity through exploration by students. More on that, she believes that no one-fit method does

exist. Rather, a teacher should vary teaching methods according to objectives, what she calls appropriateness of methodology. More than that, she believes that assessment (marks-oriented) is a tool for mirroring and improving her teaching practice. She accepts that quality teaching should focus on mastery of certain content. In this framework, teaching is about the transmission of knowledge and demonstration of application by a teacher.

Furthermore, beliefs of Mena about quality teacher education are fourfold. First, she believes that subject and pedagogical knowledge are indicators of quality teacher training. In this orientation, she asserts that theoretical knowledge should be given priority as compared to practice. Second, she indicates that teacher training is modelled through teacher educators' teaching practices. She shows that a good teacher trainer always reflects if student teachers can imitate her/him by observing her/his professional behaviour. Third, effective teacher training focuses on Rwandan values like self-respect and respect for students. Fourth, she also accepts the possibilities of learning via informal opportunities at home and co-curricular activities.

Ocean Star

Ocean Star is an old (60-70 years) female teacher educator for more than ten years in an urban faith-based non-governmental university called Somalia*. Specialized in and teaches foundations of education, sciences and mathematics. Additionally, she benefited from both general pedagogical in-service training for higher education and sciences as well as mathematics. The interview was done during the third trimester of 2020 in a nice and calm place near Somalia* for 51 minutes. The interview was done in an open environment with the interest of sharing the views of the interviewee.

Quality teaching is primarily characterized by subject knowledge on the side of the teacher. Ocean Star believes that the latter is complimented by regular preparation accompanied by updating knowledge according to changes in society. Additionally, for her, good teaching is value-oriented. This means that teaching should emphasize values like respect, punctuality, love and responsibility which must be conveyed to students through teachers' behaviours and actions inside and outside the classroom. A good

teacher should teach punctuality by being punctual and by showing respect by respecting students. More than that, good teaching is characterized by a teacher who sees her/himself as a parent. Here, she believes that she should set rules to which students comply with limited participation. Regarding teaching in action, she thinks that it should be done through the fulfilment of administrative procedures like the provision of syllabi and notes, assignments, and group work under strict prescription by the teacher. As a Christian believer, she thinks that the success of teaching is reinforced by prayer before teaching.

Regarding quality teacher education, she is aware that it is a huge responsibility to prepare future teachers. For her, quality teacher education should focus on subject knowledge and values as well as implicit exemplar behaviour of the teacher educators is very important.

Oranje

With the age between 40-50, Oranje is a female science teacher educator at a rural governmental teacher education institution called The Netherlands* for less than ten years. Specialized in sciences and mathematics education, she teaches sciences, general pedagogy and science didactics after having taught sciences in basic education for less than five years. Oranje has been facilitating and benefiting from in-service training in general pedagogical themes. The interview was carried out at the beginning of the second semester of 2020 in a calm place not far from her home and lasted 54 minutes. The interviewee was pseudo-open and hesitant when answering questions during the interview.

Oranje expresses her subjective theories about quality teaching from four perspectives, all in relation to the teacher. They include personal qualities, knowledge, teacher's organizational skills and knowledge of students' extracurricular challenges. First, she considers teaching as a calling whereby a good teacher is oriented to people's development. More than that, she conceives a good teacher in terms of normative orientation like clothing style, hygiene and serving not only as an authoritarian parent but also of good character with a sense of humour and attractiveness. Second, the mastery of the subject and related didactics are indicators of good teaching in the eyes of Oranje. Third, quality teaching is characterized by

organizational skills as well as structural presentation of the content to students without forgetting the capacity to authoritatively control students' activities. Four, good teaching goes beyond teaching the content. Rather, Oranje believes that knowing students' extra-curricular problems and possibly collaborating with parents is a sign of good teaching.

For Oranje, quality teacher education is characterized by implicit role modelling by teacher educators. On the one hand, she believes that good teacher training is modelled through professional exemplary behaviour and practices like punctuality, regular preparation of teaching, students' participation and timely feedback to student teachers. On the other hand, good teacher education is done through personal exemplary behaviour inside and outside the classroom. This may include the avoidance of drunkenness and sexually oriented relationship with student teachers.

Palanca

Specialized in and teaches foundations of education, Palanca is a female teacher educator in a semi-urban governmental teacher education university called Angola* for more than ten years. Before joining teacher education, she taught secondary school for less than five years. In addition to teaching prospective teachers, she facilitates in-service training for teachers and school leaders on equitable education. The interview with Palanca was done in the second semester of 2020 for one hour and 20 minutes. The interviewee was very enthusiastic and open to share her beliefs in relation to teaching and teacher education.

Palanca's beliefs about quality teaching are related to pedagogical formalities, individual support, learning climate, feedback, time management, and teachers' qualities. For her, quality teaching is characterized by a teacher who prepares and keeps pedagogical documents like marks' records, lesson plans, schemes of work and teaching and learning resources. For individual support, Palanca is aware of the diversity of students in terms of disabilities (students with visual impairment, hearing), learning abilities (slow and fast learners) or social and economic characteristics (poverty, domestic violence). Therefore, she believes that a good teacher must help all students according to their needs. This requires, she believes, the creation of good relationships/friendships with students. In

this regard, she believes that counselling is a necessity to facilitate students' learning. In this orientation, a good teacher is characterized by humility, honesty and active listening. Furthermore, Palanca thinks that good teaching is characterized by the timely provision of feedback in terms of marks to students to inform them about their learning progress. Another thing is that she believes that a good teacher respects teaching and learning of starting and ending the lesson. More on that, a good teacher must professionally self-develop through reading different books to get enough knowledge that she/he can transmit to students.

With regard to her subjective theories about quality teacher training, she emphasizes implicit role modelling in terms of teacher educators' teaching practices (i.e., using didactical materials) and counselling. Moreover, she believes that student teachers should be trained by being told by the teacher educator about what they will have to do as teachers, especially on pedagogical formalities (preparation of pedagogical documents).

Pharaoh

Pharaoh is a male young adult (30-40) language teacher educator at a governmental teacher training college located in a semi-urban area for less than five years. After his university specialization in language education, he taught at lower basic education for more than five years and later joined teacher training where he has been working for less than five years. During his career, he has facilitated and benefited from in-service training in both language didactics and general pedagogy. In one hour and seven minutes, the interview with Pharaoh was done at the beginning of the third trimester of 2020 with openness and was based on the interest to share thoughts by the interviewee.

Pharaoh's beliefs about quality teaching are fourfold: Administrative formalities, the practice of teaching, the learning climate and teachers' qualities. First, he believes that quality teaching relies on qualification (degree in education), pedagogical knowledge as well as regular preparation of administrative pedagogical documents. Second, he believes that good teaching emphasizes students' understanding as well as individualization of teaching through the identification of students' intellectual capacities and providing support either by a teacher or classmates. In this process,

he shows that quality teaching values students' prerequisites informally learnt from outside the classroom like the internet or films. About the process of teaching, he believes that it is of great importance to match all steps of the lesson with competences to be developed among students. Finally, he shows that good teaching should be based on the teacher's descriptive feedback on students' activities. Third, he associates quality teaching with creating a favourable learning environment characterized by the equitable treatment of students especially the provision of supporting those in need and avoiding abuse for any student. Fourth, quality teaching is linked to teacher's professional qualities like punctuality as well as personal qualities like self-discipline (inside and outside school) and self-control in terms of avoiding mixing personal and professional life.

With regard to quality teacher education, Pharaoh believes that it is not only about the provision of knowledge and facilitating practices but also about enhancing values and shaping the character of the prospective teachers. For him, the best way to prepare good teachers is to live the talk so that student teachers can implicitly learn from teacher educators.

Quina

Quina is a (45-50 years) male teacher educator at a rural governmental teacher training college for less than nine years. Specialized in humanities with education and social sciences, he taught at the basic level of education for less than five years before joining teacher training college where he teaches humanities and related didactics. Due to preventive measures for Covid-19, the interview was conducted via telephone. The interview was conducted in the third trimester of 2020 for one hour and four minutes. The interviewee was humble and open to share his beliefs about the topic.

Mena's beliefs about quality teaching are fourfold: the conception of teaching from the perspectives of a teacher, the creation of a conducive learning climate and individual support as well as professional learning. For Mena, first, quality teaching is viewed in terms of the teacher's mastery of content, and capacity to explain its relevance in the real life of students as well as the mastery of the language of instruction. He believes

that a good teacher always reflects her/his impact on students. Additionally, it is featured by the self-control and self-discipline of a teacher who always serves as a role model for not only her/his students but also the wider community. Second, good teaching is characterized by creating a friendly learning environment, especially for students with ill-socio-emotional background. Moreover, Mena believes that good teaching is based on prior identification of students' prerequisites and provides related individualized support. Third, for Mena, teaching is a process of learning. Accordingly, good teaching, for him, is characterized by always updating knowledge to meet the requirements of the changing world. In this orientation, he believes that reading current research publications and following updated information through media (radio & television for example) are important for a good teacher.

With regard to teacher training, Mena believes that it is based on four aspects: provision of knowledge, participatory training process, enhancing professional behaviour and international and lifelong learning perspectives. First, Mena thinks that the quality of teacher training is about the transmission of subject-related, pedagogical and didactical knowledge like the preparation of lessons. Second, the quality of teacher training is based on involving student teachers in professional practices and reflective use of a variety of teaching methods. Third, quality teacher training enhances normative professional behaviour like clothing style and self-positioning in the classroom. Moreover, he believes that effective teacher training is especially done through implicit role modelling of teacher educators whose behaviours are to be imitated by student teachers. Fourth, quality teacher education should reflect the internationalization as Mena believes that student teachers are not only trained to be teachers in Rwanda but also graduates ready to work in different parts of the world. Therefore, teacher training should reflect how student teachers are prepared to meet international competitive requirements. In this orientation, he believes that integration of ICT in teaching, and focus on language education especially English are keys to internationalizing quality teacher education. More than that, quality teacher training focuses on lifelong learning skills like continuous self-professionalization in terms of updating knowledge to cope with new situations.

Scorpio

Scorpio is an adult (40 – 50 years) female teacher educator at a state university located in a rural area for less than ten years. She is specialized in and teaches languages. Additionally, she taught in basic education for less than five years. In addition to participating in general pedagogy-related in-service training, she facilitates in-service teacher training for basic education mainly in languages and related didactics. The interview took place in a calm place outside Gambia* in the second half of 2020 and lasted about 51 minutes. The interview was done in a calm and open climate. The interviewee answered to all questions.

Scorpio's beliefs of quality teaching are threefold: qualities of the teacher, teaching process as well as learning and a supportive environment. First, she believes that quality teaching is characterized by a teacher with organizational skills, socially reflected clothing style, role model and honesty as well as having pedagogical and didactical knowledge. For Scorpio, academic qualification is not enough to be a good teacher. Rather, the most important is the love of the teaching profession and the readiness to learn. Second, quality teaching is featured by the participation of students in teaching and learning facilitated by careful preparation of tasks as well as clear instructions to students. Moreover, Scorpio believes that quality teaching is about the provision of positive feedback by emphasising the students' achievement as a means of students' encouragement. Third, quality teaching is characterized by creating a friendly learning climate where students feel free with the teacher as a parental relationship without intimidation. Rather, students should but feel comfortable to share their ideas. Therefore, a good teacher actively listens to students and provides social and academic counselling.

Considering teacher education as an important but challenging job especially its critical importance in the development of any nation, Scorpio believes that quality teacher education is done through implicit role modelling. She believes that quality teacher education should be modelled by teacher educators' professional behaviours. The latter, according to Scorpio, include how they interact with student teachers, preparations of lessons and structured teaching, justice in terms of dealing with students matters as well as their behaviours inside and outside training institution.

Summary

The synopsis of the professional and educational profile of the interviewed teacher educators as well as the contextual information during interviews reveals the following observations. First, it is visible that interviewed teacher educators are either qualified teachers according to national teacher qualification standards or subject specialists (see appendix 6). Moreover, they have participated in and facilitated a variety of in-service teacher trainings on mainly general pedagogy and limited on subject and subject didactics. More on that, no interviewed teacher educator had benefited from any in-service training on teacher training as a topic. Second, interviewees' teacher education institutions are mainly faith-based (see appendix 6). Third, interviewed teacher educators were generally open to share their beliefs and experiences. The duration of interviews varies from 38 minutes to one hour 46 minutes. The beliefs of interviewed teacher educators about quality teaching and teacher training are summarized and described in 5.3.

Before proceeding with detailed description of the results of this study (5.3), I summarily recall the abduction process and the structure of subjective theories.

5.2 Abduction process and the structure of subjective theories

This study seeks to explore teacher educators' subjective theories about quality teaching and related teacher professionalisation in Rwanda (chap. 1.3). Due to the paucity of scientific discourse on this topic in Rwanda (chap 1.2 & 3.4), an exploratory qualitative approach was adopted (see chap. 4.1). Using theoretical sampling and semi-structured interview, 32 interviews were conducted with teacher educators working in initial teacher training institutions in Rwanda (see chap.4.4.3 & appendix 6). Conducted interviews were transcribed, translated (from Kinyarwanda or French to English) (4.4.1), coded and inter-coded through an iterative deductive-inductive process using a software, MAXQDA (chap. 4.4.2). The generalisation of results was done through an abductive process whereby criteria as horizons of comparisons were identified and types of subjective

theories were generated (4.4.3). Accordingly, the overview of criteria (5.2.1) and generated typology (5.2.2) are provided.

Criteria as comparative horizons of subjective theories: A short description

Through the iterative and creative process of data analysis (4.4.3), the following criteria were identified: the purpose of teaching, understanding of teaching, teacher quality, the aim of teacher training, understanding of teacher professionalization, quality teacher educator and theoretical and practical teacher training.

The hereinabove identified comparative horizons are explained as of their meaning from the empirical material of this study. Each criterion is explained with one example of citation from the empirical data.

Purpose of teaching: The criterion concerns what interviewed teacher educators believe to be the purpose of good teaching. The empirical material shows that interviewees have different beliefs as far as the purpose of quality teaching is concerned. Accordingly, the example below gives the purpose of teaching in terms of compliance to pedagogical formalities.

"Good teaching does not require anything, what is important is to prepare your lesson, to respect all its parts, you have put the cross-cutting issues, and then after, during lesson delivery, there is a lesson preparation and delivery, and during lesson delivery you have to respect its steps and use warm ups that motivate and interest the children, and the cross-cutting issues have to be there (uhm)" (Eagle: 540-545).

As exemplified by the above citation, the purpose of teaching is respecting pedagogical formalities like scrupulous steps of a lesson.

Understanding of quality teaching: The criterion regards the beliefs of interviewed teacher educators about what good teaching stands for (content quality) as well as how it looks like in terms of process (process quality). On the one hand, interviewees express their personal understanding of quality teaching. On the other hand, they indicate the process that characterises quality teaching. In this criterion, interviewees express their beliefs of quality teaching-related process in terms of pedagogical methods reflecting the teaching and learning process or its related context implying pedagogical relation between teacher and students as well as students

themselves. For example, in the following citation, Etalon shows the understanding of teaching in terms of participation, learning and learner-centered teaching.

“Okey! The best way of teaching is when a student is involved in teaching and learning process (hum hum), she/he was helped to think (aaah) when she/he was not given what to memorize (hum). Rather, she/he is given opportunities to discover what is related to what she/he already knows (hum) she/he must be given time to think, she/he must be given time to work, she/he must be given time to express what she/he already has (aaah) What are her/his strengths? what are her/his weaknesses? What can she/he do to improve her/his areas of weaknesses?” (Etalon: 202-208).

Teacher quality: This refers to the beliefs of interviewed teacher educators about the characteristics of a good teacher. The empirical material of the study at hand shows that expressed qualities of a good teacher are related to the professional qualities of a teacher in teaching professional career as well as qualities regarding praxis of teaching. Here is the example of quality teacher from one interviewee in terms of normative clothing.

"Another thing, a good teacher is the one who wears the right clothes; I can put on clothes that can distract students in unusual way (aaah); I can wear a small t-shirt which can show my naked back when I put my arm up instead of understanding what the teacher is saying, they will say: hey, look at the necked back of the teacher (hum). So, a good teacher is the one who wears clothes that do not distract students (hum)" (Fauve: 184-189).

Aim of teacher training: The empirical material of this study shows that interviewees have differentiated beliefs about the aims of teacher training. In this horizon, interviewees express *raison d'être* of teacher training. In the example below, the purpose of teacher training is expressed in the sense of training for enhancing problem-solving through application of knowledge.

“(hum) this is because a student teacher must use what she/he has learnt in solving his/her problems (aah). Every course should be in this line. If we teach a student teacher, what does a student teacher get from this that should help her/him to solve some problems of today and tomorrow? (hum)This is because she/he is a person who will have to prepare others, this is what she/he will give others (aaaah).

All of them should be in this line, not only should they have knowledge but also using knowledge to solve some problems (hum hum)" (Etalon: 243-250).

Understanding of teacher training: Conceptions of interviewed teacher educators about how a quality teacher training process looks like. A closer analysis of the empirical data shows that interviewees have two interconnected beliefs about quality teacher training. On the one side, they express their subjective theories in terms of the essence (focus) of teacher training and, on the other side, process in terms of training approaches. In the following citation, Aigle gives her subjective theories in the sense of role modelling practice by teacher educators as a strategy of quality teacher education:

"Thank you helping them in teaching first of all is to try our best to be their role model in teaching, the example we give them is that they have to participate in their learning this means that if they participate in their learning you are also preparing them to involve students in teaching and learning process this means that that the way we teach student teachers will learn from it for their own teaching in the future this is why they have to participate it teaching and learning process without being a transmitter of knowledge to them so that when they will go to school to teach they do the same" (Aigle: 35-42).

Quality teacher educator: This regards the professional qualities of a good teacher educator to engineer quality teacher training. Regarding this criterion, interviewees indicate qualities of a teacher educator as a professional as well as praxis-centred qualities. The latter are related day-to-day work of teacher educators. In their description of subjective theories about qualities of a teacher educator, Quina indicates adaptation and lifelong learning as qualities of a good teacher educator.

"She/he must be up to date (hum hum) she/he must also know how to deal with different situations and know what is needed. For instance, if very soon they say that there is a new language to use all over the world, you cannot say that you will remain alone without using it, so, preparing a good teacher requires to always update your knowledge in such a way that your knowledge can't be static but dynamic (eeeh!)" (Quina: 282-287).

It is worth noting that the interviewees have a cross-type criterial horizon of subjective theories about "theoretical and practical teacher training".

Theoretical and practical teacher training (cross-cutting criterion): In this horizon, interviewees express their subjective theories concerning the necessity of both theory and practice in teacher training. Moreover, they indicate their subjective theories about their sequencing process of theory and practice in teacher training. It is worth noting that, from the citations of interviewees, this criterion crosscuts different types. In the following example, Crane exemplified the linearity of teaching theories of teaching followed by training for practice as important for quality teacher education.

"Ahhh, I think that aaa, after to... the teacher eee, after teaching her/ him how to teach that content, I think that before doing final evaluation, I understand that it is better if she/he should teach the content first, for example when I teach her /him a balanced diet, its components as well as how she/he should teach to others, automatically she/he has to teach it, I should consider that the lesson is finished when they finish teaching it, you see it should not end there, this is how I understand it today, but this may be another philosophy I have on my own which may be different from the one in place, the context in which I work, But for me, I understand it like that, even people may have other perspectives" (Crane: 265-274).

Through the lenses of the identified criteria, different perspectives of subjective theories of the interviewed teacher educators were generalised into a typology of four ideal types.

Ideal types of subjective theories: An overview


Following the process of generalisation of results as previously described (4.4.3), four ideal types of subjective theories about quality teaching and teacher training were generated. The analysis of empirical material of the study at hand shows that the generated types do not reflect subjective theories of individual interviewed teacher educators. Rather, they represent the ideal structure of the theories of interviewees. Generated typologies crosscut within and between interviewed teacher educators.

Furthermore, the abduction process shows that the generated ideal types have a two-sided structure: Focus (what) and process (how). Each generated type has the content and related process sides. On the one hand, generated types represent what matters for quality teaching and quality teacher training. On the other hand, interviewed teacher educators

express related methodological processes. Accordingly, the following four ideal types were generated. They include subjective theories focusing on:

- (1) formalities by compliance,
- (2) knowledge by transmission,
- (3) behaviour by imitation and
- (4) competences by co-construction. The following table 5 gives an overview of the comparative horizons (criteria) and generated types of subjective theories.

Table 4: Overview of identified criteria and generated ideal types

 <i>Types: Subjective theories oriented to:</i> <i>Criteria</i>	Formalities by compliance	Knowledge by transmission	Behaviour by imitation	Competences by co-construction
Purpose of teaching				
Understanding of teaching				
Teacher quality				
Purpose of teacher training				
Understanding of teacher professionalization				
Quality teacher educator				
Theoretical & practical teacher training				

Source: Empirical data

It can be seen from the above table 4 that from the lenses of the comparative horizons, a fourfold typology with four ideal types of teacher educators' subjective theories were generated.

5.3 Characterisation of generated ideal types

Using the identified criteria as horizons of comparison (5.2), the typology of teacher educators' subjective theories about quality teaching and teacher professionalisation is described as generated from the empirical material of this study. Each type is described by delineating qualities of good teaching and teacher education. In this process, criteria serve as points of reference for the description. The characterisation of generated

ideal types follows this order: subjective theories oriented to formalities by compliance (5.3.1); knowledge by transmission (5.3.2); behaviour by imitation (5.3.3) and competences by co-construction (5.3.4). The description of the qualities of teaching and teacher education in each type is exemplified by direct and indirect citations from interview transcripts. It is worth noting that citations were drawn from the empirical material coded in MAXQDA.

5.3.1 Subjective theories focusing on formalities by compliance

In the type of teacher educators' subjective theories focusing on formalities by compliance, the focus is on conformity to administrative, pedagogical, didactical, and normative standards. Quality teaching is understood as strictly conforming to prescribed pedagogical and didactical procedures. In this regard, a good teacher is viewed as faithful and obedient to prescribed pedagogical and didactical recipes as well as normative behaviour subjectively assigned to the teaching profession. For example, obedience to a subjectively conceived clothing code of conduct is seen as one key quality of a good teacher of this type. Furthermore, interviewees show an instrumental understanding of teacher education in terms of specified behavioural compliance. Hence, the quality of teacher educators is considered as scrupulously controlling adherence to discipline-based recipes. Facets of the cases: Aigle, Bafana, Bleu, Crane, Crocodile, Diable Rouge, Dodo, Eagle, Etalon, Fauve, Fennec, Flame, Harambee, Hirondelle, Lion, Mamba, Ocean Star, Oranje, Palanca, Pharaoh and Scorpio are related to this type. In detail, I describe hereunder the subjective theories of teacher educators in the focus of formalities by compliance using the comparative horizons.

5.3.1.1 Purpose of teaching: Observance of pedagogical principles

The purpose of teaching in the perspective of subjective theories focusing on formalities by compliance is about conformity to teaching-related tenets. The empirical material shows that quality teaching aims at complying with pedagogical formalities. Interviewees see it as compliance with fixed-

preestablished process-based teaching standards. While expressing how quality teaching looks like, Eagle exemplifies this perspective as follows:

"Good teaching does not require anything, what is important is to prepare your lesson, to respect all its parts, you have put the cross-cutting issues, and then after, during lesson delivery, there is a lesson preparation and delivery, and during lesson delivery, you have to respect its steps and use warm-ups that motivate and interest the children, and the cross-cutting issues have to be there (uhm)." (Eagle: 540-544).

Eagle believes that quality teaching complies with pedagogically predetermined procedures. In this orientation, scrupulous observance of pedagogical steps as strictly prepared is a key to quality teaching (see also Dodo: 200-201; Aigle, 122-22; Eagle: 565-566). The major concern, in this type, of quality teaching is solely about prescribed process-oriented teaching standards. Moreover, Eagle believes that quality teaching should be oriented to motivation-related recipes by the teacher for maintaining students' attention.

In a nutshell, the purpose of quality teaching from the perspective of teacher educators' subjective theories focusing on formalities by compliance is about complying with the strictly predetermined curriculum- and process-based pedagogical recipes. The understanding of teaching quality in this perspective is described hereunder.

5.3.1.2 Understanding of teaching: Conformity to pedagogical-administrative and normative formalities

In the framework of subjective theories focusing on formalities by compliance, quality teaching is understood as preparation-based, process-oriented pedagogical, didactical, behavioural and normative formalities. Firstly, quality teaching is seen as the preparation of pedagogically administrative documents. It is seen as a process of scrupulously complying with pedagogical, didactical and teacher's self-conceptualised behavioural norms. In the description of his personal understanding of good teaching, pedagogically administrative preparation is viewed as a quality of good teaching as appears in the following citation:

"Good teaching means that you have well prepared the lesson, you have included all essential components, and then the way you included them (uhmuhm) If you have prepared the lesson, if you have enough related teaching aids, if you have respected all the steps of a lesson, if there is an evaluation matching the objective, if there is the reference, eehh you have properly put the cross-cutting issues." (Eagle: 558-563).

In this quote, Eagle equates quality teaching with lesson preparation complying with basic prescribed immutable standards (see also Harambee: 109-111). Such lesson includes officially predetermined components like crosscutting issues¹⁴, teaching aids and objective-related evaluation. Strictness to different steps of lessons is indicated as key to good lesson preparation.

Apart from standards-based lesson preparation, quality teaching is seen as the interconnectedness of preparation of pedagogical documents and scrupulously following them during the teaching process. Pedagogical documents are seen as officially recognized indicators of quality teaching (Diable Rouge: 134-140). From her perspective of characteristics of quality teaching, pedagogically documented preparation is seen by Flame as an important dimension as expressed as follows:

"Good teaching means that a teacher should have pedagogical documents just showing where she/he has prepared lessons (hum) know if she/he does not have the preparation of her/his lessons, her/his teaching is wrong when you are teaching especially to avoid deviations or you only say what is relevant, in order to avoid going out of what you have prepared, you should possess pedagogical documents aside showing those steps you should follow so that if you find where you are mistaken, you may know how to correct yourself (hum hum), these are pedagogical documents which include a lesson plan, you have the handout or syllabus." (Flame: 358-366).

¹⁴ These are cross-subject teacher recently competence-based teaching. They include for example inclusive education, environment and sustainability... in the context of curriculum of competence-based curriculum in Rwanda (MINEDUC/REB, 2020).

From the citation of Flame, three aspects of good teaching are made visible. They include preparation and keeping pedagogical documents, related advantages, and compliance-based teaching. First, teaching of good quality is characterized by regularly holding pedagogical documents (i.e., lesson plans and handouts as well as teaching aids) to materialize teacher's preparation-related readiness (see also Eagle: 701-723). In his view, the lack of officially recommended pedagogical documents equates to incorrect teaching. Second, Flame indicates that holding officially documented pedagogical files is helpful for maintaining strictly orderly teaching (see also Aigle: 122-123). Regularity of teachers' teaching prescribed documents serves as a guardrail and guideline during the teaching process. On the one hand, teaching, in this type, strictly complies with preparation and avoids any deviations. As far as quality teaching of this type is concerned, a teacher should stay bound to her/her preparation. In case of deviation, Flame believes that pedagogically prepared documents serve as signposts in case the teacher mistakenly does not comply with predetermined teaching steps. On the other hand, pedagogically documented files guide the teaching process like the precision of the topic to teach, when, how and with which teaching aids (see also Eagle: 701-723)

Afterwards, following didactically prescribed lesson steps in specific subject-related topics like conjugation in English grammar is likewise an aspect of quality teaching in the perspective of subjective theories oriented to formalities by compliance. For example, Eagle indicates the necessity of strictly following different steps (i.e., announcing the title of the lesson, explaining the meaning of a verb to conjugate, reminding students of personal pronouns, telling students about singular and plural in conjugation) (638-645). In this understanding, didactical strictness is closely conceived in line with teacher-centred teaching where flexibility does not have a place. From the eyes of interviewed teacher educators, adherence to the prescribed teaching standardized process matters more than anything else.

Compliance with formalities is not only visible in terms of pedagogical and didactical recipes. It is implemented in behaviour-oriented teaching. As far as quality teaching is concerned, teachers impose normative-compliance behaviour regulating student-student interaction. In the understanding of Eagle for example, if a student hurts her/his classmates, a

teacher should unilaterally force the offender to apologize. Once the student does it, it is a sign that the student has mastered the lesson about interpersonal skills (Eagle: 547-553).

Finally, interviewees see quality teaching as innate. In this orientation, neither nationally organized initial nor in-service teacher training is seen as important for driving quality teaching if there is no teaching-based innateness. The following citation exemplifies the beliefs of Crocodile while expressing that innateness is the *sine qua non* dimension of quality teaching:

"You see, it's a gift, we all learn how to teach, where can you find a teacher who did not study? All have studied, we always study, and we always have in-service training, but how many do they put into practice what they are taught? Therefore, I say that there is something within the person and teaching and training are only developing what does already exist. Whatever efforts may be done in terms of training without talent, it is like wetting the rock. Without loving neither the subject nor having the talent of teaching the same subject, sometimes you may have a good knowledge of the content and becomes unable to appropriately teach."
(Crocodile: 301-308).

In this quote, Crocodile justifies that quality teaching is a result of natural gift (see also Crocodile: 268-270; Harambee: 28-30; Scorpio: 341-342). In her understanding, despite initial and in-service teacher training, teaching is differentiated by a teacher's natural talent and love for teaching. She believes that teacher professional development only contributes to pre-existing talent. In the opposite context, teacher training seems to be worthless. Additionally, Crocodile indicates that mastery of content does not guarantee performance in teaching. This implies that, for interviewees, teaching-related innateness matters for quality teaching. Formally and non-formally organized teacher professional development opportunities are seen as ingredients for already existing natural talent of teaching.

To sum up, quality teaching in the framework of teacher educators 'subjective theories oriented to formalities by compliance is understood as conformity to administrative-pedagogical and teaching-related formalities like preparation, regularity-based holding pedagogical documents, and scrupulous compliance to the predetermined teaching process. Moreover, it is seen as naturally bound. Quality teaching is seen as innate. In

such conceptualization of quality teaching, one would wonder about the type of belief teacher educators hold about quality teachers.

5.3.1.3 Teacher quality: Obedience to administrative, pedagogical and normative formalities

In the perspectives of the type of subjective theories focusing on formalities by compliance, the empirical material of the study at hand reveals threefold qualities of a good teacher. They include compliance with administrative hierarchies and professional responsibilities, conformity to pedagogical formalities and adherence to normative standards. First, interviewees believe that compliance with existing regulations, respect to hierarchies and working-related administrative professional obligations as well as nationally accredited qualifications are important as far as teacher quality is concerned. Second, a good teacher is seen in terms of conformity to pedagogic-administrative teaching-related requirements and asymmetric maintenance of students' discipline. Third, teacher quality is viewed as adherence to normative standards. The latter include ethical dressing standards, socially acceptable behaviour or conduct and divine-reliance professional behaviour. Hereunder, I describe the characteristics of a quality teacher using direct and indirect quotes from the empirical material.

Compliance with administrative hierarchies and professional obligations

In the framework of subjective theories focusing on formalities by compliance, teacher quality is understood as compliance with administrative hierarchies and professional obligations in terms of existing school rules and regulations, administrative obligations and compliance with nationally prescribed standards. First, teacher quality is considered as fulfilling nationally prescribed standards in terms of a national qualification framework (Bafana: 240-240; Bleu: 269-270 & Dodo: 117-118). In this perspective, a good teacher is viewed in the orientation of nationally defined qual-

ification frameworks. Second, a good teacher is viewed in terms of conformity to existing school legislation. For example, Lion, in his description of a good teacher, exemplifies conformity to existing legislation as follows:

"A good teacher complies with school rules and regulations, yeah the school has many rules (hum hum), she/he should know which ones regulate her/his work."
(Lion: 402-404).

In this citation, Lion makes it clear that teacher quality is about compliance with a diversity of school-guiding regulations in line with educational legislation governing the teaching profession. Third, compliance with school legislation is likely to go hand in hand with respecting hierarchies. Accordingly, a quality teacher is viewed as paying respect to hierarchies like headteachers as per educational legal prescriptions governing teachers (Fauve: 142-146). Therefore, she/he must comply with the fulfilment of hierarchically assigned tasks (Mamba: 633-635). Asymmetric respect to hierarchy seems to go with strict reliance on professional obligations. In this regard, a quality teacher is viewed in terms of regularity and punctuality as far as teaching is concerned (Bright Star: 133-135; 254-254; Diable Rouge: 224-228; 262-263; Pharaoh: 222; 225-226). In the same orientation of expressing characteristics of a good teacher, Pharaoh expresses punctuality as an important aspect of a quality teacher as evidenced by the following excerpt:

"Moreover, she/he has to be punctual, punctuality is something important at any work specially in teaching, because when a teacher gets late when a teacher delays his/her lesson, se/he can even be on time but if she/he does not do what she/he is supposed to do and get distracted, it will be bad (hum). When a teacher is punctual, her/his job becomes easy and she/he fulfils his/her responsibility uhm (3secs)." (Pharaoh: 158-163).

Punctuality is seen by Pharaoh as instrumental quality for a good teacher for teaching practice. He believed that failure of punctuality undoubtedly affects teaching. Therefore, a teacher's punctuality is seen as key and valuable (see also Ocean Star: 57-58) to fulfilling a teacher's professional responsibilities.

Conformity to pedagogic recipes

In addition to complying with administrative hierarchies and professional obligations, a quality teacher is viewed in terms of conformity-based pedagogical planning and teaching process. In this perspective, the empirical data shows quality teachers as regularly holding pedagogical documentation for planning and teaching, compliance to process-oriented pedagogical recipes, compliance-oriented assessment, and discipline maintenance.

First, Interviewees view a quality teacher as regularity and completion of officially recommended pedagogical documents. This concerns mainly the planning of teaching. From the perspectives of Pharaoh about criteria as a basis for assessing teacher quality, especially supervision of student teachers during an internship, pedagogical documents appear to be the most important in this regard. For example, the following citation expresses this belief as shown hereunder:

"Okay, mostly in the classroom, in the classroom there are some important things a teacher should have (hum hum), we call them teacher documents, in Kinyarwanda, they are called "ibidanago" (uhm) it is not "ibidanago" because we call a single kidanago" others come after (uhm), this is to say that the first thing is pedagogical documents, she/he should possess those documents (hum). The second is that she/he should fill them regularly eehh in one word, this teacher should prepare his/her lessons (aaah), this is the first; this teacher must prepare his/her lessons, this is the first because when the supervisors visit you, you immediately give her/him those documents and check if what you are teaching is up-to-date, "Are you teaching the content of the first week when you are in the 8th week? eehh all of these are about preparation of the lessons!" (Pharaoh: 168-178).

In this quote, Pharaoh indicates three aspects regarding holding pedagogical documents as an important quality of a good teacher. Firstly, he makes it clear that having pedagogical documents is the primordial quality of a good teacher (see also Crane: 357-358; Banyana: 174-176; Pharaoh: 233). Afterwards, the regularity of completing them is an added value. Lastly, Pharaoh sees holding and regularity of completion of pedagogical documents are for complying with hierarchical authority. In this regard, pedagogical documents do not have pedagogical essence. Rather they

solely have an administrative purpose: conformity to hierarchical requirements. In addition to pedagogical documents for planning to teach, a quality teacher is conceptualized as the regularity of provision of teacher-designed handouts as standard documents for students. In this orientation, a good teacher regularly checks if students unilaterally read provided notes (Palanca: 638-642). Concerning the teaching process, a good teacher is viewed in terms of strictly using and following pedagogical recipes like the use of a chalkboard, structured presentation of a content, presentation from simple to complex, legibility of her/his handwriting as well as controlling students' notebooks (Oranje: 201-211).

Second, empirical data show that a quality teacher is compliance-oriented assessor. Accordingly, a good teacher assesses conformationally to prescribed fixed requirements like formalism-based regularity. In this orientation, Bafana indicates formalist assessment while expressing her conceptions of assessment as a dimension of a quality teacher in the following quotation:

"You see a teacher must assess, you asked about teaching and for the purpose of knowing the extent to which you teach you do an assessment to check if they have understood. Therefore, a teacher must provide several assessments for example if it is a chapter that is taught in a month, you must provide an assessment every week and after providing a general quiz, you cannot say that you are a good teacher if you do not assess, you did not assess, to know the extent to which students understood the lesson." (Bafana: 361-367).

Bafana, in this citation, reveals that assessment as a key quality of a good teacher as a matter of verification of knowledge mastery /understanding on the side of students. In the same orientation, a good teacher assesses and checks the level of conformity to prescribed standards in terms of objectives for example (Flame: 294-300; 221-224). In this view of assessment-controlled teaching, the quality teacher is understood in terms of the capability of providing as many assessments as possible in a fixed interval e.g., on a weekly basis.

Third, the quality teacher in the perspective of compliance to pedagogical recipes is viewed as a discipline maintainer. Some teacher educators interviewed in this study believe that a good teacher is not "Laisser-faire" (Crane: 504-508). Rather, she/he can maintain discipline in the

classroom (Pharaoh: 232-233). In the process of maintaining discipline as a good teacher, Bafana argues that punishment is important not only for discipline but also for student development as exemplified as follows:

"And after you have to discipline students by providing some punishments which help them grow mentally." (Bafana: 336-337).

In this citation, Bafana makes it clear that the provision of punishment is a quality of a good teacher. Moreover, punishment is seen as a tool for promoting the mental development of students (see also Bafana: 329-330). In the same vein of belief, a teacher is not only a teacher but also a police agent who controls discipline and punishes accordingly (Lion: 382-385; 487). This implies that punishment is viewed as acceptable and a necessity.

Adherence to normative standards

In addition to compliance with administrative hierarchies and professional obligations as well as pedagogical recipes, the quality teacher is viewed in terms of adherence to normative standards. In this orientation, divinity-reliance, normative-clothing observance, and socially acceptable conduct are dimensions of a quality teacher of this type. First, God-reliance belief is seen as an important quality of a good teacher. Capability to rely on God as a source of knowledge and wisdom is important for a quality teacher. Therefore, a quality teacher equates total reliance solely on God (Ocean Star: 378-388). For the latter interviewee, without God, it is impossible to be a good teacher. Second, the quality of the teacher is related to the observance of clothing-related norms. In this framework, interviewees believe in some right or wrong clothes for a good teacher. While describing the qualities of a good teacher, two aspects are revealed: types of clothes considered as right or not as well as cleanness. Additionally, it is worth noting that while narrating their beliefs about the quality teacher in this orientation, interviewees insisted more on "not right" clothing. In this regard, for example, clothing-related rightness emerges from her description of the characteristics of a quality teacher in the classroom as can be seen in the following quote:

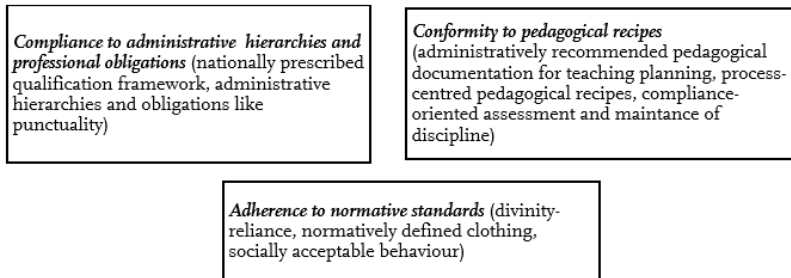
"Another thing, a good teacher is the one who wears the right clothes; I can put on clothes that can distract students in unusual ways (aaah); I can wear a small t-shirt which can show my naked back when I put my arm up instead of understanding what the teacher is saying, they will say: hey, look at the naked back of the teacher (hum). So, a good teacher is the one who wears clothes that do not distract students hum" (Fauve: 184-189).

For Fauve, a good teacher avoids clothes which are likely to distract students. As a matter of example, a t-shirt showing the back naked, having tattoos or torn style are seen as not right clothes for a teacher (see also Banyana: 207-212). In their view, the clothing code of the teacher must be carefully chosen. In addition to clothing-based normative style, cleanness is likewise important for a quality teacher for example avoiding cow dung or dirt hair (Oranje: 217-220).

Regarding socially acceptable conduct, interviewees believe that the quality teacher is viewed as avoidance of socially unacceptable behaviours like destructive conflicts with peers (Aigle: 119-121), drunkenness (Dodo: 190-193) and be characterized by humility (Hirondelle: 270-272). This means that a good teacher is viewed via the normative lenses of socially defined behaviour.

Briefly, the empirical material of the study at hand shows three characteristics of a quality teacher. They include (1) compliance to administrative hierarchies and professional obligations: strict compliance and respect of administrative hierarchies, school legislation and nationally defined qualifications. (2) Conformity to pedagogical recipes: scrupulous following preparation-, process-, assessment and discipline-oriented predetermined formalities and (3) adherence to normative standards in terms of divinity-centred reliance, normative clothing and socially acceptable behaviour (see figure 2).

Figure 2: Qualities of a quality teacher in the type of subjective theories oriented to formalities by compliance



Source: Author's own design based on the empirical data

In the following part, I describe the results concerning teacher educators' subjective theories about quality teacher professionalisation following the already identified horizons of comparison (5.2)

5.3.1.4 Purpose of teacher professionalisation: Training for compliance to pedagogic-political and normative formalities

In the perspectives of subjective theories focusing on formalities by compliance, the empirical material of the study at hand shows that interviewees understand teacher training in terms of compliance to pedagogical as well as behavioural norms expected for prospective teachers. Teacher training is understood as a process of initiating student teachers to theories in line with a bounded political frame to unilaterally comply with. In this direction, teacher educators are expected to follow such a political line to instrumentalise student teachers in this process. While describing strategies for training student teachers to become good teachers, Crane expresses political reliance as follows:

"Aaaah, preparing student teachers, also should be understood as such. There are some known theories about that, and education we were given about it along with the political lines; but teacher educators should follow them." (Crane: 385-387).

In this citation, three key interconnected dimensions of his understanding of teacher training can be drawn. First, he believes that there exist pre-determined “known theories” of teacher education which necessitate to be followed. Second, Crane indicates the asymmetry of power and passivity of teacher educators in terms of studying those “known theories” in giving-receiving approach. Third, the pre-determined theories of teacher education must be aligned with political framework. Though such political line is not specified in this excerpt, Crane insists on an unquestionable compliance since he strongly indicates that teacher educators are required to strictly follow them. Additionally, teacher training is seen as a process of instructing prospective teachers to pedagogic-administrative formalities like holding officially approved pedagogical documentation recommended for teachers. For example, pedagogical documents are seen as important for teaching quality. Therefore, interviewed teacher educators view them as a necessity for prospective teachers (Diable Rouge: 314-317; Eagle: 159-163). Believing that a teacher has a special role in the education system, her/his training should be different from other professions called “general”. Therefore, on the other hand, teacher training is seen as a process of inculcation of a predefined behavioural code of conduct for prospective teachers as either informally or formally defined in society. In this regard, teacher training has a mandate of instilling teacher’s expected behaviour especially in-class conduct recipes (Elephant: 46-50). The purpose of teacher training in the framework of subjective theories oriented to formalities by compliance is understood as a process of conditioning prospective teachers to comply with predetermined political, pedagogical, and behavioural formalities expected of a good teacher.

5.3.1.5 Understanding of teacher professionalisation: Focus on pedagogical and normative formalities

In the perspectives of subjective theories focusing on formalities to compliance, teacher professionalisation is understood as a process of conditioning prospective teachers to a behavioural teacher-related code of conduct as well as pedagogical unalterable recipes. Interviewees believe that student teachers are instructed about unacceptable behaviour to avoid and

acceptable ones to be adopted (Fennec: 61 – 65). Concerning the acceptability of behaviour, Rwandan values serve as a reference to prepare teachers in national identity. In this orientation, content is seen to be insufficient. Rather, defined national values are likewise a necessity for the professionalisation of prospective teachers (Etalon: 87-90). This implies that conditioning to a prescribed nationally defined code of conduct is seen as important for quality teacher professionalisation. Second, teacher training is believed to be of good quality if prospective teachers are conditioned to pedagogically predetermined recipes. On the one side, interviewees believe that teacher training must strictly follow pedagogically prescribed recipes. On the other side, prospective teachers must be conditioned to follow such predetermined pedagogical principles. Regarding the strict compliance to pedagogical recipes, the following excerpt drawn from the interview of Flame while describing quality criteria of quality teaching exemplifies it as follows:

"Yes, they are, you see, for example when I am teaching how a teacher prepares her/his lesson, how she/he should behave when she/he will be entering the classroom until the end of the lesson (hum hum). This means that there are steps I would have taught and they would follow them, in whatever ways they should know those steps a teacher should go through so that the one who will be teaching and does not follow those steps, others who will be observing will say aaah! she/he does not that step as the teacher said, she/he did not follow such a step, after teaching, she/he may even say that she/he forgot that step, and discovers and says it on her/his own, for the next occasion, she/he would improve (eeeh!)." (Flame: 342-350).

In this citation, Flame insists on the fact that teacher training is about initiating student teachers to scrupulously follow immutably predefined steps of the lesson. She indicates that prospective teachers should know them as the framework for assessing the quality of a lesson. It is seen from this view that the most important dimension to which prospective teachers should be trained is respecting lesson predefined formalized process: Introduction, development and conclusion of a lesson (Fennec: 100-102). This implies that teacher training is seen as a process of putting emphasis on pedagogically defined procedures. Furthermore, quality teacher training is conceived as a process of initiating prospective teachers for

scrupulous and unalterable pedagogical principles to comply with (Baréa: 23-25) and strict supervision must ensure adherence to them (Léopard: 291-292).

In brief, interviewees believe, in the framework of subjective theories oriented to formalities by compliance, that quality teacher training is about conditioning student teachers to predetermined process-based teaching unalterable procedures and strictly supervising the conformational implementation of such recipes.

5.3.1.6 Quality teacher educator: Compliance with normatively defined values

In the framework of the type of subjective theories focusing on formalities by compliance, interviewees believe that teacher educators should be value-guided professionals to successfully engineer quality teacher professionalisation. To instil values among student teachers, teacher educators are expected to be driven by positive values to train prospective teachers expected by the nation (Etalon: 94-99). They include physical (i.e., cleanliness) and social like politeness (Eagle: 444-446). Moreover, some interviewed teacher educators believe that self-discipline, self-organisation (i.e., timely orderly filing) and efficient time management (i.e., respecting and make respect established time) are important for quality teacher educators (Palanca: 671-685). This implies that professional teacher educator in the framework of subjective theories focusing on formalities by compliance is characterized by positively defined values: physical (cleanness), personal (politeness and self-discipline), professional (self-organisation and punctuality), as well as social in terms of a good relationship with education stakeholders, especially student teachers.

Summary

In a nutshell, the type of subjective theories focusing on formalities by compliance is characterized by conformity to pedagogical, administrative (i.e. pedagogical documents), and normative formalities (clothing style) as far as quality teaching is concerned. A quality teacher is believed to strictly obey professional formalities. Quality teacher training is conceived as a

process of conditioning student teachers to pre-established standardised pedagogical, administrative, and normative formalities in an unalterable way. Accordingly, teacher educator is characterised by being driven by implicitly and socially defined values and standards like cleanness, organisation, discipline, and respect for time.

5.3.2 Subjective theories oriented to knowledge by transmission

In the framework of this study, the type of subjective theories oriented to knowledge by transmission was generated from the empirical material. In this type, the purpose of teaching is about the unreflective transmission of prescribed knowledge. Quality teaching is conceptualised in a didactic approach and output-oriented assessment. Teachers and teacher educators are viewed as knowledge experts and conveyors. Furthermore, knowledge (of subjects, subject didactics and general pedagogical principles) is a key to quality teacher professionalisation. Therefore, quality teacher training is viewed as the transmission of such knowledge to prospective teachers. Facets of the cases: Aigle, Banyana, Baréa, , Crane, Crocodile, Dodo, Eagle, Etalon, Fauve, Fennec, Flame, Harambee, Hirondelle, Kilimanjaro, Léopard, Mamba, Mena, Oranje, Palanca, Pharaoh, Quina, Scorpio are related to this type. In the following parts, I describe the qualities of this type using different comparative horizons (5.2).

5.3.2.1 Purpose of teaching: Transmission of prescribed knowledge

From the perspective of subjective theories oriented to knowledge by transmission, the purpose of quality teaching is viewed as the unidirectional and monomodal transmission of knowledge to students. This is rooted in the understanding that students come to school solely to get knowledge. So, the aim of teaching is considered as a process of transmission of knowledge to students. In his description of quality teaching, Hirondelle emphasises the centrality of transmission of scientific knowledge as the major purpose of teaching. In the following citation, she expresses this as follows:

"Here is nothing new that they should learn at school (uhm). That's it, it is only showing them scientific terms (uhmuhm)." (Hirondelle: 417-419).

From this excerpt, the major purpose of school, hence teaching, is about transmission of scientific knowledge to students. Additionally, knowledge to be transmitted is restricted to the nationally approved curricula. Therefore, the focus of teaching is about transmission of knowledge as it is prescribed in the national curricula (Léopard: 222-223). In this orientation, the centrality of teaching is knowledge (Ocean Star: 391-391) which must be unilaterally transmitted to students by a teacher. This means that the main purpose of quality teaching in the perspective of subjective theories oriented to knowledge by transmission is the unidirectional communication of knowledge to students. One would wonder how interviewees conceive quality teaching of this type.

5.3.2.2 Understanding of teaching: Didactic approach

Quality teaching, in the framework of subjective theories oriented to knowledge by transmission, is conceptualized as teacher-centred and knowledge-based as well as an output-oriented assessment. It is seen as pure transmission of prescribed knowledge within the limits of the official curriculum on the one hand. On the other hand, quality teaching is viewed as the transmission of the teacher's experiential knowledge. Regarding the teaching process, teacher domination is believed to be an aspect of quality teaching.

Regarding transmission of prescribed and teacher-centered experiential knowledge, the following excerpt taken from Léopard's descriptions of qualities of effective teaching exemplifies this belief as follows:

"Well! Effective teaching is giving knowledge, and updated knowledge (hum). It is not knowledge as it is in curricula as it was planned (aaah), you may even rely on your own experiences, and you may add some new things (hum). So, effective teaching is about giving knowledge as it is prescribed in the curriculum, but you also add what you believe to be important (eeeh!) This is because the curriculum may be supposed to last many years, they may design a curriculum of ten years for example but in the meantime, you may find that there might be some contents which might have been forgotten in the same curriculum (hum) and you may add it personally (aaah). You may add something based on your experience or just how you judge it personally as important to be added (hum hum). You see, those who prepare the curriculum they are not Gods, there might be what they may miss,

and you may find them to be relevant and they may be taught (hum)." (Léopard: 220-232).

Léopard views quality teaching from the perspective of a didactic approach with centrality to knowledge. Quality teaching is conceived as a purely giving-receiving approach. In this process, the teacher dominates the teaching process. In this approach, a teacher teaches (transmits knowledge), evaluates to check the achievement of her/his objectives and summarizes the lesson (see also Palanca: 597-603). Regarding the source of knowledge to be transmitted, officially prescribed curricula and teachers' experiential knowledge are prioritized. From his perspective, official curricula may have some knowledge gaps. Consequently, a teacher may, based on her/his experience, add some content based on personal judgement. In addition to the official curriculum and teacher's experiential knowledge, teacher-possessed knowledge is another source of knowledge to be transmitted so far as quality teaching is concerned. Therefore, a good teacher transmits the maximum knowledge she/he possesses in a specified time (see also Crocodile: 48-49).

Concerning quality teaching as an output-based assessment, the empirical material of the study at hand indicates the importance of knowledge-acquisition assessment. Quality teaching is seen as closely linked to assessment (Aigle: 23-24; Harambee: 92-94). In this orientation, quality teaching is controlled by assessment of knowledge acquisition both in the teaching process as well as in the nationally organized assessment. Accordingly, Hirondelle provides an example of output-oriented assessment from his description of the features of quality teaching in the classroom context:

"In the context of the class? There is also evaluation (uhm) we must evaluate students, to check, that's why I told you, check eeh (aaah) we have to check what you gave? Did they understand that?... but also, it must be verified if what you have given is what they have really understood? That's where we talk about quizzes and tests too." (Hirondelle: 373-380).

From the above-given citation, students' mastery-based assessment is a necessity as far as teaching quality is concerned. In the context of the classroom, Hirondelle considers assessment as a checking tool. It is seen as

an important strategy for verifying if what was taught is mastered by students. Equally, the performance of students in national examinations is viewed as a sign of mastery of transmitted knowledge (Aigle: 28-29).

Briefly, quality teaching in the perspective of teacher educators' subjective theories oriented to knowledge by transmission is conceptualized in the unidirectional and monomodal understanding of teaching. It is viewed as knowledge-based through a teacher-centred approach and output-oriented assessment. Accordingly, what are the related qualities of a good teacher? In the following part, I describe the characteristics of qualities of a good teacher in the direction of subjective theories oriented to knowledge by transmission.

5.3.2.3 Qualities of good teacher: Knowledge centeredness

The empirical material in the study at hand reveals two qualities of a good teacher in the framework of subjective theories oriented to knowledge by transmission. They include mastery of knowledge and the capability of its transmission as well as knowledge-based professional development.

Teacher as a knowledge expert

Concerning mastery of content, interviewees believe that knowledge is the sine qua non condition for a good teacher (see for e.g., Flame: 308 – 311). Therefore, they believe that mastery of knowledge (in general terms), subjects, didactical as well as pedagogical knowledge are key characteristics of a good teacher in the framework of this type. Interviewees believe that a good teacher masters as well what she/he teaches. In the context of describing what she understands by having knowledge as a quality of a good teacher, Mamba emphasizes mastery of knowledge as important as follows:

"Well! She/he is going to deliver that knowledge, knowledge about the content she/he is going to teach), she/he must master what she/he is going to teach (hum) because teaching requires the mastery of the content and giving a clear message. This is the kind of knowledge I was talking about (okay!)." (Mamba: 571-574).

In this citation, Mamba makes it clear that the centrality of the quality teacher is the mastery of knowledge. The latter, she indicates, is the pre-conditional requirement for quality teaching (see also Bafana: 334-334; Quina: 87-89; 291-292; Banyana: 176-177; Harambee: 41-41; Kilimanjaro: 108-108; Baréa: 419-421). Equally, mastery of content is seen as key to quality teaching for the sake of clarity during teaching (see also Quina: 112-114) as prescribed in the official curriculum (Banyana: 267-283).

In addition to the teacher's mastery of knowledge as a precondition to clarity in teaching, interviewees believe that teacher mastery of knowledge is important for different reasons. They include correctly addressing students' questions and guaranteeing their confidence and authority in the classroom. First, knowledge mastery helps teachers to answer students' questions during teaching. This is what Etalon exemplifies in the following citation as taken from the interview with him when he explains knowledge as a basis for a quality teacher:

"Hum, she/he should have high knowledge. As we have said, for teaching a finger, you should have the whole arm, you cannot teach something (hum) if a teacher is in the classroom, she/he should be ready to answer all learners' questions (hum), so this requires enough knowledge of the content you are teaching in such a way that you can explain to every learner who does not understand what you are teaching (aaah)." (Etalon: 319-324).

In this quote, Etalon shows three aspects of a quality teacher. A good teacher is more knowledgeable than the students she/he teaches. A teacher is expected to give what she/he already has in terms of knowledge. Therefore, she/he should have higher knowledge than students. Such knowledgeability is sometimes associated with levels of education. Consequently, a good teacher has a higher educational level than students (see also Léopard: 192-199). In this context, she/he can answer all questions raised by students during teaching (see also Quina: 232-235). Equally, a teacher's knowledge mastery enables a teacher to automatically provide answers to students' questions without delay (Banyana: 191-198). Moreover, her/his mastery of knowledge helps to provide explanations to students who might not have understood what she/he teaches (see also Fennec: 230-233). This implies that mastery of knowledge is considered a key quality dimension of a good teacher. In this regard, it is considered as

teacher-centeredness as she/he is the only one to answer “all” questions in the classroom. She/he is considered as a knowledge-based authoritative figure in the classroom. Second, interviewees believe that mastery of knowledge is a source of teachers’ confidence in the process of teaching (Quina: 208-210). A teacher without knowledge may bring boredom to the classroom. Mastery of academic knowledge as related to formal training leads to a teacher’s self-confidence (Oranje: 174-176). In the same vein of orientation, mastery of content is a tool for managing the classroom. By mastery of knowledge, she/he attracts students’ attention during teaching to grasp the content of her/his teaching. This implies, in this perspective, that mastery of knowledge is the source of not only confidence but also the authority of the teacher in the classroom.

Apart from the general understanding of a good teacher as a knowledge expert, interviewees indicate, in the interviews, mastery of knowledge in terms of subject and related didactics as well as general pedagogical content. Empirical data of the study at hand shows that interviewed teacher educators see the necessity of mastery of subject knowledge as a key quality of a good teacher (Harambee: 75-75; Aigle: 73-73). For them, knowledge of the subject is not enough. Rather, they believe that knowledge of subject didactics is an added value for a good teacher. For example, mastery of language or mathematics is good but not enough. Therefore, they see the necessity of subject didactics (Harambee: 75-76; Oranje: 176-179). Furthermore, the empirical material of this study shows that interviewees equally believe in the necessity of mastery of teaching-oriented knowledge. It is considered a *sine qua non*-quality of a good teacher as exemplified by the following quotation drawn from Pharaoh’s interview while she describes the characteristics of a bad teacher:

“eeeh however, knowing how to teach well is the first quality of a teacher and it makes you a teacher (aaah). You may not be a teacher if you don’t know how to teach!” (Pharaoh: 454-456).

Pharaoh believes that pedagogical knowledge is the foremost quality of a good teacher. For him, a teacher is a teacher only if she/he knows how to teach (see also Dodo: 121-122; Eagle: 631-632). From the perspective of interviewees in this study, pedagogical knowledge is related to different

dimensions like lesson preparation (Palanca: 635-637), mastery of teaching methods (Baréa: 477-479) and general principles of teaching used to transmit knowledge (Pharaoh: 200-203; Mena: 261-266). Scorpio shows an example of pedagogical knowledge when she explains her understanding of knowledge to deliver knowledge (methodology of delivering knowledge):

"Knowing how to deliver it (5secs), this is about methodology (3secs) (uhm) sometimes you may find a person who knows something but who does not know how to deliver it (hum). Knowing how to deliver it follows some principles; firstly, she/he gives it a structure (aaah) and then says: "What will my students get?" Let me get a concrete example, I may know something and believe that you know it as well as I do! I may spend an hour telling you this; though I know it, but you did not understand that! Methodology of delivering content as well your role in this process and the way I transmitted this to you, this is what I called knowing how to deliver it (hum)." (Scorpio: 58-66).

In this citation, pedagogical knowledge concerns knowledge of methodological principles to transmit knowledge to students. Transmission-orientedness is related to the lesson structure which specifies what students should know. For Scorpio, the transmission of knowledge from a teacher to students is not as automatic as it may be believed. Rather, a teacher needs to have knowledge of how to transmit it to students as well as her/his role in this process. Knowledge of how to teach recalls knowledge of methods of teaching, teaching aids as well as the context in terms of the place where the lesson takes place (Bright Star: 324-329). The above description indicates that qualities of a good teacher in the type of subjective theories oriented to knowledge by transmission refer to knowledge-centred understanding. Regarding the process of teaching, a teacher's capability to deliver and increase knowledge is seen as qualities of a good teacher.

Knowledge-transmission-centred capability

A quality teacher in the context of subjective theories oriented to knowledge by transmission is not only considered as a knowledge expert. Rather, her/his capability to transmit and increase knowledge is seen as important.

First, interviewees believe that the capability of transmitting knowledge is the key to a good teacher from the perspective of subjective theories oriented to knowledge by transmission. Hereunder, Eagle exemplifies this while describing the quality criteria of a good teacher to use observations during lesson:

"With practice, she/he delivers well the lesson and make students understand, she/he transmits them from her/him and give them to the concerned people (students) according to their levels and they understand." (Eagle: 592-596).

In this quotation, the quality of a teacher is related to her/his transmission-based ability to unilaterally deliver knowledge to students (see also Aigle: 73-74; Kilimanjaro: 122- 122; Harambee: 102-103; Crane: 335-337). Her/his capacity of transmission is verified by students' knowledge-centred understanding. Moreover, a quality teacher is seen as a technically monomodal transmitter of knowledge as prescribed in the official curriculum by a competent governing body (Léopard: 32-23). This illustrates that a good teacher is a conveyor of officially prescribed knowledge within a nationally accredited curriculum per se.

Second, interviewees see knowledge-centred professional development as a key quality of a good teacher in the context of subjective theories oriented to knowledge by transmission. In this orientation, interviewees indicate the necessity of knowledge-centred teacher professional learning, related strategies as well as their significance. Interviewees indicate the necessity of continuous and regular knowledge-based learning (an increase of knowledge) as a key to a quality teacher (Aigle: 298-29). In this orientation, Aigle indicates strategies and significance of knowledge-centred teacher professional development from his perspectives of a quality teacher regarding continuous knowledge improvement. Aigle expresses it as follows:

"Gaining new knowledge helps us regularly have updated information you get that information by reading, asking others searching in different ways like reading books or use the internet and other means this helps you to teach by delivering the correct content and giving examples you are sure they are also correct instead of saying that I might not have taught appropriately what I was supposed to teach when you did your own research you are confident about the validity of content delivered instead of giving things with doubts." (Aigle: 308-314).

In this quotation, Aigle indicates that knowledge-based teacher continuous learning is done through a self-organized professional learning strategy and for various advantages. Concerning self-organized knowledge-based teacher continuous learning, self-initiated reading (books as well as scientific publications, (see also Quina: 341-343), asking colleagues and consulting different digital platforms like websites and media (e.g., watching TV and listening to Radio) (see also Aigle: 300-302, Banyana: 201-204; Quina: 340-24). As far as the significance of self-organized teacher continuous learning, Aigle reveals two interconnected advantages. It enables teachers to update content and facilitates the transmission of correct knowledge with documented examples. Additionally, once the teacher is ready to teach with valid content, she/he teaches with confidence. Regularity of self-organized knowledge-based teacher professional learning prevents her/him from self-doubt in the process of knowledge delivery.

In brief, the empirical data of the study at hand shows that a quality teacher, in the perspective of subjective theories oriented to knowledge by transmission, is characterized by (1) mastery of knowledge (subjects, subject didactics and pedagogical), (2) knowledge-related transmission capacity as well as (3) knowledge-centred professional development. If quality teaching is conceived as knowledge-transmission oriented, how does quality teacher training look like in this type?

5.3.2.4 Purpose of teacher professionalisation: Transmission of subject and pedagogical knowledge

In the framework of the type of subjective theories oriented to knowledge by transmission, teacher professionalization is understood as the transmission of subject, didactical and pedagogical knowledge. The interviewed teacher educators believe that quality teacher training focus on two-sided aspects: transmission of subject knowledge and subject-related didactics. This makes teacher training a double-directed work (Baréa: 348-351; Fauve: 280-282; Eagle: 532-533). The two-sidedness purpose of teacher education is exemplified in the following quote by Mena while expressing what must be considered to prepare good teachers:

"In fact, for being a good teacher; we are going to focus on curriculum principles; she/he should be a teacher with content because you cannot give what you don't

have (3secs) she/he should be a teacher who masters pedagogy, (yeah yeah) the first one is the contents and then pedagogy (5 secs) as she/he is going to teach young students (3secs) our students are expected to teach those from secondary school (uhm); in fact, they teach teenagers (uhm) These are children who are still building their character, we must also teach some values for teachers we are training, these values will help their learners to build good character instead of having the content only (hum). That is why these values are very important. A teacher should have these three things: the mastery of the content, the mastery of pedagogy, and possess some Rwandan values." (Mena: 180-191).

In this excerpt, Mena insists on mastery of content, pedagogy, and values. Firstly, he believes that training a prospective teacher emphasizes mastery of content (subject knowledge) (see also Aigle: 10-11) as scrupulously prescribed in the official curriculum. For him, quality teaching depends on the quantity of knowledge a teacher possesses, which must be transmitted. Additionally, training an effective prospective teacher focuses on the mastery of pedagogical knowledge. Mena sees this as an important dimension of quality teacher training. More than that, he believes that quality teacher training should aim at nationally driven value-based knowledge. For him, mastery of knowledge is not enough. Rather, knowledge of values for prospective teachers is important to shape their own character.

To sum up, the purpose of teacher training in the perspective of subjective theories oriented to knowledge by transmission is to unilaterally transmit knowledge of subjects, subject didactics and pedagogy without forgetting national values. In the following part, I describe the beliefs of interviewees about their understanding of teacher training in terms of focus and related process.

5.3.2.5 Understanding of teacher training: A transmissionist view

The empirical material in this study reveals a didactic understanding of teacher training from the perspective of subjective theories oriented to knowledge by transmission. Teacher training is understood as a pure transmission of knowledge as well as teacher educators-centred demonstration. On the one hand, interviewees believe that quality teacher train-

ing is about the transmission of content to prospective teachers. This relies on the assumption that no one gives what she/he does not have. Therefore, prospective teachers should be given content (Harambee: 64 – 65) which they transmit to their future students (Hirondelle: 549-550). For example, in the context of his description of serving as a role model for student teachers as an aspect of quality teacher training, Baréa indicates the importance of the transmission of correct knowledge. He expresses it as follows:

"What I always think is to transmit to the one she/he will teach the correct content as you for example how she/he is going to teach any notion. Just she/he has to teach the notion so that student teachers may be able to later teach correctly the content, teaching what is correct eehhh just teach what is correct, this is what I wanted to mean." (Baréa: 343-348).

In this citation, Baréa insists on two aspects of quality teacher training. First, he believes that quality teacher training focuses on the transmission of correct knowledge to prospective teachers. For him, the centrality of transmission of subject knowledge is important to help prospective teachers correctly to teach the same content (see also Bafana: 231-235). Moreover, quality teacher training is based on the transmission of knowledge-oriented application. For example, Bleu believes that student teachers should be told how language is applied in everyday life like telling stories.

On the other hand, teacher training is conceptualized as a transmission-demonstration model. interviewees believe that prospective teachers should learn to teach by being told verbally how teaching looks like (Palanca: 95-97). In addition, interviewees believe that quality teaching to teach should be done by demonstration. For example, demonstration of how teaching materials are made since prospective teachers will likely use them in their teaching (Hirondelle: 110-113). This shows that quality teacher training is viewed from the perspective of trainer-centeredness. Therefore, quality teacher training is framed in a didactic perspective in the type of subjective theories oriented to knowledge by transmission. In more detail, in the following part of the chapter, I describe the qualities of a good teacher educator in this regard.

5.3.2.6 Professionalism of teacher educator: Knowledge-mastery teacher educator

In the context of subjective theories oriented to knowledge by transmission, the interviewed teacher educators have differentiated but interconnected knowledge-centred understanding of a good teacher educator. Empirical data of this study shows that their understanding of an effective teacher educator has a threefold perspective: the particularity of teacher educator, teacher educator as knowledge master and as a multifold knowledge expert.

First, interviewees believe that being a teacher of teachers is regarded as a double-related teacher's role: a teacher and a teacher of teachers. She/he is a different teacher since she/he trains prospective teachers. The following quote exemplifies this view in the context of expressing the understanding of the interviewee about being a teacher of teachers:

"I understand that being a teacher of teachers is being a teacher twice Eeeeh being a teacher twice you educate people, but they will also be educators of others. This means that what you give them might be higher as compared to what you can give to others (hum hum)" (Banyana: 22-26).

Banyana insists on the fact that a teacher educator is special in the sense that a teacher of teachers trains prospective teachers. Therefore, the knowledge provided to student teachers should be higher than the one taught to students in non-teacher training specializations. This relies on the assumption of unidirectional transferability of knowledge provided for student teachers. The knowledge taught to student teachers is seen as having a huge impact on society. Therefore, the main particularity of teacher educators lies in the fact that they transmit knowledge to prospective teachers who, on their return, would do the same (see Palanca: 309-317). Interviewees see the necessity and responsibility of teacher educators regarding the transmission of knowledge. Therefore, quality teacher educators are aware of the long-term impact of knowledge provided to prospective teachers. Accordingly, interviewees believe that mastery of knowledge is the key as far as a quality teacher educator is concerned.

Second, the empirical material of the study at hand reveals that a quality teacher educator is seen as a knowledge master. interviewees believe

that a good teacher educator has a mastery of knowledge and is capable of accurately transmitting it to student teachers. This view is typified by the following quotation as drawn from the interview of Aigle while describing what he meant by mastery of content as the quality of a good teacher educator:

"Knowing what you teach before teaching, before giving knowledge to student teachers, you should understand well. This is why, in what we learn or teach, we have what we call theories (hum hum) and there exist practices to be given. Normally, it is said that no one gives what she/he does not have. You should then have first a good understanding of what to content and thereafter you are able to transmit to student teachers, student teachers will understand it and put into practices."
(Aigle: 81-87).

In this quote, Aigle indicates two qualities of a good teacher educator. Firstly, he emphasizes the mastery of knowledge. A good teacher educator necessitates to have a very good understanding of the content to be taught. In the same orientation, other interviewees believe that a teacher educator should have advanced knowledge as compared to so-called general teachers (Crane: 140-141; Etalon: 185-192; Léopard: 320-323). Secondly, a good teacher educator has the capability to transmit mastered knowledge to student teachers. In the view of Aigle, the two qualities are interwoven. Mastery of content is a precondition for the capability to transmit knowledge to student teachers. Furthermore, Aigle believes that mastery of knowledge and the capability to transmit it to students are preconditions for knowledge understanding and application on the side of student teachers.

In addition to mastery of knowledge and the capability to transmit it to student teachers, third, interviewees view a good teacher educator as a multifold knowledge expert. In this orientation, they think that she/he should have multidisciplinary knowledge. This implies knowledge of different subjects. In the perspectives of explaining how a teacher educator is different from a general teacher, Léopard, in the following quotation, indicates multidisciplinary as a particularity for teacher educators:

"Eehh! It is very different because someone who teaches those other subjects like economics is supposed to know that economics only (hum hum) but a teacher of teachers has a variety of knowledge! She/he must know everything related to

methodology, she/ he must know psychology and pedagogy and she/he should know many things as compared to one teaching economics for example, it requires the latter to know only economics (hum). You get that she/he is different from a teacher of teachers because she/he is different from a teacher because she/he is in different domains, she/he is cross-cutting!" (Léopard: 341-348).

In this quote, Léopard insists on multidisciplinary knowledge as a quality of teacher educators. For him, a subject-specialized teacher must only be bound to knowledge in one discipline. However, he indicates that a teacher of teachers needs to have a diversity of knowledge in different teaching-related disciplines like methodology, pedagogy and psychology as well as knowledge of different subjects. A teacher educator should have multi-subject knowledge to accurately provide answers to student teachers' questions. Principally, this is understood in the context where student teachers are trained to teach more than one subject (Aigle: 217-221). This implies that a teacher of teachers should have the diversity of knowledge to successfully address student teachers in different disciplines.

To summarize, the qualities of a quality teacher educator in the framework of subjective theories oriented to knowledge by transmission are twofold: knowledge expert and particularly multifold knowledge master. Mastery of knowledge in general and specifically multidisciplinary knowledge is seen as a central quality of teacher educators of this type. Additionally, and connected to the first quality, a good teacher educator is characterized by the capability to transmit knowledge to student teachers and accurately answer their knowledge-based questions.

In the framework of this study of exploring teacher educators' subjective theories, the second type oriented to knowledge by transmission, as indicated by the name, is characterized by the centrality of static prescribed knowledge in a didactic approach. Teacher and teacher educator are viewed as knowledge experts and capable of transmitting it to either students or student teachers.

5.3.3 Subjective theories oriented to behaviour by imitation

The empirical data of the study at hand shows that interviewees have subjective theories oriented to behaviour by imitation. In this type, quality teaching is considered as closely linked to the behaviour of the teacher

whereby students learn by imitating her/him. In this regard, a teacher is solely seen as a role model worthy to be imitated. A good teacher is seen as one living undivided personal, social and professional life: "Practice what you preach". Concerning teacher training, interviewees believe that student teachers learn to teach by imitation. Therefore, their training practices and behaviour both inside and outside the training school or university are seen as the foundation of quality teacher professionalisation. In this framework, teacher educators are role models and follow the principle of "behave and do as I do". Facets of the cases: Aigle, Bafana, Banyana, Baréa, Bleu, Bright Star, Crane, Crocodile, Diable Rouge, Dragon, Eagle, Elephant, Etalon, Fauve, Fennec, Flame, Harambee, Hironnelle, Kilimanjaro, Lion, Mamba, Ocean Star, Oranje, Palanca, Pharaoh, Quina and Scorpio are related to this type.

5.3.3.1 Understanding of teaching: Teaching by exemplar behaviour

From the perspective of the type of teacher educators' subjective theories oriented to behaviour by imitation, interviewees believe that quality teaching is a word-action consistency. They see matching preached and practice as important for quality teaching. In her description of a teacher's exemplary behaviour worth being imitated as an indicator of quality teaching, Ocean Star exemplifies this in the following excerpt:

"When we teach students hhhh we need to teach not only by words mandatorily we teach by who I'm (uhm) and so who I'm inside the classroom and outside the classroom (uhmuhm), this is very important, aaah we need to match our words and our actions (uhmuhm) I saw sometimes I go to the market eeh for example here in Mukura*¹⁵ and there are, many students are around also some of them are traders (uhm) and if we say here please respect the people, the values and then I am doing wrong in the market and some of the students listen before me and now they saw something not good, not match and then what can I can I teach? What kind of teacher am I? This is very important, first match our words and our actions inside the classroom and outside the classroom (uhm)." (Ocean Star: 46-57).

¹⁵ Anonymised for confidentiality.

From the above quotes, Ocean Star expresses that teachers' conduct inside and outside school matters more. For example, she indicates that a teacher's misbehaviour outside school has the likelihood to negatively affect the teaching and learning process. Value-guided conduct like respect is seen as important for quality teaching. For example, it is unworthy and unhelpful for a teacher to dictate to students how the latter should behave in case she/he does not behave so (Etalon: 331-33). Therefore, practising the talk is an engine for quality teaching (see also Ocean Star: 287). Moreover, serving as a role model is seen as a teaching approach. For example, Bright Star believes that it is inappropriate to theoretically teach collaboration if the teacher does not collaborate with co-workers. Rather, teaching collaboration skills is learned through observing teachers collaborating. For him, learning by observation is better than learning by hearing. Therefore, quality teaching especially behaviour-oriented is of good quality if teachers practice what they preach (Bright Star: 286-291).

In the perspective of subjective theories oriented to behaviour by imitation, quality teaching is based on the behaviour and the actions of the teacher. Therefore, students learn to appropriately behave by observing and imitating teachers who are expected to be role models.

5.3.3.2 Qualities of a good teacher: Role model

In the framework of subjective theories oriented to behaviour by imitation, a quality teacher is seen as a role model. A closer analysis of the empirical material of this study reveals three interconnected perspectives: walk the talk principle, normative-social role model and imitation-based professional learner. Firstly, interviewees believe that a good teacher practices what she/he preaches as far as behaviour is concerned. Afterwards, a good teacher is seen as a social role model both inside the school context and in the wide community. Finally, they believe that a good teacher self-professionalises through imitation.

Teacher as a walk-the-talk professional

In this type of subjective theories oriented to behaviour by imitation, exemplarity in terms of preached-practice consistency is the main quality of a good teacher. Accordingly, a good teacher teaches by example as far as her/his behaviour, as well as practice, are concerned. Preached-practice

consistency as a characteristic of a competent teacher is exemplified by the following citation:

"But as teachers we have to live first what we teach others (hum) we need to practice what we always tell students to practice if you teach students to save but you don't save, they take you as incompetent (hum hum)." (Bleu: 304-308).

In the above-cited quotation, Bleu indicated that teachers must practice what they request students to do. In her eyes, failing to practice what is preached to students is seen as the incompetence of the teacher. Therefore, good teachers teach by example (Ocean Star: 290-292) and avoid teaching the opposite of their own behaviour or practice (Etalon: 327-329). This is justified by the belief that students learn from their teacher by observation. Accordingly, a good teacher avoids the contradiction between saying and doing in the teaching profession (Harambee: 45-47). Accordingly, she/he should then be a role model.

Teacher as a normative-social role model

In the same orientation as preached-practice consistency, the quality teacher is viewed in terms of exemplary practice and behaviour both inside the school and in the wide social community. interviewees consider a good teacher as a role model in terms of positive values (Harambee: 32-33) and exemplary practice (Dragon: 145-145). Moreover, they consider role modelling as the main duty of the teacher (Dragon: 142-143) so that students may learn from her/him (Harambee: 195-196; Quina: 206, 210-211, Kilimanjaro: 60-62; Fennec: 171-173). In this perspective, a good teacher is a role model in her/ his behaviour as a person and as a professional.

Interviewees believe that a good teacher is a role model both inside school and outside the wide community. This is underlined by the belief that a teacher is not only a teacher in the classroom or within the boundaries of the school but also outside the school context. Consequently, a teacher teaches through her/his conduct in the wide community. In the context of describing how a good teacher is a role model inside and outside school, the following quotation exemplifies the perspectives of Flame in this regard:

"Humhum, with regard to being a role model inside and outside the school, it is usual in the society that criminals, suspects of theft, impoliteness, the one who shows immoral behaviours, you see, in that context, for both students you teach or those who observe you in the society, she/he should obviously appear as a curse, she/he may not be able to convince students, this what I wanted to say that a teacher should be careful in all matters and be a role model, you see, students she/he teaches may assimilate all that she/he teaches (hum) this is what I wanted to say that a teacher should be careful in all matters and be of moral integrity so that whatever she/he teaches students to assimilate it (hum hum), this is what I want to say (hum)." (Flame: 259-268).

In this citation, Flame emphasizes that a good teacher is a role model both inside the school and outside the social community. For him, the teacher's immoral behaviors negatively affect teaching especially by mistrust of the teacher by students. It is assumed that students learn by imitation of whatever they are told or observed by their teacher. By serving as an exemplary teacher, students are not only the ones learning from her/him but also fellow teachers (Bafana: 264-267). In the eyes of the latter, teacher role modelling is oriented to conducive relationships with both students and citizens in her/his community. Therefore, a good teacher is of moral integrity internally and externally in the school context.

In the same vein of orientation, interviewees insist on positive values as an important factor of dual exemplarity of the teacher as well as immoral behaviour to avoid. Firstly, they indicate for example honesty as an important value characterizing a good teacher as a role model. There is a likelihood that students would learn honesty from honest teachers (Mamba: 561-567; Scorpio: 84-93). Afterwards, alcohol abuse, especially getting drunk is considered an immoral behaviour to be avoided by an exemplary teacher (Dragon: 320-324; Quina: 165-177; Oranje: 234-236). Quina believes that mastery of subject knowledge is not enough to be a good teacher. Rather, he emphasizes the necessity of discipline in terms of moral integrity as far as a teacher as a role model is concerned. Lastly, interviewees see teachers' role modelling in terms of normativity-oriented clothing and body-oriented cleanness. To serve as a role model inside and outside the school context, they emphasize clothing-based self-control and self-discipline (Flame: 268-272; Oranje: 131). In her view, for example, Scorpio believes that clothing styles like shorts and sandals as well as

twisted hair are prohibited for teachers during working time (Scorpio: 69-84).

Concerning teacher role modelling in society, a good teacher is seen as a socially trusted professional having relationships with people in her/his surrounding society and the capability to provide advice on society-related issues. She/he is viewed as a community advisor using her knowledge to contribute to shaping the future of her/his near society (Etalon: 281-284). Moreover, a teacher as a role model is likewise seen as a socially engaged citizen whereby, she/he is seen as an active member of the community. As a member of the school-surrounded community, she/he regularly interacts with community members as well as participates in pertaining issues. Hereunder, Eagle gives an example of this aspect of a teacher's role modelling in the context of describing how a good teacher looks like:

"Whatever she/he knows has to go hand in hand with good interpersonal relationships, she/he does not use them in abusing others but she/he uses them in cooperation with others, in social interaction and collaboration, participating in living in harmony with others, in participating in government activities, the meetings, living in harmony with the neighbours, the workmates, everywhere they have to say that you are the role model (uhm) in such a way that everyone who sees him/her can say that she/he is the role model." (Eagle: 598-604).

In this quote, Eagle insists on the fact the teacher's quality of role modelling is oriented to participation in community affairs. To be a role model, a good teacher nurtures harmonious interpersonal relationships with members of her/his school and surrounding community. As a socially engaged citizen, a good teacher serves as a role model in terms of being actively involved in governmentally organized events.

Teacher as an imitation-based professional learner

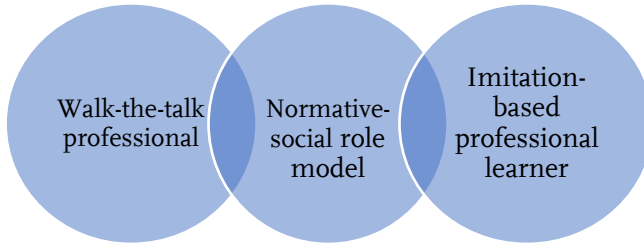
Apart from the teacher as walk-the-talk professional and normative-social role model, the empirical data of this study reveals that imitation-based professional development is another quality of a good teacher in the type of subjective theories oriented to behaviour by imitation. In this perspective, teacher learning is viewed as a process of imitation from fellow teachers for instance. In her expression of features of a good teacher, Scorpio

gives the following citation as an example of professional learning by imitation as a quality of a good teacher:

“Another thing, a good teacher should know how to teach, I don’t say that she/he should have an educational qualification (aaah), I don’t say that it should be his/her major subject (uhm) I don’t agree with people who say that only qualified teacher should teach, maybe you can do it without knowing that you are in the right path (5 secs) it is also good to learn this because if you do it badly, you will be aware of that (hum). The one who has not learnt this can also educate, she/he may say: “I have not learnt this, so I shall imitate that one who has learnt that” or you can read! What is important is to like it and try to improve! (hum).” (Scorpio: 349 – 358).

In the above-cited quotation, Scorpio affirms her understanding of the necessity of pedagogical knowledge as a quality of a good teacher. Nevertheless, she does not see teacher professional qualification as a requirement for quality teachers. For her, the unqualified should be allowed to teach as well. She believes that even unqualified teachers may intuitively and unknowingly offer quality teaching. Therefore, she believes that unqualified teachers may self-professionalize by imitating fellow qualified ones. Unqualified can professionally self-develop by observing and imitating trained teachers. Moreover, a good teacher, even qualified, may self-professionalise by observing and imitating fellow teachers, too (Mamba: 584-588).

A good teacher in the context of subjective theories oriented to behaviour by imitation in a threefold dimension: Preached-practice (living) consistency, normative-social role model and imitation-centred professional learning. First, a good teacher lives and practices what she/he preached to students. Second, she/he is a role model inside and in the wide community in terms of living professionally, ethically, and socially predefined code of conduct in the form of dos and don’ts. Third, a good teacher can professionally self-develop by imitating other teachers. Accordingly, one would wonder how quality teacher professionalisation looks like in this type.

Figure 3: Quality teacher in the type of behaviour by imitation

Source: Author's own design from the data

The figure 7 summarises the qualities of a good teacher from the perspectives of the type of subjective theories oriented to behaviour by imitation. They include living the talk, being a role model in socially and ethically denied behaviours and norms and learning by imitation.

5.3.3.3 Purpose of teacher professionalisation: Enhancing professional behaviour by imitation

In the framework of subjective theories oriented to behaviour by imitation, quality teacher training is seen as a process of enhancing professional behaviour through which prospective teachers learn to teach by imitation. Teaching teachers is considered a dual-purpose. On the one side, quality teacher training aims at the provision of knowledge necessary for becoming a teacher. On the other side, the process of teacher training matters more. In this typical perspective, it is assumed that prospective teachers learn to teach by imitating of pedagogical and didactical practices observed along with their training. The following citation gives an example of the dual purpose of teacher training as drawn from the interview of Bright Star while she explains learning to teach by imitation:

"Here, I wanted to talk about what is more related to the teaching profession, you see there are two things: you not only teach what you know but also who you are. How she/he is seen by student teachers, they can imitate if what she/he teaches

is good or how she/he behaves, they may imitate and do their work effectively later." (Bright Star: 78-81).

In this quote, Bright Star makes it clear that teacher training has two interconnected dimensions: knowledge- and behaviour-centred. He believes that teacher training is not only about knowledge-centeredness but also exemplarity-centred behaviour in the teacher training process. Accordingly, prospective teachers learn to teach by imitating teacher educators' behaviour during their training. By observing teacher educators' behaviour, interviewees believe that they learn how to behave as teachers in their future professional careers (see also Banyana: 30-33; Flame: 18-23). Therefore, teacher training aims at shaping prospective teachers' professional behaviour through an imitation-based training approach. Interviewees believe that student teachers learn to teach by observing and imitating teacher educators' behaviour and professional practice.

5.3.3.4 Understanding of teacher professionalisation: Training by exemplary practice and behaviour

In the perspective of subjective theories oriented to behaviour by imitation, quality teacher training is understood in threefold interconnected characteristics: teaching or learning to teach by imitation, practice, and preached-practice consistency.

First, interviewees believe that prospective teachers learn by solely imitating teacher educators' training practice and behaviour during their initial teacher professionalisation (Scorpio: 228-230). After mentioning role modelling as the quality of teacher training, Fennec gives an example in relation to how it should look like:

"Even in teaching, in teaching the preparation is necessary, to use teaching aids (hum). This means that the way we teach them, is the same as the way they will teach using teaching aids (hum), the preparation of all of this is to enable them to learn from it in such a way that they can do it wherever she/he will go by saying "our teacher used to do it" and see that it is something good (hum)." (Fennec: 74-80).

In the above-given quote, Fennec shows that prospective teachers likely use the same pedagogical and didactical approaches as experienced during their initial teacher training (see also Banyana: 411-413). He understands that if student teachers are trained using teaching aids, they would imitate this and use the same approach in their future teaching.

Connected to this and second, interviewees believe that quality teacher professionalization is implicit-action oriented. In this perspective, they believe that the best strategy to train prospective teachers is to implement the same method as a process of learning to use it in their teaching practices. For example, if prospective teachers are expected to use learner-centred methods, the latter must be modelled in their own training process. This is what Aigle exemplifies in the following extract in the context of describing strategies for effective teacher training:

"Thank you for helping them in teaching, first of all, to try our best to be their role model in teaching, the example we give them is that they have to participate in their learning this means that if they participate in their learning you are also preparing them to involve students in teaching and learning process this means that that the way we teach student teachers will learn from it for their own teaching in the future this is why they have to participate in teaching and learning process without being a transmitter of knowledge to them so that when they will go to school to teach they do the same." (Aigle: 35-42).

Aigle emphasizes exemplary teaching as a teacher training approach. In this regard, he believes that student teachers learn from how they are taught. This assumes that there is a likelihood that they will use the same teaching approaches as experienced during their training. For example, he believes that prospective teachers learn to teach learner-centred approaches by being involved in their training process. It is assumed that by participating in their own training, they will likely use learner-centred approaches in their future teaching practices. Moreover, interviewees believe that prospective teachers learn individual support by being individually supported. By identification of their learning-related difficulties and related mitigation measures, student teachers learn to offer individual support and will likely apply it in the teaching (Flame: 81-88). More than that, learning to deal with students' questions in the teaching and learning

process can be taught by honestly acknowledging teacher educators' limitedness of knowledge and accepting to share the responsibility to answer asked questions (Scorpio: 100-105). This implies that quality teacher training is understood as implicit action-based training. In this orientation, interviewees believe prospective teachers learn to teach through observation of teacher educators' teaching practices and behaviours during their training process.

Third, quality teacher training is understood as a process of walking-the-talk during their training. There should not be inconsistency between preached behaviour and practices. Hereunder, the following extract gives an example of walking-the-talk principle in teacher training as extracted from Flame's interview especially when she describes how role modelling should look like:

"Well! I wanted to say that when I am teaching, you see! I always have a target in my mind, that what I teach them will be the same thing they will be applying when they get into their field of teaching, being in their classroom (hum hum). That's what I wanted to say. For example, if I teach them about the quality of a good teacher, I will not say it only theoretically (eeeh!), I must convince them by matching what I say with what I do on a daily basis. They must see that what I say is what I show in front of them (eeeh)." (Flame: 26-32).

From the above-indicated quotation, Flame believes that student teachers apply observed strategies during their initial training. Therefore, preached-practice consistency must be maintained to enable student teachers to learn from their training experiences. For example, Flame sees that it is not appropriate to theoretically teach the qualities of a good teacher without being modelled in training practices (see also Flame: 44-47). For example, teaching responsibility should be concomitantly done with being a responsible teacher educator to enable them to learn from them (Ocean Star: 192-195). This implies that the walking-the-talk is an important quality of good teacher training.

To sum up, quality teacher training in the framework of subjective theories oriented to behaviour by imitation is conceptualized as teaching to teach by imitation as well as preached-practice consistency. In this regard, interviewees understand that quality teacher training is primarily

facilitated by professional practice and behavioural qualities of teacher educators. Therefore, I describe the characteristics of good teacher educators in the type of subjective theories oriented to behaviour by imitation.

5.3.3.5 Quality teacher educator: Practice- and behaviour-oriented role model

The empirical material of the study at hand shows that teacher educator is a role model in the perspective of subjective theories oriented to behaviour by imitation. Interviewees believe that teacher educators serve as role models so that prospective teachers can learn to teach by imitating them and there are three justifications. First, they see teacher educators' role modelling as a strategy for improving the quality of their future teaching practices (Banyana: 397-400; Diable Rouge: 306-310; Scorpio: 95-95; Palanca: 661-663). Second, they see role modelling as important for learning teachers' professional behaviour (Eagle: 457-459). Third, it is assumed that interviewees, by serving as role models for student teachers, teacher educators teach how to become, in their turn, role models for their future students (Elephant: 567-571; Harambee: 65-67). In this framework, quality teacher educator is seen as pedagogical, social, and normative-behavioural role models to facilitate quality of teacher training.

Teacher educator as a pedagogical role model

To train student teachers for the teaching profession, especially in preparation for the capability to direct the teaching and learning process, interviewees believe that teacher educators must be a role model in their professional behaviour. They not only see the necessity of teaching to teach by training-related pedagogical preparatory formalities but also the exemplarity of professional behaviour during the training process.

Concerning professional behaviour in preparation for teaching, teacher educators are viewed as role models in terms of preparation-related formalities. For example, they believe that a good teacher educator must serve as a role model by having officially recommended pedagogical

documents. In her description of processes through which teacher educators serve as role models, Crocodile expresses pedagogical role models as the quality of good teacher educators as follows:

"Being a role model for student teachers I teach, you see, it is what already said about preparation though they are not supposed to see my preparations, they may discover that what you are teaching is not done haphazardly, they may know that you have prepared it. Moreover, you should have all the required teaching materials. If you are going to teach a text, how can you do it without a book or even having read the same text at least once? How can you teach it? This should be applied to all subjects or lessons you teach; you should have the documents showing how you prepared what you will teach." (Crocodile: 118-125).

One main quality of a teacher educator as a pedagogical role model may be drawn from the above-mentioned extract. Role modelling in terms of preparation of teaching is seen as a necessity for a teacher of teacher considered as a role model for prospective teachers. Crocodile believes that it is important for a teacher educator to serve as a role model in the regularity of preparation and possession of officially recommended pedagogical documents and teaching aids. It is assumed that student teachers are likely to learn to teach by observing the flow of teacher educators' teaching practices likely to reflect teaching-related preparation. Moreover, the teacher educator's role modelling is seen in terms of the preparation of teaching aids like textbooks. Crocodile sees that this aspect is a necessity for all subjects. More than that, teacher educators as role models must possess officially recommended pedagogical documents. Preparation and possession of pedagogical documents by a teacher educator are seen as pedagogical acculturation to the teaching profession. By preparing and possessing pedagogical documents, teacher educators shape the professional culture in this orientation. It is understood that they serve as learning opportunities for student teachers by observing their teacher educators (see also *Diable Rouge*: 68-78; *Hirondelle*: 212-214; *Quina*: 324-330).

The empirical data of this study show that teacher educators do not only serve as role models in pedagogical preparation. They believe that a good teacher educator is a role model in her/his teaching and training practices. Since they believe that student teachers learn from teacher educators by observation and likely imitate them, interviewees believe that

good teacher educators are cautious about their behaviour during the training process (Elephant: 571-580). This is because student teacher teachers learn by imitating teacher educators and, in case of failure to be role models, negative consequences will likely be high (Bright Star: 135-139). Therefore, interviewees see the necessity of serving as role models by teacher educators. The empirical material of this study shows that interviewees believe that quality teacher educators model their professional behaviour following process-related pedagogical formalities. The latter includes for example scrupulously following three lesson steps: (1) introduction, (2) lesson development and (3) evaluation. Accordingly, the use of blackboard follows the same steps (Hirondelle: 198-212, 214-216; Pharaoh: 130-134). They should likewise serve as role models through teaching methods (Flame: 70 – 74); classroom management (Pharaoh: 135-135); provision of feedback during the training process (Bright Star: 71-74) as well as the alternative use of mother tongue as a medium of instruction for the benefits of students' learning (Bafana: 137-140). While role modelling is seen as a principle of teacher training, it is, however, viewed as a necessity only for teaching subject-related didactics (Barea: 331-339). In the understanding of Baréa (op.cit), teacher of teachers must be role models only in teaching subject didactics. Conclusively, interviewees believe that good teacher educators serve as role models through their pedagogical and didactical practices.

Teacher educator as a social role model

A teacher of teachers, in this type, is considered a teacher of prospective teachers in a social context. Using a metaphor of a school as a family where a child grows, he believes that school internal and external life of a teacher educator must be exemplary for prospective teachers (Elephant: 69-76). The behaviour of a teacher educator inside and outside school mutually influences. Therefore, living and serving as a social role model is not only limited to school but also her/his social life outside the school context. Interviewees believe that student teachers are trained within and for society. Consequently, they see the close interconnectedness of the school and society which, positively or negatively, influences one another.

In this type, a teacher of teachers is considered a social role model both inside and outside the training institution context.

First, a teacher educator is seen as a role model within teacher education institutions and society. In this regard, both student teachers and citizens can learn from her/him. Accordingly, Bleu explains how teacher educators should be role models in the context of teacher education, the following is an example of the excerpt from the interview:

"Being a role model at school and in society in general means that a teacher educator everywhere has to be the person from her/him others learn in term of development, thinking, skills and behaviours because for instance I cannot show up at school drunken before student teachers or let's say student teachers know my misbehaviours I cannot teach and expect them to understand what I am teaching. So, I always need to be careful (hum hum)." (Bleu: 212-217).

Different qualities of role modelling may be visible in the above-given citation. Teacher educator's professional responsibilities are far beyond officially defined boundaries i.e., school. A teacher educator is considered as a role model from which student teachers learn to behave (Bleu: 115-117) and even the citizens can learn from her/him. Lack of proper conduct like coming to school drunkenly likely affects the quality of the teacher training process. In their beliefs, both inside and outside social life are an integral part of the teaching process. The relationships of teacher educator and student teacher as well as and with colleagues, collaboration with school leaders as well as her/his general living conditions outside are integral part of teacher training (Bright Star: 143-149). In this regard, they are likely to negatively affect teacher training in case she/he does not serve as a role model in these dimensions (Bright Star: 151-159). Therefore, interviewees believe that the behaviour of teacher educators in the wide community can either facilitate or hinder the quality of teacher training.

Regarding preparing prospective teachers for a successful teaching professional career, interviewees believe that teacher educators must serve as role models in terms of healthy relationships with colleagues and neighbours to learn how to work and live with others in school and the wider community (Crane: 199-204). In case of failure to behave appropriately i.e., bad relationships like mistreatment of student teachers, it is assumed that the latter may likewise mistreat students (Elephant: 444-454).

In this context, Elephant believes that the provision of content is not sufficient to train teachers. Serving as a role model through social behaviour is an important dimension of the quality of teacher training of this type. Therefore, a teacher of teachers must behave carefully not to compromise the profession of teaching teachers.

Teacher educator as a behavioural normativity-oriented role model

In addition to pedagogical and social exemplarity, the teacher educator is likewise seen as a behavioural normativity-based role model. Believing that prospective teachers learn professional behaviour by unreflective imitation of teacher educators, the latter serves as a role model in terms of moral-behavioural integrity and value-guided professional behaviour.

Concerning moral-behavioural integrity, interviewees believe that teachers of teachers behave in conformity with informally and socially defined behavioural codes of conduct. Interviewees express this belief either as negative conduct to avoid or positive behaviour to adopt. Additionally, physical qualities of teacher educators are revealed as dimensions of quality as far as serving as a role model is concerned. While describing the particularities of teacher educators as compared to general teachers, behavioural codes of conduct and physical qualities emerge as qualities of good teacher educators as exemplified by Eagle in the quotation below:

"And we likewise have to be characterised all of these; teaching by example I don't know how to say it in Kinyarwanda, teaching by giving example (uhm). There is a new trend of being a role model, as a teacher, I am teaching teachers, but what are good behaviours am I manifesting? So that they can imitate me when they will be teaching? If they see me coming drunk, they will take it as normal, when she/he will be teaching, she/he will come to school drunk too and feel as... uuhh, and say; even our teacher used to come to school drunk, if I am shabby when I am teaching, without polishing my shoes, without washing my face, she/he will take it as normal and will imitate, if she/he sees us fighting at school, we have fought, quarrelled at school, teachers have broken the glasses of the staff office, they are fighting, she/he will say that it is normal and will do the same at his/her workplace by saying. "uhumuhm, at my former school, it was their culture there is no problem" (eeeh) That is why a teacher who is teaching future teachers is different from other teachers (uhmuhm)." (Eagle: 430-444).

In the above-given citation, Eagle indicates the necessity of serving as a role model by a teacher educator. She assumes that student teachers unreflectively imitate their behaviour whether bad or good (see also Mamba: 286-296) and this may be related to social ties between a teacher educator and a student teacher (Pharaoh: 116-119). Eagle believes that prospective teachers are likely to consider such behaviour as positive and imitate them for their future teaching career. Therefore, negative behaviour like drunkenness (see also Lion: 547-549; Aigle: 284-286), quarrels with co-workers as well as sexually oriented behaviour with student teachers (Oranje: 332-339) should be avoided. In addition to negative behaviour to avoid, interviewees believe that moral integrity in terms of living the preached behaviour to set a good example for student teachers is viewed as an important quality of a good teacher educator (Etalon: 118-119; 288-291; Fauve: 70-73; Fennec: 57-61; Pharaoh: 109-111; Quina: 317-319; 41-43; 321-324). One of the reasons is that interviewees believe that students under teacher training will have to be role models for their students too (Etalon: 122-122; Mamba: 295-296). Teacher educators' behaviours should not only be modelled inside but also outside since it is believed that student teachers imitate teacher educators' behaviours as observed even outside the school context (Lion: 512-516; 541-543; Scorpio: 73-84).

Furthermore, Eagle believes that teacher educators' role modelling must be not only in the form of behaviour but also in physical qualities. For instance, she views cleanness-based role modelling as a necessity for quality teacher education. Here, Eagle believes that a teacher of teachers must be a role model for student teachers in terms of the nattiness of her/his body and clothes. In addition to cleanliness, a teacher of teachers must be selective in terms of clothing style. For example, mini-skirt, shorts, sandals, twisting hair (for males) as well as other short clothes especially for women must be avoided for a teacher educator to serve as a role model for prospective teachers (Mamba: 301-306).

In addition to behavioural norms, interviewees believe that teacher educators are regarded as role models in terms of values-guided professional behaviour. In this regard, interviewees are convinced that Christian and social values are important for teacher educators considered role models for prospective teachers. Accordingly, Ocean Star describes qualities of teacher educator worth to be imitated and show how value-guided

behaviour is important in this regard. The below-given excerpt gives related example:

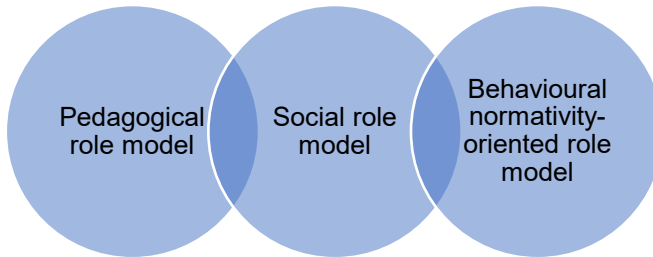
"Imitate I said aah we play the role, role model and the most important for teachers to imitate is the values, those values being loyal, loyal to the most important value is love, love Jesus, love God, if we love God we love every person aah the other important value is respect, respect to the teacher but first teacher's respect to student teachers and also student teachers respect to the teacher educators, respect between them." (Ocean Star: 35-40).

From the citation, Ocean Star makes it clear that a good teacher educator must be a role model whom student teachers imitate. Moreover, she believes that two values are important as far as teacher educators' role modelling is concerned. They include love and respect. First, she sees love as the most important for teacher educators worthy to be imitated by student teachers. From her view, a good teacher educator is guided by vertical love, love to the highest, to God. Love of God, according to Ocean Star, is a preconditional for horizontal love which is for every human being. Second, she understands that respect is likewise important for a good teacher educator. In this regard, respect is not oriented to asymmetric respect. Rather, she believes that there should be mutual respect: teacher educators for student teachers and vice versa. Respect as a guiding value of teacher educators, especially mutual respect must not only be between teacher educators and student teachers. Rather, it must be extended to coworkers as well as respect to time (Fauve: 74-76). Other values to be modelled by teacher educators are patience and politeness. For example, if a teacher educator would like to teach how to be patient and polite as a future teacher, she/he should be patient and polite, too (Etalon: 111-118; 119-121). More than that, teacher educators must be honest as an exemplarity for prospective teachers to learn honesty (Scorpio: 84-93). This implies that teacher educators must live the expected values for prospective teachers by the process of implicit imitation.

In summary, interviewees believe that professional teacher educator in the framework of subjective theories oriented to behaviour by imitation is characterized by threefold qualities. They include being role models in (1) pedagogical practice, (2) social life and (3) behaviour especially complying with a professionally and ethically defined (formally or informally)

code of conduct for teachers. Believing that student teachers learn to teach by imitation, interviewees see teacher educators as role models in terms of training practice as well as normative professional and social behaviour inside training institutions and the wider community.

Figure 4: Professional teacher educators in the type of behaviour by imitation



Source: Author's own design from the empirical data

The figure gives a synopsis of the qualities of good teacher educators in the perspectives of subjective theories oriented to behaviour by imitation. Being role models in pedagogical practices, conduct in society and ethical behaviour are seen as important qualities of teacher educators worth to be imitated by prospective teachers.

Summary

Concerning the type of subjective theories oriented to behaviour by imitation, the centrality is put on shaping behaviour through imitation. In this regard, exemplarity of teacher's and teacher educator's practice and behaviour both inside the classroom, school and the wider community are seen as keys to quality teaching and teacher education in this type. For example, interviewees believe that student teachers learn to teach by observing and imitating teacher educators' training approaches as well as their lived values and behaviours within and outside teacher training institutions.

5.3.4 Subjective theories oriented to competences by co-construction

The type of subjective theories based on competences by co-construction is characterized by a multidimensional and dynamic understanding of teaching and teacher education. Quality teaching and teacher training are considered a dynamic and reflective process of facilitating competence development by involving student or student teachers in this process. In this type, the emphasis is put on competence as the key to quality teaching and teacher training. Regarding the process, quality teaching and teacher training are viewed as reflective and interactive process. In the perspective of this type, student and student teacher play a central and active role in teaching and training process. Accordingly, a conducive learning climate created by a facilitating teacher or teacher educator is seen as quality of teaching and teacher training in the oriented to the type of subjective theories oriented to competences by co-construction. Facets of the cases: Aigle, Amavubi, Bafana, Banyana, Baréa, Bleu, Bright Star, Crane, Crocodile, Diable Rouge, Dodo, Dragon, Eagle, Elephant, Etalon, Fauve, Fennec, Flame, Harambee, Hirondelle, Kilimanjaro, Léopard, Lion, Mamba, Quina and Scorpio are related to this type. Hereunder, I respectively describe in detail the characteristics of this type using different points of comparison as previously identified (5.2).

5.3.4.1 Purpose of teaching: Competence development by active engagement

The focus of teaching from the perspective of the type of competences by co-construction is to enhance the cognitive competences of students through their active engagement in the teaching process. In this perspective, quality teaching focuses on facilitating students' understanding. Facilitating understanding is reflected in conjunction with the participation of students as expressed by Aigle in his description of her conception of teaching:

"...knowledge of how to deliver the content is concerned with finding out which techniques you can use and help students understand through their involvement

(hum), like the content instead of giving only knowledge without focusing on students' understanding rather it is to teach the content in proper ways and make students like it, and understand it so that they can be able to explain to others..." (Aigle: 90-94).

For Aigle, two interconnected foci of quality teaching are made visible in this citation. First, quality teaching aims at students' cognitive competence: understanding the content. The latter is materialized by, he believes, the fact that students can explain it to others. Second, understanding is only possible if students are actively involved in the teaching and learning process. Henceforth, Aigle criticizes transmission-centred pedagogy as a hindrance to students' competence development.

In a nutshell, interviewed teacher educators indicate that quality teaching aims for competence development among students by actively letting students get actively engaged in the teaching and learning process, which can also be seen in *Diable Rouge*: 132 – 134 and *Kilimanjaro*: 153 – 154. In the following section, I describe the understanding of quality teaching from the perspective of subjective theories oriented to competence by co-construction.

5.3.4.2 Understanding of teaching: A multidimensional and dynamic view

The empirical data of this study shows that the beliefs of interviewed teacher educators about quality teaching in the type of competences by co-construction are multidimensional and dynamic. The empirical material of this study shows four interconnected dimensions of quality teaching in this regard. First, quality teaching is viewed as competence in terms of authentic-situated teaching in conjunction with students' engagement in the construction and application of knowledge in both the teaching process and assessment (see for example *Lion*: 382-382; *Barea*: 486-492). Second, teaching is viewed not as a fixed but rather as a dynamic and reflective undertaking. For example, interviewees believe that there does not exist the "best" method of teaching; it is rather a context-related and reflective choice-making process. They believe that such a process implies interconnecting different aspects including but not limited to students'

prerequisites and curriculum requirements (Bright Star: 386-399; Bleu: 396-402). Third, quality teaching is viewed as an interactive process whereby the teacher plays the role of creating learning opportunities and facilitating the learning process. In this regard, students are considered as active co-constructors of knowledge and collaborators. Hence, it is therefore learning- and learner-centred teaching (Aigle: 136-137; Eagle: 586-588). In the same orientation, finally, interviewees believe that quality teaching is characterised by a conducive learning climate in terms of valuing learning diversity, social warmth as well as physical classroom arrangement to meet the diverse needs of students (see for example Scorpio: 389-397; Dragon: 275-281 and Aigle: 117-118). In the following part, I describe each dimension using both indirect and direct quotations from empirical data.

Competence-oriented understanding of teaching

In the type of competence by co-construction, teaching is believed to be of good quality in three interlinked perspectives: Contextualisation of teaching, construction and application of knowledge. Firstly, interviewees believe that quality teaching is contextualized in the authentically lived experiences of students (Lion: 382-382 & 404-406). They emphasize the fact that contextualisation is a key quality of good teaching. As a matter of exemplification, Kilimanjaro exemplifies it as follows while sharing his beliefs about teaching strategies for understanding:

“...Regarding methods, every lesson especially in a new methodology is to say that children should relate it to real life, children should think on their own, children should do research on their own, this for the purpose of letting a child seeks out knowledge for her/himself, that she/he may discover something and be involved in the same lesson. You see, that is one way to help a student understand that lesson by relating to real life, like what I was saying before that a lesson should not be made a miracle and let them feel that it is something possible, but you should relate it to real life, normally, there is no lesson which cannot be related to daily life, so that the children may think about it...” (Kilimanjaro: 170-179).

In this citation, Kilimanjaro emphasizes that good teaching is realistic. It is progressively made linked to practical life. Students should be given opportunities to relate the content to their lived experiences. Furthermore,

Kilimanjaro believes that contextualization is not a particular issue for some subjects. Rather, it is possible for all lessons. More than that, she views contextualisation of teaching as a *sine qua non* condition for understanding the content. Therefore, it is always worth progressively bringing students to their own lived experiences in relation to the concerned lesson (Barea: 486-492). This implies that interviewees value the contextualisation of teaching from not only their own perspectives but also students' previously and currently lived experiences. This requires, interviewees believe, students' active engagement.

Secondly, she believes that contextualisation of teaching must be related to offering opportunities to get engaged in the construction of knowledge. This is materialised through providing students with opportunities for independent thinking and self-organised learning-oriented research. For Kilimanjaro, the latter aims at facilitating student-centred knowledge-seeking and discovery. This implies competence development on the side of students since they are actively engaged in autonomously organized construction of knowledge at different steps of the teaching process.

Thirdly, the empirical data in this study show that interviewees view quality teaching as competence-centeredness in terms of knowledge-application assessment. They believe that quality teaching is the one whose assessment is an integral part of the teaching and learning process and is oriented to the application of knowledge in the real life of students (Dragon: 305 – 309). In this orientation, theory-based assessment is critiqued to be insufficient since it does not assess students' practical skills. In his description of qualities of good teaching, Crane indicates practice-oriented assessment as an important dimension:

"In the domain of literature, a student can have a practical assessment about poem composition or see if they can act as master of ceremonies for example at weddings or conferences because it requires knowledge of literature; and the teacher can join where they are just to observe how they do it and assess them accordingly. I know that our families use to have ceremonies or neighbours; hence the student can ask to be allowed the performance and invite his/her teacher. If it is not possible for the teacher to be there, they can take a video and send it to them and they can judge his/ her performance through the latter." (Crane: 457-464).

In this example, Crane insists on competence-oriented teaching through practical and life-embedded contexts. He believes that quality teaching is oriented to societally contextualized assessment. In this regard, it should be organized to assess to what extent students are able to apply knowledge in society like socially organized events. In this perspective, the application of knowledge in realistic social life is a tool for competence development among students.

Contextualization of teaching, construction and application of knowledge can be possible in the context whereby flexibility, reflectivity and multiperspectivity are welcome. In the context of the study at hand, the empirical material shows that the interviewed teacher educators conceptualize good teaching as a reflective process.

Reflective understanding of teaching

In the same orientation of the subjective theories by competences by co-construction, quality teaching is understood as a multidimensional-reflective process. The multidimensionality of teaching is conceived in terms of reflective, multifactorial and multi-contextual process as well as deliberative diversification of teaching approaches and methods.

On the one hand, quality teaching is personally understood by interviewees in this study not as a set of predetermined processes and factors in a simply additive perspective. Rather, quality teaching is viewed as a complex and reflective process of the diversity of interwoven variables. The following citation is taken from the interview of Bright Star especially when he was asked to give examples of quality teaching. The excerpt exemplifies the complexity and reflectivity of teaching as follows:

"Hhh, there does not exist one answer to many questions, there are many answers, eee, good teaching is about teaching what is related to the context, in relation to time, this is why I said that there does not exist one answer which may mean that good teaching is $a+b+c$, rather it would say that good teaching is the capability to know the situation in which your students are, and you match it with what it is required, matching with the available materials you have, and then teach your students eee what does this mean? It means that before you teach students, you have to know them. You see, I am going to teach how to prepare a project, what do they think about it? What do they think? What problems do they have? You see, you

can plan to teach them, and you start preparing a project and yet they don't have any idea which project they may plan. You see, what you were doing was good but was not done at the appropriate time, this is the major challenge, I cannot have a precise answer which does not change because it depends on the context." (Bright Star: 386-399).

In the excerpt, Bright Star shows that quality teaching is a dynamic and reflective process and cannot be unilaterally represented. It is not an additive of variables. Rather, it is a context-dependent process. Importantly, the quality teaching is based on the knowledge of students. This is about the identification and consideration of students' prerequisites in terms of prior knowledge and thinking processes about the content. In the context of the multidimensional understanding of teaching, quality teaching is about deliberately relating students' context to other dimensions like allocated time and availability of teaching aids as well as the thoughtful choice of teaching methods (see also Bright Star: 376-382). Concerning teaching methods, interviewed teacher educators believe that it requires a tactful and reflective choice-making process. For example, Bleu believes that there is no one-fit-all method or "best method". For her, the choice of teaching methods is reflective and multifactorial-dependent. As a matter of exemplification, Bleu believes that teacher-centred and learner-centred methods may be reflectively and alternatively used depending on the context of the teaching and learning process (Bleu: 396-402).

On the other hand, in addition to reflecting quality teaching as a matter of reflective choice-making, the empirical data in this study reveals that interviewees believe that quality teaching is about the diversification of teaching methods and learning spaces. The following excerpt indicates this as follows as drawn from her description of characteristics of quality teaching:

"The best way of teaching is to vary methodology; you vary so that students cannot get bored (hum). This one also is an effective way of teaching because if you are in groups, you change, if you are using discussion between students, you change and use discussion as a classroom (hum). And as you are changing, you are relating it to the content, and this will not make students feel bored. This will lead to the interest in the lesson and understanding it very well." (Fennec: 238-243).

In this citation, Fennec conceives good teaching as a matter of reflected and progressive use of a variety of teaching methods for two interconnected reasons: maintaining students' interest and attention as well as the understanding of content. On the one hand, he thinks that using a variety of teaching methods is a matter of avoiding boredom on the side of students. Fennec indicates that discussion in small groups and in plenary can be used alternatively. Moreover, field visits, watching movies, and use of ICT are equal strategies to diversify teaching methods (see Bafana: 383-388). In addition to interest and attention, interviewees see the alternation of teaching methods as a tool for contributing to competence development among students (Flamme: 275-290). Furthermore, the diversity of teaching spaces is seen as an important dimension of quality teaching. For instance, Bright Star believes that quality teaching does not only take place in the classroom. Rather, teaching can take place outside to reflect the day-to-day life of students (Bright Star: 104-108). This implies the dynamism of learning spaces rather than a static understanding of teaching.

The development of students' competences does not only necessitate flexibility and reflectivity regarding the choice of teaching methods. Rather, the empirical material of the study at hand shows that quality teaching is interactive. Learning and learner are the centermost of the teaching process.

Teaching as active and interactive process: Learning and learner-centeredness

In the framework of subjective theories oriented to competences by co-construction, four dimensions are identified as far as quality teaching as an active and interactive process is concerned. They include students' active participation in the teaching and learning process, activating students to get engaged in the construction and co-construction of knowledge, the conception of students as active agents in teaching as well as active and activating methods.

Primo, interviewed teacher educators believe that active participation of students in the teaching and learning process is a sine qua non condition for quality teaching (Aigle: 136-137; Eagle: 586-588). Metaphorically, teaching without involving students is considered as passive fans watching a football match. The latter only cheer and cannot learn to play football

(Mamba: 711-717). Passivity is therefore criticized as a hindrance to quality teaching. The active participation of students is appreciated in the sense that it is oriented to students' learning. Therefore, they should be guaranteed autonomy for learning-oriented research leading to the discovery of new knowledge (Barea: 467-472). This implies that the involvement of students serves as an engine for facilitating learning through independence, on the one side, and cooperation with either teacher or classmates, on the other hand.

Secundo, teaching is of good quality if students are actively involved in the construction and co-construction of knowledge. Interviewees view quality teaching in terms of engaging students in the construction of knowledge by offering opportunities to autonomously reflect and relate the content to their related prior knowledge and experiences. As a matter of example, Etalon expresses this view while describing quality teaching in the classroom context as follows:

"Okey! The best way of teaching is when a student is involved in teaching and the learning process (hum hum), she/he was helped to think (aaah) when she/he was not given what to memorize (hum). Rather, she/he is given opportunities to discover what is related to what she/he already knows (hum) she/he must be given time to think, she/he must be given time to work, she/he must be given time to express what she/he already has (aaah) What are her/his strengths? What are her/his weaknesses? What can she/he do to improve her/his areas of weaknesses?" (Etalon: 202-208).

In the quotation, Etalon indicates three dimensions of quality teaching: Participation, cognitive activation, and self-reflection. First, teaching is of good quality only if students are actively involved in the teaching process. Second, students are cognitively activated for the construction of knowledge. In this regard, Etalon indicates that students should be given opportunities to reflect by relating actual content with their prior knowledge; engagement in learning activities and expressing their prerequisites. Third, he believes that students' self-reflection should be enhanced by pushing them to reflect on their own learning. This implies the enhancement of self-regulated learning since students are activated to reflect their learning potentialities, limitations as well as mitigation

measures. Activation is not only unidirectional whereby the teacher provides activating opportunities for students. Rather, empirical material shows that both, teachers and students, are engaged in the co-construction of knowledge (Banyana: 310-317). The same interviewee makes it clear that teachers and students should be engaged in the process of exchanging ideas about a given topic. In such an exchange, Banyana believes that the teacher does not monopolize the process. Rather, students should have spaces for disagreeing and even questioning the teacher's ideas. This implies that the student is no longer considered a passive recipient of knowledge. She/he is viewed as a collaborator in the process of teaching. In this regard, by involving students in the process of teaching, the teacher equally learns from students (Bleu: 409-410). Teaching is, therefore, a learning adventure where both teacher and students mutually enrich.

Tertio, consideration of teaching as mutual learning journey of both teacher and students requires a particular conception of a student. In this type, interviewees believe that students are not empty. They have prior knowledge and experiences as learning resources for enriching the teaching and learning process. This is what Banyana exemplifies in the following citation when she expresses her views about the participation of students in teaching:

"Normally, involving students in teaching requires a teacher to understand that students are not empty, you must consider them as having some prior knowledge they learn from families, their colleagues who pay them visits or other institutions, they may have gained knowledge from here and there. So, depending on the type of lesson, it is better to know what they already know and once you are aware of what they already know, you add new knowledge to what they know (hum hum)." (Banyana: 302-309).

From the perspective of Banyana, the involvement of students in the teaching and learning process requires certain prerequisites. She shows the necessity of recognition of students' prerequisites likely from non-formal and informal learning opportunities. The teacher should then identify and value such prior knowledge for the benefit of the teaching and learning process. Moreover, students bring accumulated and diverse experiences which should be valued via interactive teaching and learning process (Dodo: 219-228). Therefore, teachers should not minimize the

role of students in the teaching and learning process to passive observers. Rather, a student is considered a collaborator.

Finally, the material data of this study show some strategies that could facilitate active participation and interaction, activation for construction and co-construction of knowledge. They insist on facilitating materials, activating methods and social organization of the classroom. The following excerpt exemplifies this as follows:

"There are many tools which can be used for that end in order to make students participate we may use didactic materials; you may use debates; you can use presentations; you can use group works, in pairs; they may prepare and do a role-play or dialogues reflecting a given topic you can also use case studies drawn from their daily life (hum), this helps students easily understand the content of the lesson and you increase her/his self-confidence that she/he can do something by taking responsibility (hum hum)." (Bleu: 321-328).

In this citation, Bleu indicates three types of tools that are likely to facilitate students' active participation. They include using teaching aids, activating methods and social organisation of the classroom. Bleu believes that active participation depends on the use of teaching didactic aids in the process of teaching and learning. Additionally, activating methods like debate, presentations, role plays, dialogues and life-relevant case studies are important to engineer active participation. Furthermore, students should be given opportunities to collaborate either in pairs or groups. By getting actively involved in the teaching and learning process, they develop competences: cognitive (understanding of the content) and self-confidence via taking responsibilities.

Quality teaching as an active and interactive process concerns the understanding of teaching as a process of active engagement of students in the construction and co-construction of knowledge through interactive-activating methods like debates, dialogues, and case studies. In such mu

Teaching as a conducive learning climate

From the perspective of the conception of quality teaching as competence by co-construction, the interviewed teacher educators believe that a conducive learning climate is important. In this framework, quality teaching

considers learning-oriented feedback, values students' learning heterogeneity, and creates a conducive social climate as well as a physical arrangement.

First, learning-oriented feedback in terms of constructive feedback is viewed as an important dimension of quality teaching in the framework of the type of subjective theories oriented to competences by co-construction. The empirical data of this study shows that feedback is not marks-centred. Instead, students' learning progress as well as areas for improvement are clearly described. After indicating constructive feedback as a quality of good teaching, Scorpio describes her view about how it looks like. The following is an example of a citation in regard to learning-centred feedback:

"Well! This means that you should thank the student for some points among what she/he has done (hum); you should not always tell her/him that she/he is wrong because awarding marks is not enough (eeeh). There is a person who can give feedback in the form of marks; you may know that someone has got 15/20 and another one six, but if you say: "I would like to appreciate how you started in a very good way, you tried to read, you have done some research but you have not indicated the source yet it is not yours, next time you will indicate the source, this is about a research" (hum hum). Constructive feedback is all about showing what is good without showing what is not good only (aaah)." (Scorpio: 389-397).

In the above citation, Scorpio emphasises two aspects of feedback oriented to improve learning. On the one hand, she indicates that negative and solely marks-based feedback should be avoided. Rather, feedback should be given through a descriptive performance of the student as well as the feedforward in terms of areas of further improvement on the other hand. In this perspective, feedback should be clear and specific enough so that students know what they did correctly and what they should improve (see also Scorpio: 252-256). To be able to provide constructive feedback, the empirical material of this study shows that diagnostical analysis is a necessity. Interviewees understand that thoughtfully reflecting on success as well as risk factors for students' success or failure for subsequent action is important for quality teaching (Etalon: 173-176). In this orientation, students should be given feedback depending on their learning progress. Empirical results in this research show that constructive feedback is not

only for low-performing but also for high-performing students (Dodo: 279-283).

Second, interviewees believe that students are heterogeneous in terms of learning paces. And this must be considered in the teaching and learning process. In the following quote, Dragon describes how, in quality teaching, students must be supported according to individual learning needs:

"Normally there are severe cases which can even exceed a teacher's capacity (uhm). But all students do not learn the same way (uhm). There are some who may have problems where the teacher needs to pay more attention to know how better they can learn their lesson just where they have weaknesses in their learning pace (uhm). This is to say that she/he should assess even those who are at a lower level to see if they have learnt something from what she/he taught (uhm) you see." (Dragon: 275-281).

This excerpt illustrates the conception of learning diversity. Therefore, good teaching is one in which a teacher builds on this understanding and provides support to students according to their learning difficulties. This means that students who have learning problems are given special support to reach the expected level of achievement. In the understanding of Dragon, students' difficulties are not only related to disability or impairment like visual, hearing, or deaf-mute. Rather, it can be about heterogeneity in terms of the learning process. Therefore, quality teaching is about providing appropriate support for students according to their learning difficulties like slow learners (see Dragon: 282-295). To successfully help students with the diversity of learning needs, the social climate should be conducive enough to accommodate such learning difficulties.

Third, quality teaching emphasises social and emotional learning climate in which students feel comfortable for learning. This is the case of the following interviewee while sharing his belief about quality teaching:

"For teaching to be good you need to avoid things like acting violently to students like arriving in the classroom by frightening and traumatizing students." (Aigle: 117-118).

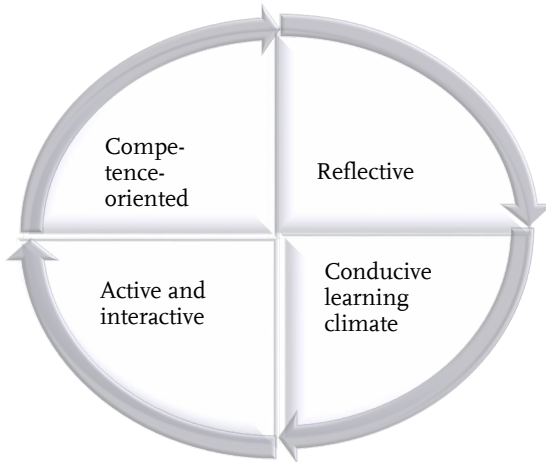
In this citation, Aigle emphasizes the fact that, for good teaching, a teacher must work peacefully with students and avoid a fear-driven cli-

mate. In this orientation, the teacher creates a good classroom environment in which all students, especially those with special problems, feel supported and actively get engaged in the teaching and learning process (Dragon: 265-271).

Fourth, good teaching is characterized by a safe physical classroom environment. The classroom should be set in a way that all students disregarding their particularities feel welcome. For example, it is necessary to reflect if facilities like blackboards are fixed appropriately in the classroom so that it may be accessible to and used by students with disabilities for their learning (Dodo: 148-153). This shows that the concern is about maximizing students' learning, especially those with special needs.

Briefly, quality teaching in the framework of teacher educators' subjective theories oriented to competences by co-construction is multidimensional. It is an interconnection competence development among students through reflective, active, and interactive teaching and learning processes in conducive learning. The conception of quality teaching from the perspectives of the type competences by co-construction is summarized in figure 9:

Figure 5: Quality teaching in the type of competence by co-construction



Source: Author's own design from data

Development of competences via co-construction requires related qualities of a teacher. Therefore, I describe the subjective theories of the interviewed teacher educators about teacher quality in the framework of the type of competencies by co-construction.

5.3.4.3 Qualities of a good teacher: A dynamic teacher

In the orientation of the type of subjective theories oriented to competence by co-construction, a good teacher is seen as a reflective practitioner, lifelong learner, and creator of a conducive learning and working climate. A good teacher is viewed as one who reflectively and responsibly implements the curriculum. In this regard, she/he does not comply with the prescribed curriculum per se. Rather, learners' learning needs are taken into consideration. Additionally, lifelong learning is seen as a necessity with regard to a good teacher. More than that, a good teacher is believed to have close relationships with key collaborators: students, parents, fellow teachers, and school administration. In this orientation, interviewees believe that approachability is a key to supporting students' learning, especially those with ill-social background for their effective learning. In this perspective, a good teacher is not only seen as a collaborator in the learning process but also as a counsellor.

Teacher as a reflective practitioner

In this type, a good teacher is considered as the one who progressively reflects on how to maximise students' learning. The empirical data show that interviewees believe that good teachers autonomously and responsibly implement the prescribed curriculum for learning-oriented benefits. The focus is put more on facilitating students' learning rather than solely implementing the prescribed curriculum. Teachers, therefore, have autonomy and self-initiated responsibility to restructure and add on the officially recommended curriculum to meet students' learning needs. Bleu exemplifies this orientation while describing the qualities of a good teacher from the perspectives of quality teaching:

“Another is that we don't have to be slaves of the curriculum when you are given a curriculum you cannot take it per se and swallow it rather you have to analyze

it according to what you find that students need (hum), if you do not take into consideration of students' needs it is a waste of time; this is what we call to consider interests and needs of students ok they are they are considered in the curriculum but try to use your own intelligence do analysis in order to know what is appropriate what fits with students' needs which can help them in the future (hum)." (Bleu: 441-448).

In this citation, Bleu indicates that good teachers do not consider the prescribed curriculum as a panacea. Rather, she believes that it must be implemented in a reflective way by considering students' needs, especially the long-term benefits of the curriculum to students. In the type at hand, a good teacher asks her/himself different questions to match the prescribed curriculum and students' needs. The following is an example of the citation in which one interviewee shares his beliefs about qualities of a good teacher with regard to the planning of teaching:

"What is the length of the content? What background do students have? At which level are students to understand and apply knowledge? And after she/he try to see how she/he matches the two: What kind of support can she/he provide to my students? What facilities do I give them to facilitate their learning of the proposed content and achieve prescribed objectives?" (Bright Star: 258-266).

In this excerpt, the major foci of questions a good teacher reflectively asks in teaching are threefold. First, a teacher should reflect the size of the content within a given curriculum in relation to the allocated time. Second, it is of great importance to thoughtfully think about students' backgrounds and levels to inspire the teaching process. By combining the size of the content and the student's background and pre-existing skills, a good teacher must reflect, therefore, different supportive strategies to help students achieve intended objectives.

In this type, interviewees believe that the curriculum is not like immutable content. Therefore, it may be transposed and rearranged in terms of the order of the topics and students' learning gap if ever identified, could be integrated (Bright Star: 295-308; 339-344). Moreover, a teacher may even go beyond the curriculum simply for the purpose of meeting students' learning needs (Flame: 254-256). In the same vein of reflection, a good teacher is not only bound to the prescribed curriculum. Rather, she/he must reflect if the curriculum reflects the needs of the society and

then integrate them progressively (Crane: 341-351). Therefore, a quality teacher takes into consideration the dynamicity of the world by innovatively matching it with the curriculum (Crane: 337-340). Therefore, a good teacher is seen as an autonomous and responsible practitioner reflectively implementing the prescribed curriculum by prioritizing students' learning and contextual needs. In his view, the central concern of a good teacher is not about the implementation of the curriculum per se. Rather, transposition and rearrangement of the prescribed curriculum are acceptable for meeting students' learning needs.

A good teacher as a reflective practitioner is not only visible from the perspective of the curriculum. It is likewise reflected in terms of teachers' retrospective reflectivity. Interviewees believe that good teachers retrospectively reflect on delivered lessons to delineate challenges hindering the achievement of expected results and to find mitigation strategies (Harambee: 94-97). Moreover, students' failure is not always pushed on students. Rather, it is seen as a problem on the side of the teacher who equally reflects the enabling factors (Ocean Star: 326-330).

As a reflective practitioner, interviewees believe that the teacher is engaged in the construction, deconstruction, and reconstruction of the prescribed curriculum to meet students' learning needs and related competences. In this orientation, flexibility seems to be a must. Flexibility requires looking beyond existing prescriptions. Henceforward, continuous learning should be a necessity.

Teacher as a lifelong learner

In the framework of the type of competences by co-construction, a good teacher is seen as a lifelong learner. Interviewees believe in the necessity of formal teacher training without ignoring possible inborn qualities of teachers (Dragon: 339-341; Fauve: 278-280). Additionally, the necessity of a continuous process of learning is viewed as an important quality of a good teacher. In these views, interviewees delineate the justifications and strategies for lifelong learning.

The empirical material of this study shows that a good teacher must be kept updated in her/his profession (Leopard: 201-202) for different reasons. Interviewees believe that lifelong learning process means "knowing

is a never-ending process” (Harambee: 169). Consequently, no one should claim to be all-knowing (Lion: 399-400). Additionally, they believe that life-long learning is necessary due to the dynamicity of the development of science both in pedagogy (Leopard: 204 – 205) and subject-related discourses (Quina: 333-340). The process of learning is believed to engineer the quality of the teaching profession. Lion expresses this perspective when underlining the necessity of continuous learning for a good teacher:

“You know, teaching goes hand in hand with learning (hum), it is not good to come to teach if someone is not able to learn (hum), the commitment she/he will invest in increasing her/his knowledge more than what she/he gained from formal school, this is capital for the performance of her/his job (hum hum).” (Lion: 253-257).

Lion makes it clear that teaching and learning are closely related and mutually inclusive. Therefore, investing in learning, especially by improving knowledge acquired in formal education is a central and sine qua non condition for a good teacher to regularly improve the quality of her/his teaching. This is likewise important to avoid monotonous practices in her/his teaching (see also Crocodile: 82-83).

Regarding teachers’ professional learning strategies, interviewees indicate three perspectives. First, they see self-initiated learning by reading different books (Barea: 516-519; Crocodile: 141-145), subject-related scientific publications as well as from media like radios and television (Quina: 340-343) as an important quality of a good teacher. Second, they consider peer learning through collaboration as important for teachers’ professional learning (Lion: 251-252; 399-402; Lion: 401-402). Third, to be and continue being a good teacher, one needs in-service training (Kilimanjaro: 110). In this perspective, interviewees indicate the necessity of non-formal and informal learning as crucial qualities of a good teacher.

In a nutshell, the interviewed teacher educators view learning as a never-ending process especially due to the dynamicity of knowledge in a changing world. Therefore, formal learning via initial teacher training and continuous professional learning through both informal and non-informal are the key for a good teacher.

As a lifelong learner especially learning from peers, a good teacher should have good relationships with co-workers and even students. Therefore, I describe the qualities of a good teacher as a creator of a conducive climate in teaching and working environment from the interviewees' perspectives.

Teacher as a creator of a conducive learning and working climate

In the type of subjective theories oriented to competence by co-construction, interviewees see a good teacher as a creator of a conducive learning and working climate. On the one hand, they believe that she/he must befriend students by being approachable to help them feel comfortable with her/him during the learning process. They likewise consider a good teacher as a good collaborator for her/his colleagues for the purpose of her/his professional development, on the other hand.

As a creator of a conducive learning climate, interviewees believe that a good teacher is one who has positive relationships with students, is an approachable and active listener. Regarding having good relationships with students, Barea expresses it as follows in the context of his description of the qualities of a good teacher:

"A good teacher, a good teacher is one who establishes a very strong relationship with students, what does a strong good relationship mean? It is the one who, when getting in the classroom, does not fear students and they feel comfortable with her/him, they feel comfortable with her/him this is what I want to mean by a strong good relationship with students." (Barea: 382-387).

In this citation, Barea insists on avoiding a fear-driven classroom climate. Rather, a good teacher develops closer relationships with students so that students can feel free to interact with her/ him during the teaching and learning process. Moreover, humour in terms of always laughing with students as a key aspect of a conducive climate (Diable Rouge: 228-235). More than that, she/he is seen as approachable to know students' challenges regarding teaching and learning or out-school context (Banyana: 182 – 187). In this orientation, a good teacher acts as a parent-counsellor by identifying students with psychological, emotional, and behavioural problems, analyse underlying causes and then providing adequate support (Fennec: 431-436; Scorpio: 348-349). Therefore, a good teacher plays

the role of an active listener by being responsible and dedicating time for students to actively listen to their concerns (Fennec: 203-208).

From the perspective of creating a conducive working climate, an effective teacher is characterised by respect for fellow teachers and collaboration with them for her/his professional development. In the context of explaining the necessity of respect for a good teacher, Fauve articulates this perspective as follows:

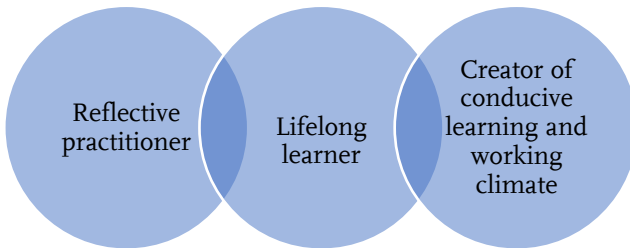
“Thank you, a teacher must respect others, these are her/his workmates, and these are her/his leaders (hum), her/his workmates should be friends at work, friends at work collaborate, they can exchange books, they can exchange ideas, they can teach one another if I don't know something I can ask my colleague who can explain to me, if I am not able to teach something, there is a colleague who can teach it, I can ask permission to observe how she/he teaches, (hum hum) we can exchange the ideas. (hum) If I have a conflict with my colleague, if I don't respect her/him, she/he will not accept to share that knowledge (hum).” (Fauve: 135-142).

From the perspective of Fauve, respect for co-workers- school leaders and colleagues is important for a good teacher. Additionally, she/he must befriend and collaborate with workmates. He believes that collaboration through the exchange of ideas, possibly teaching materials, one-to-one consultation as well as peer teaching and mutual observation are strategies for mutual professional enrichment. For him, bad relationships with peer teachers are a hindrance to teacher's professional development. Lion shares the same beliefs with Fauve by indicating that a good teacher, especially a newly recruited one, must nurture good relationships with coworkers for her/his professional integration in the teaching profession. Therefore, a good teacher must be humble and avoid overconfidence to effectively collaborate with her/his fellow colleagues (Lion: 248-251).

From the above description of a good teacher as a creator of conducive learning and working, she/he is characterized by approachability and positive relationships, collaboration as well as active listening and counseling. To sum up, the results show that the development of competence by co-construction recalls teachers having specific qualities. From the perspective of the interviewees in this study, a good teacher is a reflective

practitioner and lifelong learner who, continuously, is engaged and facilitates the construction, deconstruction, and reconstruction of knowledge. And this is through the reflective implementation of the prescribed curriculum, self-initiated and cooperative professional learning. In this orientation, collaboration with both students and colleagues is a necessity. Consequently, a good teacher is likewise seen as a creator of favourable learning and working climate. The following figure recapitulates the qualities of a good teacher in the framework of subjective theories oriented to competences by co-construction.

Figure 6: Qualities of a good teacher in the type of competence by co-construction



Source: Author's own design from the empirical data

The focus of the study at hand is to explore the subjective theories of teacher educators about quality teaching and related teacher training (chap.1.3). After describing interviewees' subjective theories about quality teaching, the following part is dedicated to their subjective theories about quality teacher training in the framework of the type of subjective theories oriented to competences by co-construction.

5.3.4.4 Aim of teacher professionalisation: Social responsibility and global openness

In the framework of the type of subjective theories oriented to competences by co-construction, interviewees conceptualize the purpose of

teacher training in three interconnected perspectives: responsible citizenship, competence-centeredness and international openness. On the one hand, teacher education is seen as preparation for social responsibility and hence the necessity of competence-based teacher training in terms of collaboration and problem-solving skills. On the other hand, teacher education aims not only to train teachers for national purposes but also it is considered as a tool to prepare student teachers for the international labour market. Therefore, student teachers should be equipped with the required skills like the use of ICT as well as communication skills in foreign languages, especially English.

First, interviewees in this study believe that teacher professionalisation should focus on the social responsibility of prospective teachers. Accordingly, they think that nurturing interpersonal competences is a necessity. The latter is believed to be the pillar for the success of student teachers to play their role in society both as teachers and adults (Bright Star: 228-230). In this orientation, teacher education should aim at equipping student teachers with problem-solving-oriented competences. Here, Etalon exemplifies this as follows in the context of sharing his beliefs about criteria for quality teacher preparation:

“... (hum) this is because a student teacher must use what she/he has learnt in solving his/her problems (aah). Every course should be in this line. If we teach a student teacher, what does a student teacher get from this that should help her/him to solve some problems of today and tomorrow? (hum) This is because she/he is a person who will have to prepare others, this is what she/he will give others (aaaaah). All of them should be in this line, not only should they have knowledge but also use knowledge to solve some problems (hum hum).” (Etalon: 243-250).

In the excerpt, quality teacher professionalization is oriented to competence development among student teachers. In this perspective, Etalon sees competence development in terms of problem-solving as a strategy of preparing student teachers for professional responsibilities. In this regard, teacher training should enhance problem-solving skills to be able to solve current and future problems at individual and professional levels. For Etalon, competence-oriented teacher education focuses not only on acquisition but merely on knowledge application.

Second, interviewees believe that quality teacher training prepares prospective teachers for a more global open market beyond state-oriented perspectives. One of the advanced reasons is that, though trained in Rwanda, student teachers are likely to work outside the national boundaries. As a matter of example, Quina expresses this belief in the following citation as drawn from his description of features of quality teaching in the globalising context:

"Another thing, you cannot say that you will teach Rwandans only, you can think that one may go and teach in America and think of what will happen if she/he reaches there. If an American learner has learnt using the internet, so you will need to be someone who has not studied for marks but for getting knowledge and you will be delivering that knowledge wherever you are going to teach. Therefore, in this world which has become a global village, you must set the priorities to focus on without saying that you have read it only. Without memorizing only instead, you should say that you have skills in this domain. Another thing is the use of technology, especially because teaching by using face-to-face is no longer up to date. So, the use of technology is something that can enable people living in this global village where you can consider the languages in use like international languages without focusing on local languages as they cannot help you very much. So, we should focus on international languages. In past, people used to say that English is something..., but now it is the most used language. In fact, languages, ICT and understanding of knowledge in the different domains is what I think a teacher should have to compete in this global village." (Quina: 253-269).

Believing that the world has become a global village via technology, Quina sees the purpose of teacher professionalization in terms of preparation of student teachers for an internationally oriented market by enhancing three dimensions. First, teacher education should enhance ICT in teacher preparation. It is considered as a tool for internationalizing prospective teachers for the global labour market. Equally, it is an important strategy for preparing student teachers to successfully live in the globalizing and digitalizing world. Furthermore, he views ICT as important for engineering the quality of teaching and learning in a digitalizing context. Therefore, the purpose of teacher education should be to prepare them to fit

into the digital teaching and learning system (see also Lion: 340-348). Second, teacher preparation should be oriented to competence development rather than knowledge transmission. Quina asserts that the knowledge-memorization teacher training system does not fit with the globalizing world and with a high stake in ICT. He insists on a skill-development teacher training approach. Third, quality teacher education should focus on preparing prospective teachers for a globally oriented market and updated teaching via the enhancement of worldwide languages, especially English as an internationally used language.

In short, teacher training in the framework of subjective theories oriented to competences by co-construction aims at competence development for responsible citizenship and preparing prospective teachers for a globalised world. In the subsequent part, I describe how teacher training looks like from the perspectives of teacher educators.

5.3.4.5 Multidimensional teacher professionalization

The interviewed teacher educators in the direction of subjective theories oriented to competences by co-construction see quality teacher training in a multidimensional perspective. Fourfold subjective theories are identified, namely competence-oriented by interactive-stimulating methods, lifelong learning, equity-oriented and climate-oriented teacher training. While the first focuses on a competence-development approach by cognitively oriented participation, the second is about teacher training as preparation for continuous professional development. The third is oriented to equitably support student teachers according to their learning needs and help them overcome challenges likely to prevent them from effective learning to teach. The fourth is about creating and maintaining a conducive social and psychological climate important for their successful teacher training.

Competence-oriented teacher training by interactive-activating methods

In the framework of multidimensional teacher training, quality teacher training is viewed as competence-centred by interactive-stimulating meth-

ods. Interviewees believe that engaging students in cognitively stimulating tasks is key to competence development among student teachers. In this orientation, interviewees indicate different active and activating methods to be used to drive prospective teachers' competences. When describing strategies for quality teacher training, for instance, the following excerpt exemplifies the view of Flame with regard to interactive-activating methods:

"This means that when you are teaching a given topic and you give it to student teachers to discuss; you can directly make it a debate, where they go and conduct their own research, either on the internet or in the library. This can help them discover other new things which can even be new to the teacher educator's knowledge in such a way that she/he can learn from their presentation (hum). So, for me, I see that the best thing for preparing these student teachers so that they can evaluate themselves where they will be, is to know earlier how to develop their competences, not just give them knowledge because those competences are of great importance (hum)." (Flame: 146-154).

Two perspectives come out of the above-stated excerpt: interactive-activating methods as well as related advantages. On the one hand, Flame indicates that student teachers should directly get engaged in interactively and cognitively activating methods like discussion, debate, learning-based research, and presentation. Moreover, self-directed reading, summarizing texts, retelling text-related content either individually or in groups (Fauve: 207-214) or using scenarios (Flame: 156-157), exchanging experiences in groups and later in plenary (Elephant: 159-163) are believed to be central to competence enhancement among student teachers. On the other hand, she reveals learning-oriented advantages for both student teachers and teacher educators. Engaging student teachers in cognitively activating methods like self-oriented research via the internet or library can lead to the exploration and discovery of new insights beneficial for not only themselves but also for teacher educators. Moreover, she insists on the fact that knowledge-centred transmission should be avoided in quality teacher education. Activating methods may require flexibility if student teachers should get engaged in their training. Therefore, it likely requires openness to learning.

Teacher training as preparation for lifelong learning

Following the same orientation of subjective theories, interviewees in the study at hand see the necessity of enhancing lifelong learning as one of the major foci of quality teacher training. The major aspects on which quality teacher education should focus are self-directed professional development as well as training for reading capacity. The Interviewed teacher educators consider quality teacher training as a process of preparing prospective teachers for self-organized professionalization (Crane: 234-235). On the other hand, effective quality teacher training puts emphasis on reading skills as a requirement for the successful condition of the teaching profession (Fauve: 29-297). Reading capacity is seen as a precondition for fulfilling teacher's responsibilities. Therefore, they believe that student teachers must be trained in reading culture.

Interviewees in this study show the understanding of student teachers as heterogeneous in terms of learning as well as social background. Therefore, they believe that student-differentiated needs must be taken into consideration.

Equity-oriented teacher training: Meeting heterogeneous learning needs

In the perspective of subjective theories oriented to competence by co-construction, interviewees believe that student teachers are heterogeneous in terms of learning. Consequently, they see the necessity of regular monitoring of student teachers' learning progress (Crocodile: 110-111) to diagnostically identify learning-differentiated difficulties. Such diagnostic analysis is viewed from two perspectives: learning progress and performance (Crane: 170-172). Therefore, the analysis of interviews shows that learning diversity is differentiated in two dimensions: speed of learning and academic performance. Regarding the speed of learning, they indicate slow and quick student teachers as well as underachievers and outperformers so far as academic performance is concerned. On the one hand, interviewees in this study believe that student teachers have different learning progress. They, therefore, believe that individualized learning support is a necessity for both slow-learning and quick-learning stu-

dent teachers. Hereunder, Flame gives an example of the citation of individualized support as embedded in the context of sharing her beliefs about supporting student teachers:

"Hum the way I mentioned there is to try to help student teachers by progressing on individual rhythm and do not put them all in the same category saying they have understood everything 100% (hum) for you to reach somewhere in your training process, you need to know those who have already understood something and those who did not so that you may find out appropriate support like methods as I told you before, you can give them individual work or group work (hum hum)" (Flame: 91-97).

Flame asserts that quality teacher training values the individualized learning progression of each student teacher. In her view, equalization of learning progress should be avoided in teacher training. Rather, there is a need to recognize student teachers according to their level of understanding process and henceforward look for necessary support mechanisms. In this regard, she proposes to provide remedial tasks individually or collectively as well as extra-learning time (see also Elephant: 485-510). To make it more relevant, a collaborative diagnostic evaluation is seen as important as far as equitable training is concerned. To this end, interviewees believe that teacher educators and student teachers jointly work together to examine risk factors for her/his learning difficulties or academic failure (see also Etalon: 173-176; Lion: 201-207). Lastly, interviewees believe that learning-oriented support is not only for those with learning difficulties and underachievers. Rather, it should be provided even for high-performing student teachers. Outstanding-performing student teachers should be given due support to continue learning with other student teachers (Dodo: 279-283).

In addition to learning-centred support, interviewees understand that there is a need for the social and psychological accompaniment of student teachers with an ill-social background. In this regard, student teachers especially in the post-genocide time in Rwanda should be supported in terms of counselling whenever needed (Lion: 425-432). Lion refers to genocide-related challenges like the post-genocide traumatic situation of student teachers. From this perspective, teacher training should consider the

socio-emotional context of student teachers and provide the necessary support.

In a nutshell, equity-oriented teacher training concerns the belief of teacher educators about meeting heterogeneous learning and social needs. This indicates that student teachers need learning-oriented individualized support in line with different needs.

Individualized learning support for student teachers requires close relationships between teacher educators and student teachers. In this perspective, interviewees see the necessity of a conducive training climate as dimension of quality teacher training.

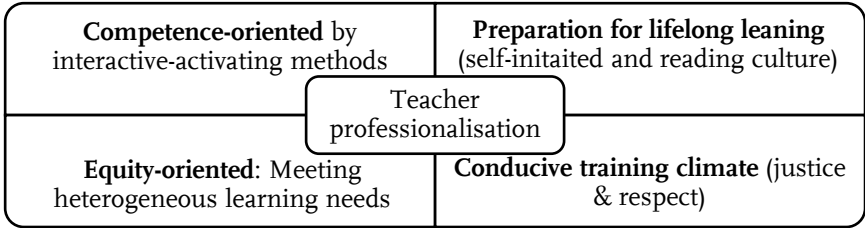
Conducive training climate

To effectively help student teachers in the process of their professionalization, interviewees believe that the context of the training must be conducive. In this regard, they insist on respect, justice, and emotional-sensitive support.

First, interviewees see the necessity of respecting student teachers by namely recognizing them. They assert that it is important for teacher trainers to know the names of student teachers (Hirondelle: 216-219). Second, fair treatment of student teachers is seen as a key to the quality of their professionalization. Impartiality, fairness and respect for others' rights are viewed as the core for better preparation of prospective teachers (Scorpio: 134-137). Impartiality and fairness are mainly reflected in the perspective of justice in terms of avoiding favouritism in the distribution of assessment-oriented results.

To sum up, quality teacher professionalisation in the type of subjective theories oriented to competence by co-construction is multi-dimensional. It is viewed as competence-oriented by interactive-activating methods and lifelong learning-oriented by fostering self-initiated professional development and reading culture. Moreover, it is considered equity-oriented by meeting the heterogeneous learning and social needs of student teachers as well as fostering a conducive training climate with respect and justice. The following figure summarily provides the dimensions of the subjective theories of interviewed teacher educators about teacher training in this type.

Figure 7: Dimensions of teacher training in the type of competences co-construction



Source: Own design from empirical data

In such a multidimensional conceptualisation of teacher education, one would wonder how the qualities of a teacher trainer should look like. In the following part, I describe the beliefs of the interviewees of quality teacher educators in the framework of the type of subjective theories oriented to competences by co-construction.

5.3.4.6 Professionalism of teacher educator

In the framework of the type of subjective theories oriented to competences by co-construction, interviewees believe that teacher educators should have professional qualities to engineer competence development among prospective teachers. Interviewees see a quality teacher educator respectively as a reflective practitioner, lifelong learner, facilitator and being interpersonally skilled.

Teacher educator as a reflective practitioner

As a reflective practitioner, the interviewed teacher educators believe that a professional teacher educator has the following qualities: outcome-based and process-oriented reflection as well as innovativeness.

Firstly, teacher educators in the orientation of competences by co-construction, Interviewees view the quality of teacher education in terms of

prospective teachers' professional outcomes as far as their performance in schools is concerned. They see outcome-based teacher training as a guiding light in their professional reflection on their practice. In this orientation, they believe that good teacher educators continuously reflect the long-term effects of their practice as teachers of teachers. They believe that quality teacher educators are not short-sighted. Rather, they are farsighted as far as the implications of their work to the school system are concerned. This is exemplified in the following quotation as drawn for Barea's description of what it means to be a teacher of teachers:

"Being a teacher of teachers requires you see what it means is that you have to reflect the end of teaching teachers eeeeehhhh its outcome what it will bring in the end. I am a teacher educator, and I am teaching those who will become teachers. Therefore, you reflect on who will be taught by the one you taught, and you see if I show her/him the wrong way, the consequences will be double." (Barea: 66-70).

In this excerpt, Barea insists on the fact that teacher educators should always bear in mind the positive or negative consequences of their work of training teachers. The impact of prospective teachers on students matters more. Similarly, the expected professional competences of prospective teachers serve as a signpost for teacher educators as far as a reflection on quality teacher professionalization is concerned (Bleu: 220-226; Barea: 357-373). In this perspective, visionary teacher educators are guided by consciousness about the consequences on the education system. Therefore, there is a necessity to continuously reflect on strategies to better support prospective teachers to successfully engineer quality teaching during their professional career (see also Dodo: 26-28).

Secondly, interviewees believe that a process-reflective teacher educator is engaged in continuous reflection concerning strategies for facilitating prospective teachers' learning. They assert the principle of no-one-fit-all by showing that there are no one-fit-all methods of teacher training. Rather, they should be reflectively adopted in line with student teachers' learning needs. Therefore, they believe that a good teacher of teachers always seeks learning improvement instead of maintaining static recipes (Bright Star: 428-434; Mamba: 254-257).

Finally, a good teacher educator is viewed as innovative. Having the orientation of facilitating student teachers' learning, a good teacher educator is solution-oriented. She/he should always identify challenges likely to prevent student teachers from effective learning and find adequate solutions. The empirical material shows that a good teacher educator may decide to invent new teaching materials in case of need (Diable Rouge: 241-255). This entails responsibility in terms of autonomously reflect how to facilitate student teachers' learning.

As a reflective practitioner, openness to new learning is important. In this regard, interviewees believe that a good teacher educator is a lifelong learner, too.

Teacher educator as a lifelong learner

Interviewees view lifelong learning as a cornerstone quality of a good teacher educator to engineer quality teacher professionalisation. They view quality teacher educators in terms of openness to new experiences and capability to cope with a dynamic changing world. Therefore, interviewees in this type of competence by co-construction highly value lifelong learning. Empirical results show that interviewed teacher educators indicate the necessity and approaches of lifelong learning.

The analysis of the empirical material of the study at hand shows that effective teacher educators are aware of the dynamicity of knowledge in the changing context. Henceforth, they need to continuously update themselves accordingly. In this orientation, they do not pretend to be all knowing. Rather, they value openness to learning new knowledge (Barea: 207-208). Furthermore, interviewees see the necessity of lifelong learning to successfully face the diversity of dynamic contextual changes for the purpose of enhancing qualitative training for prospective teachers. Quina gives an example of this belief in the context of his conception of quality teacher training in the globalizing world:

"She/he must be up to date (hum hum) she/he must also know how to deal with different situations and know what is needed. For instance, if very soon they say that there is a new language to use all over the world, you cannot say that you will remain alone without using it, so, preparing a good teacher requires to always

updating your knowledge in such a way that your knowledge can't be static but dynamic (eeeh!).”(Quina: 282-287).

In this citation, Quina indicates three reasons justifying the necessity of lifelong learning as a key quality of teacher educators. First, lifelong learning is seen as important to reflectively coping with changing professional contextual demands in a teaching career. Second, teacher educators need lifelong learning skills to adapt to changing world as well as the education system. Third, for quality teacher training, a teacher of teachers is characterised by always avoiding the maintenance of a knowledge-based status quo. Rather, she/he must be animated by a dynamic culture of knowledge-seeking (Aigle: 221-225).

Moreover, the empirical results of this study show, from the perspective of qualities of good teacher educators, three intermingled approaches through which lifelong learning takes place. They include peer learning, self-reflection and opportunity-based learning. Firstly, though it is not precisely how; acceptance to learn from peers is a key quality of teacher trainers. This is accompanied by openness and readiness to change. Next, continuous self-reflection in terms of always reflecting on one's strengths and weaknesses is important for lifelong learning as a key quality of a teacher trainer (see Amavubi: 334-338). Lastly, interviewees see the necessity of the teacher educator to be open to the diversity of informal learning opportunities at the workplace and in the wider community. In the context of workplace-based learning, for instance, Bright Star views the teacher training process as a professional learning process. It is viewed as a learning adventure in terms of openness to new perspectives (see also Bright Star: 414-417).

Briefly, interviewees' beliefs of teacher educators as lifelong learning are based on the dynamicity of the world, the knowledge and education. Therefore, they see the necessity of lifelong learning especially in informal learning spaces.

Teacher educator as a facilitator

In the type of competences by co-construction, interviewees' subjective theories about good teacher educators are embedded in and oriented to trainee-centred teacher training. In orientation, teacher educators play the

role of facilitator in terms of task setters, supervisors and guides. They believe that good teacher trainers set tasks for student teachers, supervise the process of doing tasks and offer needed guiding support whenever needed (Hirondelle: 130-142; Banyana: 148 149). Therefore, they believe that good teacher educators dedicate more time to student teachers during the training process (Lion: 303-309; Dodo: 265-269). While describing the particularities of teacher educators, Banyana indicates that supporting student teachers to learning in terms of facilitating their learning. In this regard, she expresses this as follows:

"Another difference is that educator of educators is that I might have said it before when you teach the big role has to be played by student teachers, they have to be active enough and teacher educator has to play the role of supporter to student teachers, she/he does not have to work alone without let student teachers get involved during the whole lesson this is another difference." (Banyana: 142-146).

In this quotation, Banyana shows that being trainee-oriented teacher educators makes a difference as far as the qualities of teacher educators are concerned. In this regard, she emphasizes the fact that student teachers are more active than their teacher educators serving as facilitators. Facilitation and guidance may be offered in terms of continuous provision of feedback as well as other resources necessary for the completion of a given task (Flame: 156-162). To effectively facilitate the training process, interviewees believe that teacher educators should be active listeners. In this orientation, they must be open to student teachers' experiences and reflections (Bright Star: 110-111) for better monitoring of their learning progress. Student teachers are likewise seen as collaborators (Amavubi: 195-199). In this orientation, interviewees acknowledge and value the prerequisites and experiences of student teachers. Therefore, the latter are active contributors to the teacher training process. A teacher educator as a facilitator likely needs social competences. In this orientation, interviewees believe that a quality teacher educator is interpersonally skilled, too.

Teacher educator: interpersonally skilled

The empirical material of this study indicates that interpersonally skilled teacher educators are important for driving quality teacher professionalization. There are two perspectives characterizing interpersonal teacher

educators: positive social relationships with students and collaboration with other education stakeholders.

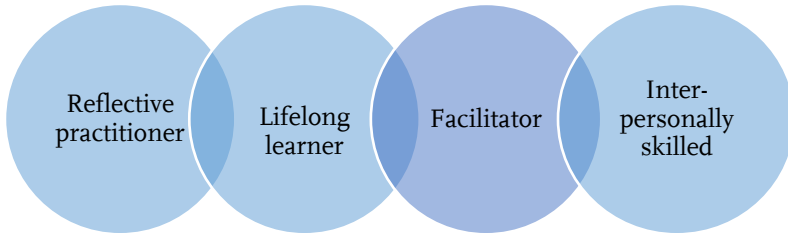
On the one hand, quality teacher professionalization in the perspective of competence by construction, the training context should be characterized by positive social relations with student teachers. The following part of Aigle's interview especially related to the qualities of professional teacher educators exemplifies it as follows:

"Another thing is to be friendly to your student teachers they become your friends and you trust one another, and they feel free and comfortable with you." (Aigle: 66-67).

From the perspective of Aigle, friendliness with student teachers and mutual trust is key to make a quality teacher training process. In this context, student teachers feel that they have the freedom to unfearfully approach teacher educators for better learning. Accordingly, a professional teacher educator nurtures close relationships with education stakeholders like fellow teacher educators, school leadership as well as parents (Aigle: 67-69). The latter sees the necessity of synergic partnership with key stakeholders in teacher education.

In brief, empirical material in this study reveals four characteristics of a professional teacher educator in the framework of the subjective theories oriented to competences by co-construction. A professional teacher educator is believed to be reflective a practitioner, a lifelong professional learner, a facilitator and interpersonally skilful. Interviewees believe a good teacher educator innovatively reflects and continuously search for strategies to train expected professional quality teacher by endlessly adapting to the contextuality of the changing world through learning with student teachers and peers in a conducive training climate.

Figure 8: Qualities of professional teacher educator in the type of competences by co-construction



Source: Author's own design from the data

Summary

To sum up, the type of subjective theories oriented to competences by co-construction is characterized by the emphasis on competence-oriented teaching and teacher education by dynamic processes in a conducive and collaborative climate. In this regard, dynamic processes imply active, interactive, activating and reflective approaches and methods aiming at competence development via engagement, construction and co-construction of knowledge through contextualized teaching and teacher training.

5.3.5 Cross-cutting criterion: Theoretical and practical teacher training

The empirical material of this study shows that interviewees indicate their beliefs about theoretical and practical teacher training. Concerning the positionality of the subjective theories about theory and practice in teacher education, they cannot be singularly aligned to one of the generated types. Rather, by expressing their beliefs especially the orchestration of theory and practice, the interviewed teacher educators refer to different types. For instance, interviewees believe in the transmission of theoretical pedagogical and subject knowledge (Type: knowledge by transmission) (Crane: 265-274; Etalon: 51; Mena: 76-84) and equally in self-, diagnostical, outcome-oriented assessment (likely to align with type 4: competences by co-construction) before practical teacher training (see Crane: 274-284). More-

over, for example, learning to teach by observation is considered as important as far as practical teacher training is concerned (Etalon: 51-53) (likely to be related to type 3: behaviour by imitation). More than that, the belief about sequencing theory and practice seems to be understood in an unalterable and linear process of transmission of knowledge for practice (refer to type 1: formalities by compliance). This justifies the cross-criterial dimension of this horizon of the theoretical and practical teacher training.

In their perspectives, interviewees insist on the necessity of both theoretical and practical teacher training as well as their related sequencing process. Concerning the requisite of theoretical and practical teacher training, interviewees show two perspectives. On the one side, theoretical knowledge especially general pedagogical knowledge for instance pedagogical principles like learner-centeredness and inclusiveness should be transmitted to prospective teachers (Mena: 76-86). In her views, mastery of theoretical pedagogical knowledge is the foundation of quality teacher training. For example, she indicates that it is inappropriate to offer practical training like microteaching without theoretical pedagogical knowledge. Practical teacher training is viewed as the best strategy for teacher training. In this regard, practical teacher training especially teaching practices do not only improve student teachers' practical skills but also pedagogical knowledge (Dragon: 345-352). Therefore, it is believed that there is a necessity of providing prospective teachers, without forgetting theory-based training, with enough time for practical teacher training (Léopard: 285-291).

Concerning the orchestration of theoretical and practical teacher training, the empirical data of this study shows a linear process of theory and then practice in two perspectives. They include theory-observation-practice and subject knowledge-didactics-practice. On the one side, interviewees believe that quality teacher training starts by transmission of theoretical pedagogical and didactical knowledge and then after offering practical training opportunities. While Etalon describes properties of quality teacher training, he exemplifies linearity in teacher training as follows:

"You should have firstly taught her/him theories of teaching but there is time for practice, to see how professional teachers are doing (hum). She/he should get what she/he has learnt and relate it to what she/he observed and then go to the internship but after observing how they are teaching (hum) So, she/he should be

familiar with the environment and avoid it to be new for him/her (eeh!). She should have many opportunities of practice, she/he should have field visits, she/he should have a conversation with his/her teacher on the field." (Etalon: 50-57).

Closer look at the afore-presented citation shows threefold aspects of the linearity of theoretical and practical teacher training: (1) theory, (2) observation and (3) practice. First and foremost, Etalon believes in the fundamentality of provision of theories of teaching before school observation and teaching practice¹⁶ and internship (see also Aigle: 15-20). Moreover, Etalon views practical opportunities as teacher professionalization in terms of familiarity with the contextuality of teaching profession.

On the other side, subject knowledge-didactics-practice process is seen as important as far as quality teacher training is concerned. In this regard, subject knowledge-related didactics followed by practice process is seen as the best strategy for enhancing the quality of teacher training. Crane exemplifies the aforementioned orientation in the context of expressing his subjective theories about quality teacher training:

"Ahhh, I think that aaa, after to... the teacher eee, after teaching her/ him how to teach that content, I think that before doing final evaluation, I understand that it is better if she/he should teach the content first, for example when I teach her /him a balanced diet, its components as well as how she/he should teach to others, automatically she/he has to teach it, I should consider that the lesson is finished when they finish teaching it, you see it should not end there, this is how I understand it today, but this may be another philosophy I have on my own which may be different from the one in place, the context in which I work, But for me, I understand it like that, even people may have other perspectives." (Crane: 265-274).

In this citation, Crane shows the process of teacher training as alternation of theoretical and practical training. First, he insists on the fact that quality teacher training starts with transmission of subject knowledge on a specific topic. Afterwards, subject related didactics follows. Lastly and directly

¹⁶ This concerns the preparation of lessons and teaching at demonstration schools during the course of training before extended period of internship in schools.

after provision of subject knowledge and related didactics student teachers are given opportunities to teach the same content at a demonstration school. Alternatively, prospective teachers can be given practical opportunities via microteaching¹⁷ in their respective classrooms (Crane: 289-299). In this orientation, Crane believes that outcome-based assessment should be applied. Teacher training is seen as of good quality only if prospective teachers are assessed based on teaching capability. In his views, alternation of theoretical and practical training serves for three purposes. First, student teachers are prepared to serve in schools. Therefore, direct teaching practice after content and didactics is an important tool for quality teacher training. This is justified by the fact that student teachers are progressively assessed regarding the extent to which they are progressing towards becoming good teachers. Second, it serves as diagnostic tool as far as quality teacher training is concerned. By alternation, Crane believes that it is easier to identify the gaps to be addressed as far as teacher training is concerned. Third, alternation is seen as self-assessment tool for teacher educators. Crane believes that alternation offers opportunities for self-assessment on the side of teacher educators concerning their performance as far as teacher training is concerned (Crane: 274-284). This means that teacher training seems to be of good quality only if prospective teachers are progressively given opportunities to directly practice what they learn.

In summary, the empirical material of this study shows that interviewed teacher educators consider theoretical and practical sides of teacher training as of great necessity. Moreover, they have unidirectional processes with two perspectives of sequencing theory and practice as far as quality teacher education is concerned. They are pedagogical theories-observation-practice and subject knowledge-didactics-practice. The results show that criterion crosscuts generated types of subjective theories. First, the unalterability and linearity of sequencing theory and practice: theory-observation-practice and content-didactics-practice are more related to type 1 focusing on formalities by compliance. Second, the interviewed teacher educators believe in the transmission of theoretical pedagogical,

¹⁷ Preparation and teaching a lesson to fellow student teachers as practical teacher training practice

didactical and subject knowledge (type: knowledge by transmission). Third, learning to teach by imitation is considered as important (type 3: behaviour by imitation). Finally, the importance of self-, diagnostical/formative, outcome-oriented assessment (type 4: Competences by co-construction) before practical teacher training is valued.

5.4 Typology-centred descriptive summary of results

The study at hand aims at exploring subjective theories held by teacher educators about quality teaching in the context of their profession. As detailed in chapter 5.2, seven criteria as horizons of comparisons were identified from the empirical material. Criteria are purpose (1) understanding of teaching (2), teacher quality (3), purpose (4), understanding (5) of teacher training, quality teacher educator (6) and cross-cutting criterion of theoretical and practical teacher training (7). Using identified criteria, four types of subjective theories about quality teaching in the framework of interviewed teacher educators' professional context were generated (chap 5.3). They include subjective theories focusing on (1) formalities by compliance, (2) knowledge by transmission, (3) behaviour by imitation and (4) competences by co-construction. In the following lines, the four generated types are synopsized using different comparative horizons (criteria).

It is worth noting that the empirical results revealed a cross-type criterion: theoretical and practical teacher training. Its cross-typicality relies on the fact that the interviewees believe that it cannot be singularly aligned with one or the other among the generated types. Rather, by expressing their beliefs especially the orchestration of theory and practice, they refer to different types (see 5.3.5).

Subjective theories focusing on formalities by compliance

In this type, teacher educators hold subjective theories about quality teaching and teaching teachers as compliance with pre-established administrative, pedagogical, and normative standards. Interviewees, in this type, believe that the purpose of teaching is about strictly complying with the curriculum- and process-oriented teaching standards like strict observance of immutable lesson steps. Quality teaching is understood as preparation-based as well as process-oriented pedagogical, didactical, and behavioural-

normative formalities. It is about conformity to administrative-pedagogical and teaching-related formalities like preparation, regularity-based holding of pedagogical documents, and scrupulous compliance to predetermined teaching process. Moreover, the study at hand revealed a diversity of characteristic qualities of a good teacher. Primo, interviewees consider quality teacher in terms of obedience to administrative, pedagogical and normative formalities. In this framework, threefold qualities of a good teacher are made visible: (1) Compliance with administrative hierarchies and professional responsibilities in terms of existing school rules and regulations, administrative obligations and compliance to nationally prescribed standards. (2) Conformity to pedagogical formalities in terms of conformity-based pedagogical planning and teaching processes. In this orientation, the empirical data show quality teacher as regularly holding officially administrative pedagogical documentation for planning and teaching, compliance to process-oriented pedagogical recipes, compliance-oriented assessment, and discipline maintenance. (3) Adherence to normative standards in terms of reliance on normatively defined behaviour. In this orientation, divinity-reliance (God-driven), normative-cloth-ing observance, and socially acceptable conduct are considered as important qualities of a good teacher. The purpose of teacher training is conceived as political and pedagogical instrumentalization. What is more, interviewees consider the purpose of teacher training as conditioning prospective teachers to unilaterally comply with predetermined political, pedagogical and behavioural formalities like pedagogically administrative preparation of teaching by completing pedagogical documents. Teacher education is understood as a process of conditioning prospective teachers to behavioural teacher-related codes of conduct as well as pedagogical unalterable recipes. Furthermore, interviewees believe that teacher training focuses on strictly following pedagogically prescribed canons. Accordingly, interviewees believe that student teachers are instructed about unacceptable or acceptable behaviour in line with nationally, explicitly, or implicitly, defined values. Finally, the teacher educator is considered as the one being driven by socially implicit defined values and standards like cleanness, organisation, discipline, and respect of time in the perspective of type one oriented to formalities by compliance.

Subjective theories oriented to knowledge by transmission

This type concerns the unidirectional transmission of immutable theoretical and teacher's experiential knowledge. Concerning the purpose of teaching, it is about the unreflective and unidirectional transmission of prescribed knowledge to students. Regarding, quality teaching, knowledge- and teacher-centeredness as well as output-oriented assessment are seen as important. Quality teaching, therefore, is seen as pure transmission of prescribed knowledge within a nationally accredited curriculum, teacher's experiential knowledge as well as knowledge-centred assessment. A quality teacher is related to (1) mastery of knowledge (subjects, subject didactics and pedagogical), (2) knowledge-related transmission capacity as well as (3) additive knowledge-centred professional development. In the same orientation, teacher professionalization is understood as the transmission of subjects, didactical and pedagogical knowledge. Accordingly, teacher training is conceived in a didactic understanding: a pure transmission of knowledge as well as teacher educators-centred demonstration. This concerns the delivery of subjects, didactical and pedagogical knowledge in the framework of a nationally defined curriculum. Moreover, the demonstration is seen as important in this type. Finally, a professional teacher educator is considered as knowledge expert especially mastery of multidisciplinary knowledge as central to quality teacher training. Additionally, knowledge transmission-based capability is seen as important to provide accurate answers to student teachers' knowledge-based questions.

Subjective theories oriented to behaviour by imitation

The type at hand is related to the conception that quality teaching as well as quality teacher education are about shaping social and professional behaviour through imitation. Interviewees believe that quality teaching is behaviour-centred word-action consistency with assumptions that students implicitly learn to behave accordingly. Three interconnected qualities of a good teacher are identified. They include (1) walk-the-talk principle: practices what she/he preaches as far behaviour; (2) normative-social role model: social role model both inside the school context and in the


wide community and (3) imitation-based professional learner: self-professionalisation. In this type, interviewees believe that teacher training aims at shaping prospective teachers' professional behaviour by an imitation-based approach. Accordingly, interviewees believe that student teachers learn to teach by implicitly and informally observing and imitating teacher educators' behaviour and professional practice. Regarding quality teacher training, threefold interconnected characteristics are made visible from the empirical materials of this study: teaching to teach by imitation, serving as role models in practice, and preached-practice consistency. Therefore, interviewed teacher educators believe that quality teacher training is primarily characterised by implicitly modelling professional practice and behavioural qualities of the teacher educators. In this orientation, the teacher educator is seen as a role model. Implicit role modelling is considered a teacher training strategy whereby interviewees believe that prospective teachers learn teachers' professional behaviour especially personal and social skills as well as to be role models for their future students by imitation. In this orientation, interviewees express threefold perspectives through which implicit role modelling is a necessity: (1) pedagogical practice, (2) social life and (3) behaviour, both inside the training institution and the wider community, especially complying with professional and ethically defined (formally or informally) code of conduct for teachers.

Subjective theories oriented to competences by co-construction

In this type, interviewees hold subjective theories oriented to competence development by reflective, interactive, and dynamic approaches. In this regard, the purpose of teaching is seen as the development of competences through active engagement of students via collaborating with their peers. Quality teaching is considered as a multidimensional concept with four interconnected perspectives: (1) authentic-situated teaching in conjunction with students' engagement in the construction and application of knowledge in both teaching process and assessment; (2) dynamic and reflective undertaking for example reflective choice-making about teaching methods; (3) interactive learning process with and between students and teachers and (4) a conducive learning climate in terms of valuing learning and learners' diversity, social warmth as well as physical class-

room arrangement to meet the diverse needs of students. Regarding quality teacher, three qualities are made visible from the empirical material: (1) reflective practitioner: reflectivity and responsibility to implement the curriculum considering for example learners' learning needs; (2) lifelong learner: self-initiated and cooperative professional learning, and (3) creator of conducive learning and working climate. The latter concerns nurturing close relationships with key collaborators: students, parents, fellow teachers, and school administration: She/he is not only considered as a collaborator but also a counsellor. Concerning the purpose of teacher training, the focus is put on social responsibility through competence development and openness to global labour. Accordingly, teacher training aims at competence development (of collaboration and problem-solving skills) for social responsibility and preparing prospective teachers for global competitiveness using ICT as well as fostering English communication skills. Quality teacher training is conceived as multi-dimensional. In this regard, fourfold subjective theories: (1) competence-development approach by interactive-activating methods; (2) lifelong learning: by fostering self-initiated professional development and reading culture; (3) equity-oriented: meeting heterogeneous learning and social needs of student teachers as well as (4) climate-oriented teacher training: fostering conducive training climate by respect and justice in terms of fair assessment for example. Finally, the study reveals fourfold interconnected qualities of a good teacher educator in this type. They include (1) reflective practitioner, (2) lifelong learner, (3) facilitator and (4) those who are interpersonally skilled. Therefore, interviewees believe that a good teacher educator innovatively reflects and continuously search for strategies to train expected professional quality teacher by endlessly adapting to the contextuality of the changing world through self-initiated professionalisation and learning with student teachers and peers in a conducive training climate.

Table 5: Descriptive summary of empirical results

 <i>Types</i> <i>Criteria</i>	Formalities by compliance	Knowledge by transmission	Behaviour by imitation	Competences by co-construction
Purpose of teaching	Compliance with prescribed standards	Transmission of prescribed knowledge	-	Cognitive competences by active engagement
Understanding of teaching	Formality-conformational teaching (following recipes)	Knowledge-based by teacher-centred and output-oriented assessment	Implicit teaching by example, action-behaviour consistency	Multidimensional: competence-oriented, reflective, active & interactive and conducive climate
Teacher quality	Obedient to pedagogical and ethical formalities, teaching as innate	Knowledge expert, transmission capability Knowledge-centred professional development	Role model (inside the classroom, school & society) walk-the-talk professional, imitation-based professional learner	Reflective practitioner, lifelong learner, facilitator, creator of a conducive learning and working climate
Purpose of teacher training	Standards-based teacher training	Triple: knowledge-oriented: subject, pedagogical and knowledge of values	Shaping prospective teacher professional behaviour by implicit role modelling (exemplar practice & behaviour)	Competence-oriented, citizenship and global openness
Understanding of teacher professionalization	Conditioning for compliance to pedagogical and normative formalities	Transmission of subject & pedagogical knowledge, demonstration	Training by exemplary practice & behavior	Competence-oriented by interactive-activating methods, preparation for lifelong learning, equity-oriented: meeting heterogeneous learning needs
Professionalism of teacher educator	Loyalty to administrative, pedagogical, and normative standards	Knowledge master, transmission-centered capacity, multifold knowledge expert	Practice- and behaviour-oriented role model: pedagogical, social as well as behavioural normativity	Reflective practitioner, lifelong learner, facilitator, interpersonally skilled
Theoretical & practical teacher training: Theory for practice (subjects, pedagogical and didactical knowledge followed by practice)				

Source: Empirical data

6 Theoretical Contextualisation of Subjective Theories: Overview and Discussion

Due to the paucity of empirical studies on teacher educators in general and particularly their subjective theories about quality teaching (see chap. 1 & 2), the study at hand aims at exploring subjective theories of teacher educators about quality teaching in the context of their profession in Rwanda. The results of the study contribute to the discourse by generating the typology of subjective theories of teacher educators (see chap. 5). To better reflect such a contribution, this chapter is dedicated to the theoretical contextualisation of the empirical results of this study. Accordingly, results are discussed in linkage to previous theoretical discourse (see e.g., chapter three). To this end, an overview of the empirical results (6.1) is synopsized first, and the discussion follows as a matter of theoretical interpretation of the empirical results (6.2).

6.1 Summary of empirical findings

As indicated earlier (chapters 1, 2, 3), this study was undertaken to explore subjective theories of teacher educators about quality teaching in the context of their profession in Rwanda. The study sought to answer the general research question: What are teacher educators' subjective theories about quality teaching in the context of their profession? Sub-questions are: (1) what are teacher educators' subjective theories about quality teaching? and (2) what are teacher educators' subjective theories about how to train teachers for quality teaching? A qualitative approach using semi-structured interviews to collect data from 32 teacher educators theoretically sampled was adopted to explore teacher educators' subjective theories in the context of Rwanda (see 4.1, 4.2, 4.3). Collected data were analysed via content analysis through an iterative process of deductive-inductive and generalisation of results into a typology through an abductive process (see. 4.4). Through the lenses of seven identified comparative horizons (criteria) namely purpose of teaching, understating of teaching, teacher quality, the aim of teacher training, understanding teacher professionalisation and professionalism of teacher educator (5.2); four types of subjective theories were generated: (1) formalities by compliance, (2) knowledge by

transmission, (3) behaviour by imitation and (4) competences by co-construction (see 5.3.1-5.3.4). Before the empirical results of the study are theoretically contextualised and discussed, a synopsis of the results is given in three distinct but interconnected perspectives following the study research questions. This includes (1) subjective theories about quality teaching (6.1.1); (2) subjective theories about quality teacher professionalisation for quality teaching 6.1.2) and finally (3) the summary of subjective theories of teacher educators in the context of their profession (6.1.3).

6.1.1 Teacher educators' subjective theories about quality teaching

The results of the study as described in chapter five show differentiated subjective theories held by the interviewed teacher educators about quality teaching. They include, for example, quality teaching as additive knowledge versus competence development, a static versus a dynamic process, teacher's learning, passive observer or active player: Students as recipients or partners in teaching, teacher for quality teaching: dealing with relationships in teaching and administrative understanding of quality teaching.

Quality teaching as additive knowledge versus competence development

The results of the study at hand show that quality teaching, from interviewed teacher educators, is either about the additivity of knowledge or competence development. Knowledge is seen as central to quality teaching from different perspectives. On the one hand, they see knowledge (theoretical and experiential) as important in an unalterable perspective. Therefore, they believe that knowledge must be transmitted to students for memorisation. In this angle, mastery of knowledge and the teacher's transmission-based capability are seen as indicators of quality teaching (5.3.2). On the other hand, they see competence development as core to quality teaching. In this framework, interviewees believe in the dynamicity, malleability, contextuality and flexibility of knowledge. Therefore, they believe that quality teaching is about understanding, contextualisation and application of knowledge in students' authentic life (see 5.3.4).

Quality teaching as a static versus a dynamic process

The study results reveal two perspectives of teacher educators' subjective theories concerning the teaching process. It is seen as a static versus dynamic process. On the one side, it is considered as a passive-compliance, -assimilative, and -imitative process with monopolized roles and unilateral relationships between teachers and students. On the other side, quality teaching is seen as reflective, self-reflective, and interactive interreflection with shared responsibilities for both teacher and students. Therefore, teacher-teacher, teacher-student-teacher and student-student relationships and collaboration are considered as important in quality teaching.

The passive nature of quality teaching as expressed by interviewed teacher educators is characterised by compliance to administrative and pedagogical immutable formalities (see type 1), unreflective transmission of theoretical and teacher's experiential knowledge (type two) as well as implicit imitation (type three). In the three types, passivity is observed in the sense of unquestionability of formalities, unalterability of knowledge as well as the fixity and asymmetricity of behaviour to be imitated. Consequently, the monopolisation of roles, as well as asymmetric relationships, are quite visible in this perspective. Due to the reliance on formalities and mono-epistemic belief of knowledge as well as the so-believed expert and model nature of the teacher, the role of the latter is for reinforcing compliance to formalities, the transmission of pre-determined knowledge and maintenance of her/his imitability. Accordingly, students passively follow a pre-established standardized process, memorise knowledge and unquestionably imitate the teacher. Therefore, the results reveal two levels of relationships: (1) an asymmetric teacher-student relationship; (2); a hegemonic relationship to formalities and knowledge.

Concerning the dynamicity of quality teaching from the perspective of the interviewed teacher educators, it is characterised by reflective practice, self-reflectivity for both student and teacher as well as active and interactive process in a symmetric shared responsibility (see type 4). First, quality teaching is considered as a reflective process in the sense of the teacher's autonomy and responsibility to implement the official curriculum. For example, interviewees believe that reflective multidimensional

and multifactorial choice-making are important concerning quality teaching. For instance, reflecting on the choice of teaching methods, contextualisation of the curriculum to students' prerequisites, and valuing the diversity of learning spaces and learning needs are seen as of great necessity. Second, the interviewed teacher educators believe that quality teaching is a process of self-reflectivity whereby in the sense of teachers reflect on their own teaching and students reflect on their own learning. Third, interviewees see the dynamicity of teaching in terms of activating-participative and interactive methods. For example, they believe that teachers and students are engaged in the co-construction of knowledge by sharing experiences whereby students have the autonomy to even critique the teacher's ideas. This is based on the belief that quality teaching is a mutually interactive journey of teacher and students. Therefore, interactivity is seen as important not only between teacher and students but also among students through different activating-interactive methods like debate, role plays and dialogues to name a few. In this perspective, quality teaching is considered as a shared responsibility in a symmetric relationship with mutual respect between stakeholders i.e., teacher-teacher, student-teacher and student-student. Therefore, the focus of quality teaching is put on learning and learners' needs.

Quality teaching as a teacher's learning process

The findings of this study reveal that teacher's continuous professional learning is a necessity for enhancing quality teaching. The study shows three perspectives of teacher's learning: additive knowledge, imitation-based and multidimensional lifelong learning. First, interviewees believe in the quantitative dynamicity of knowledge. Accordingly, they see the need for additive knowledge-centred professional learning. The validity of the knowledge to be delivered as well as the teacher's confidence are at the centre of such professional learning. Second, interviewees see the possibility of learning to teach by imitation. In this orientation, they believe that unqualified teachers can learn to teach by observing and imitating nationally qualified teachers. Moreover, they likewise believe that the latter can learn to improve their teaching by solely imitating fellow teachers.

Third, quality teaching is seen as a mutual and interactive process between a teacher and students. On the one hand, interviewees believe that, in quality teaching, teachers learn from students as the latter do. Therefore, they believe that quality teacher prepares quality teaching by continuously and professionally learning through self-initiated or professional-formal or informal learning opportunities. The latter include collaborative professional learning communities, formalised in-service professional development, or self-initiated learning like reading a diversity of literature and digital media like radio and television. In brief, interviewees believe in the dynamicity of science in subject and pedagogy. Therefore, they see the necessity of professional learning for not only knowledge increase but also to the improvement of quality teaching through self-initiated, informal professional learning communities and formally organized continuous professional learning opportunities.

Passive observer or active player: Students as passive recipients or partners in teaching

The results of the study at hand show a dichotomisation of opposing beliefs as far as quality teaching is concerned in terms of beliefs about students. On one side, interviewees see students as objects of teaching in terms of strictly following teaching formalities, passively swallowing imposed knowledge and unreflectively imitating the teacher. Student, on the other side, is considered as an active collaborator in terms of enriching the teaching and learning process. In this regard, informally acquired knowledge or developed experiences, interviewees believe, are valued. The interviewed teacher educators believe that students can interactively learn with and from teachers, and classmates as well as in encounters through day-to-day social life and professional experiences. This relies on the belief that students are not empty. They are viewed as contributors to the teaching and learning process by valuing their accumulated knowledge and experiences from a diversity of learning opportunities (formal, informal and non-formal).

Quality teaching as dealing with asymmetric versus symmetric relations

Results of the study at hand reveal multifaceted teacher qualities deemed important to engineer quality teaching. First, interviewees believe that quality teaching relies on the teacher's dominance based on the possession of knowledge and related capability to transmit it to students in compliance with prescribed administrative and pedagogical prescribed formalities. Second, a teacher's social and moral integrity is a cornerstone for quality teaching, especially being a role model to imitate. Therefore, adherence to normative standards (divinity-reliance, normatively defined clothing, and socially acceptable behaviour) are seen as important for quality teaching. In this regard, professional and personal life are seen as symbiotic. Interviewed teacher educators believe that a teacher's behaviour outside is likely to affect classroom teaching. Third, interviewees see a teacher as a transformational agent driving changes among students especially competences stimulation, promotion of reflectivity, participation, collaboration, cooperation and interaction.

Administrative understanding of quality teaching

Concerning the administrative understanding of quality teaching, interviewees hold either compliance-oriented or reflective implementation of educational policies concerning teaching. On the one hand, they see quality teaching as dully complying with administratively pedagogical formalities like the regularity of pedagogical documents, and implementation of the officially accredited curriculum per se. Accordingly, compliance to administrative hierarchies and professional obligations in terms of nationally prescribed qualification framework, administrative hierarchies and obligations like punctuality, conformity to pedagogical recipes i.e., administratively recommended pedagogical documentation for teaching planning, process-centred pedagogical recipes, compliance-oriented assessment, and maintenance of discipline are considered as important for driving quality teaching. However, on the other hand, political and administrative formalities are seen as guides which need reflection as far as their implementation is concerned. For example, interviewees believe that the official curriculum should be reflectively implemented by considering the

contextuality of students like learning prerequisites and needs. In the first perspective, the major concern is about reliance on administrative-pedagogical and political procedures. Secondly, the focus is put on the contextualisation of the official curriculum for the benefit of students' learning.

6.1.2 Subjective theories of teacher educators about quality teacher professionalisation

In the framework of this study, results reveal a diversity of subjective theories held by the interviewed teacher educators about quality teacher professionalisation. They include quality teacher training as status quo maintenance versus competence-centred, training obedient versus reflective teachers, preparation for lifelong learning, a multifaceted process: role of student teachers, state-restricted and international community-oriented, knowledge theory for practice and implicit role modelling (imitation).

Teacher training as status quo maintenance or competence-centred professionalisation: Training obedient or reflective teacher

Concerning the process of teacher training, it is considered either as a process of maintenance of the status quo or the development of competences of prospective teachers. On the one hand, quality teacher professionalisation is about complying with administrative, pedagogical, and behavioural pre-determined routines (see type one). Additionally, interviewees believe that quality teacher training is about purely transmitting unalterable knowledge. This is based on the belief that quality teacher masters the content and can transmit it to students. In the same orientation, interviewees do believe that student teachers come to teacher education without experience and knowledge about teaching. Consequently, they consider quality teacher training as a process of imparting knowledge (see type two). More than that, quality teacher training is seen as pure imitation of "role models". For example, some interviewees believe that prospective teachers would likely teach and behave exactly as they do without reflection (see type three).

On the other hand, quality teacher professionalisation is believed to a multidimensional competence development for prospective teachers. Interviewees believe that the use of interactively and cognitively stimulating approaches in teacher education are at the core to facilitating student teachers' competence development like problem-solving and collaboration. For example, they believe that interactive and activating methods like discussion, debate, working with texts i.e., reading and summarizing, and learning-based research either individually or collectively are reflected as important strategies that can contribute to the diversity of competences among student teachers.

Quality teacher training as preparation for lifelong learning

Results about interviewees' subjective theories about quality teacher training as a preparation for lifelong learning are based on three intermingled justifications: dynamicity of knowledge (theoretical), knowledge-based limitedness of human beings including teachers and the diversity of dynamic contextual changes of teaching and teacher education. Therefore, they see the necessity of lifelong learning in teacher training for both student teachers as well as teacher educators. For example, they believe that training for and fostering a reading culture is a tool for the quality preparation of prospective teachers. Moreover, peer learning, self-reflection and openness to new perspectives especially the diversity of informal learning opportunities at the workplace and in the wide community are considered as important for lifelong learning on the side of teacher educators.

Teacher training as a dual process: Student teachers as receivers or co-constructors of knowledge

In the context of teacher professionalisation especially the role of a student teacher, the diversity of dimensions is differentiated in the empirical results of this study. They include student teachers as objects of professionalisation, subject capable of self-professionalisation and inter-professionalisation. First, interviewees believe that student teachers come to teacher education without prior experiences and knowledge concerning teaching. Therefore, they understand that quality teacher training focuses

on the provision of administrative and pedagogical formalities guiding teaching and the teaching profession (see type one). Others believe that the transmission of theoretical knowledge is a necessity for teaching (see type two) and then offers practical opportunities. More than that, others believe that the teaching profession has specific professional and behavioural formalities. Therefore, they think that they need to observe experienced teacher educators considered as “role models” (type three).

Second, interviewed teacher educators believe that student teachers can take part in their professionalisation by reflecting on their own learning and in collaboration with teacher educators. For example, interviewees give the example of collaborative diagnostic assessment as far as learning progress is concerned. They believe that, for quality teacher professionalisation, teacher educators and student teachers jointly work together to examine risk factors regarding learning progress.

State-restricted and international community-oriented beliefs of teacher education

The results of the study at hand show two tendencies of beliefs about teacher education: Nationalist and instrumentally international beliefs. On the one hand, interviewees see quality teacher education as nationally oriented in terms of purpose and compliance. First, they believe that quality teacher education is of good quality only if it complies with national pre-determined standards and strictly follows the national curriculum per se. Second, they believe that teacher training aims at the preparation of teachers for serving Rwandan society. On the other hand, some interviewees in the study believe that quality teacher education does not only aim at national, rather, international labour market, too. Accordingly, they believe that teaching ICT and “international” foreign languages like English are instruments for the international competitive labour market of student teachers.

Teacher training as knowledge for practice

The results of this study show that interviewees value both and complementarity of theoretical and practical teacher training. Concerning the orchestration of theory and practice in teacher education, the results of this study indicate a linear process. Some interviewees believe that teacher candidates join teacher education without prior knowledge and experience in teaching. Therefore, they believe that it is of great necessity to start teacher training by the provision of theoretical knowledge: subject, pedagogical and didactics before practical training. They understand that practical training should directly follow individual unit of subject knowledge and related didactics: subject (on a specific content), didactics and practice or theoretical knowledge (subject, didactics, and pedagogical), observation and practice. Concerning practical training, they see microteaching, and school observation practicum as important for quality teacher professionalization.

Teacher education as socialisation process: Implicit role modelling (imitation) as a teacher training strategy

The results of the study reveal that quality teacher training is about shaping socially accepted and professional behaviour for prospective teachers. Accordingly, they believe that student teachers learn to teach professional behaviour by observing and imitating teacher educators. Consequently, they believe that being role models in their pedagogical practice (especially matching the talk with practice), socially accepted behaviour inside and outside the school setting is a cornerstone for quality teacher professionalisation.

6.1.3 Subjective theories of teacher educators in the context of their profession

The empirical findings of this study are differentiated as far as teacher educators' subjective theories about quality teaching in their profession

are concerned. They included for example differentiated typological subjective theories, dichotomized perspectives in terms of epistemological beliefs as well as the pedagogical process, ideal relationships between subjective theories about quality teaching and quality teacher professionalization, differentiated dimensions of quality teaching with both unreflected and reflected processes and the simultaneity of the multiplicity of subjective theories by one or the other teacher educator. First, the results of this study reveal differentiated typological orientations of subjective theories of teacher educators in the context of their profession. First, a typology of subjective theories with four ideal types was generated. They include subjective theories oriented to (1) formalities by compliance; (2) knowledge by transmission; (3) behaviour by imitation and (4) competences by co-construction. This implies heterogeneity of subjective theories revealing the diversity of foci and processes regarding quality teaching and related teacher professionalization: formalities, knowledge, behaviour, and competences recalling different teaching as well as professionalization approaches through compliance, transmission, imitation, and co-construction. Differentiated types of subjective theories indicate different forms of learning including instrumental, imitational, construction and co-construction of knowledge as well as lifelong learning. Moreover, generated types of subjective theories imply different purposes of teaching and teacher training like maintenance of formalities, preservation of knowledge, imitation of normatively defined behaviour as well as competence development.

Second, the results reveal two perspectives: mono-perspectivity to multiperspectivity of teaching and teacher education. They include (1) mono- (types one, two, three) versus pluri-epistemic (type four) understanding of knowledge. Moreover, results show (2) unilateral source of knowledge and unreflective reliance on official curriculum and teacher (types one and two) versus multisource of knowledge (type four). For example, some interviewees believe that students' and student teachers' prior knowledge and experiences from both non-formal and informal learning opportunities must be valued in teaching and teacher education. Moreover, a teacher is not seen as the only source of knowledge but also students for example. Regarding the pedagogical process, (3) results show statism and unidirectionality in terms of compliance to fixed pedagogical

formalities, pure transmission of prescribed knowledge and imitation (types one, two, three) versus dynamicity and multi-directionality in terms of reflexivity, reflectivity and interactivity in teaching and teaching to teach (type four).

Third, the three generated types (one, two, three) reveal different quality dimensions in teaching and teacher education in an unreflected process. Theoretical knowledge, pedagogical and administrative formalities as well as social and professional behaviour are important in teaching and teacher training. However, related pedagogical processes seem to be unreflective in terms of compliance, transmission, and imitation. Pedagogical administrative dimensions, for instance having pedagogical documents, can be seen either as purely as administratively immutable routines or tools for pro-reflective and retro-reflective teaching and teacher training.

Fourth, the results of the study show more ideal relationships between subjective theories about quality teaching and related teacher training. In this regard, results show both direct relationships and particularities for teacher training (see table 7).

Table 6: Ideal relationship between subjective theories about quality teaching and teacher education

Types	Quality teaching	Quality teacher professionalisation
Formalities by compliance	Compliance with pedagogical formalities	Conditioning to teaching-related formalities
Knowledge by transmission	Transmission of unalterable theoretical knowledge	Transmission of theoretical knowledge for teaching: Subject, didactics and pedagogical
Behaviour by imitation	Implicit teaching by imitation (behaviour)	Teaching to teach by imitation (social and professional behaviour)
Competences by co-construction	Dynamic competence-oriented: Active, interactive, and reflective	Transformational & multidimensional competence oriented: lifelong learning, self- and inter-professionalisation

Source: Own design from empirical data

From the above-given table, it can be observed that interviewees' subjective theories about quality teaching and teacher education are closely related. For instance, quality teaching is considered as the pure transmission of unalterable theoretical knowledge, and related teacher education is conceived as the transmission of fixed theoretical knowledge for teaching.

Fifth, another result is the innateness versus learnability-centred subjective theories of the teaching profession. From one perspective, interviewed teacher educators see quality teaching as innate. In this orientation, learning to teach has inborn characteristics without which quality teacher training is deemed to failure. In this regard, formal teacher training is considered not always a necessity for becoming a good teacher. It is conceived that innate features can be enough without formal teacher training. On the other perspective, other interviewees believe that learning to teach is learnable. Therefore, they see the necessity of initial and continuous teacher professionalisation both non-formal and informal.

Sixth and finally, results reveal a likelihood of the simultaneity of holding the multiplicity of more than one type of subjective theories. A closer analysis of the results shows that interviewed teacher educators hold multiple subjective theories at the same time. The findings reveal that no single participant's subjective theories can be classified in one of the generated types. Rather, the results show that each individual interviewee talks about aspects which can be put in more than one type.

For the purpose of reflection on the theoretical significance of the results of the study at hand, the empirical findings are hereunder discussed in light of the previously theoretical and empirical discourses.

6.2 Discussion: Qualities of subjective theories and education quality

The purpose of this chapter is to reflectively link the empirical results of the study as described (5.3) and summarized (5.4 & 6.1) with the theoretical and empirical perspectives of educational quality especially quality teaching and teacher education (3) as well as the context of teaching and teacher education in Rwanda (1 & 2). Based on the fact that the interviewees in this study are teacher educators whose main duty is to train teachers for quality teaching, the findings of this study are mainly discussed in the

light of theoretical and empirical perspectives of teacher education. Accordingly, the typology of subjective theories is reflected from the lenses of existing models of teacher education (6.2.1). Moreover, the same results are discussed in regard to teacher education of resilience building (6.2.2), to teacher educators' professionalization (6.2.3), to teacher education in the globalising world (6.2.4) and to teacher education for inclusion (6.2.5).

6.2.1 Generated typology of subjective theories and quality teacher education

The generalisation of the empirical results of this study revealed that the interviewed teacher educators hold a fourfold typology with four ideal types of subjective theories about quality teaching and teacher education (5.2, 5.3). In this part, each type is discussed in light of existing discourse on teacher education and their theoretical contextualisation in Rwanda. Accordingly, the discussion focuses on four perspectives. They include teacher education in epistemological reductionist subjective theories (6.2.1.1), compliance to and reproduction of cultural formalism of the teaching profession (6.2.1.2), teacher education in socio-pedagogical and normative implicit professional socialisation (6.2.1.3), and teacher education in co-constructivist subjective theories (6.2.1.4). Moreover, ideal types were generated. This means that they crosscut within and between the interviewed teacher educators (5.2). Consequently, the plausibility of the simultaneity of holding the multiplicity of subjective theories by one teacher educator is discussed in light of previous educational discourse and is theoretically interpreted in the Rwandan context (6.2.1.5).

6.2.1.1 Teacher education in epistemological reductionist subjective theories

The empirical results of this study especially in the type of subjective theories oriented to knowledge by transmission (5.4.2) as well as the linearity of knowledge for practice (5.3.-7) indicate strong primacy of knowledge. In this orientation, it is evidenced that hegemony is put on fixed curricular knowledge to be transmitted to prospective teachers as an aspect of quality

teacher education. It is worth reflecting on the epistemological significance of subjective theories in this orientation and discussing the significance of subjective theories oriented to the hegemony of knowledge for practice in teacher education.

Epistemological subjective theories: Which type and nature of knowledge for teacher education?

The empirical results of this study show that teacher education is considered as a channel through which curricular knowledge is transmitted to student teachers. Such results have, on the one hand, similarities with previous studies on teacher professionalism. For example, previous research on teacher professional development (König, 2012; Baumert & Kunter, 2006; Schulman, 1987), indicates that subject, general pedagogical and subject content pedagogical knowledge are seen as important in quality teacher education. However, differences can be observed in the nature and type of knowledge referred to. Unlike previous studies which insist on scientific knowledge (Cakcak, 2016: 122; Cochran-Smith & Lytle, 2001: 47; Schön, 1987), curricular knowledge is referred to in the context of this study. Scientific knowledge is unlikely not mentioned as important among teacher educators' subjective theories oriented to knowledge by transmission. In the context of limited scientific research (Ezenya et al., 2013), the question might be about the dynamic validity of the knowledge transmitted to student teachers if teacher educators see curricular knowledge as a sine qua non condition for the success of teacher education.

Teacher education is embedded in the political, cultural, and technological context implying a diversity of epistemologies. Such contextual epistemologies explicitly and implicitly likely shape teaching profession (Villegas-Reimers, 2003:39). This is limitedly reflected in teacher educators' subjective theories in the context of this study: narrowed contextual knowledge in terms of Rwandan values is expressed as a necessity for quality teacher training. In addition to the vagueness of "Rwandan values", they appear to be immutable principles unlikely to be reflected. Knowledge of wide context, for instance, knowledge of global issues directly and indirectly related to the teaching profession (cfr. Scheunpflug,

2011: 35) seem to be invisible in what matters for quality teacher education by the interviewed teacher educators.

Furthermore, the conceptions of quality teacher education in terms of pure application of “pre-determined knowledge” seem to be linked to the mono-epistemological understanding as evidenced in the type of subjective theories oriented to knowledge by transmission. This conception is related to technical-rational teacher education (Robinson & Mogliacci, 2019; Tezgiden Cakcak, 2016) whereby teacher education is oriented to the transmission of pre-produced knowledge to be applied during teaching (Tuinamuana, 2007). The contextualisation, adaptation of knowledge, reflection on knowledge and importance to practical knowledge are missing. Consequently, this reflects the assumption of one-fit-to-all knowledge. Teachers’ progressive generation of knowledge from practical experiences is neglected and invalidated (Ariza, del Pozo, & Toscano, 2002: 307). Moreover, this conception rejects the evidence of teacher educators and student teachers as producers of knowledge (Sibomana, 2016; Russell 2007: 187), rather they are considered as passive receivers and consumers of knowledge.

Teacher education as knowledge for practice

Theory and practice have been a long debate in teacher education (Dillon, 2017; Livingston & Flores, 2017). On the one hand, the traditional model of teacher education emphasises scientific knowledge to be applied in school (Korthagen, 2011: 34). Other researchers, on the other hand, believe that theoretical knowledge should be reflected, and practical knowledge generated through the process of reflection-in-action is important for quality teacher education (cfr. Korthagen, 2001). This means that teachers or student teachers should be engaged in the construction and co-construction of knowledge (Loughran, 2005). In this orientation, quality teacher education does not only adhere to knowledge-for-practice, rather, it can foster the dynamic process of knowledge construction and co-construction through models of knowledge-in-practice (embedded in practice) and knowledge-of-practice (generated through reflection on practice) (Cochran-Smith and Lytle, 2001: 47).

Coming back to the case of this study, subjective theories of teacher educators about quality teacher education in regard to the linearity of knowledge for practice are in line with traditional teacher education (cfr. Korthagen, 2011). Though they believe in the power of practice in dynamising the quality of teacher education through microteaching and practicum during and at the end of initial teacher training, the hegemonic power of theoretical knowledge is visible. It follows the principle: knowledge first, practice follows. This meets the tenets of “applied science” which assumes that knowledge of teacher education is pre-determined and it has the mandate to transmit it to student teachers for practical training (cfr. Korthagen, Loughran & Russell, 2006). In this perspective, teacher education is seen as a consumer of knowledge in the sense of monopoly of “produced” knowledge for practice. Additionally, teacher educators who are expected to do research on teacher education (MacPhail, 2021: 142; Lunenberg, Dengrinsk & Korthagen, 2014: 34-35), interviewed teacher educators do not see this role as important. The unidirectionality of knowledge for practice reveals a lack of a dialogical dimension between theory and practice. In this regard, the beliefs of teacher educators are partially oriented to a decontextualised understanding of teacher education especially relying on and application of externally “produced” knowledge for teaching (Vavrus et al., 2011). Due to the paucity of research in the context of Sub-Saharan Africa including Rwanda, theoretical knowledge for teaching is likely to be related to the imported knowledge from other contexts and likely to be irrelevant to teacher education in the context of Sub-Saharan Africa and Rwanda for instance.

Summarily, quality teacher education in the type of subjective theories oriented to knowledge by transmission is concerned with the transmission of curricular knowledge considered central for quality teacher education. In this type, there is an omnipotence of curricula with less concern for evidence-based knowledge. In this regard, there is limited epistemological autonomy and reflections on the side of both student teachers and teacher educators. Therefore, teacher education is seen as a consumer of pre-prescribed knowledge for teaching practice. This recalls the unidirectionality of theory and practice whereby hegemony is put on pre-pre-

scribed knowledge to be applied for teaching. Consequently, practical-contextual and scientific knowledge seems to be less important for the interviewed teacher educators.

6.2.1.2 Teacher education as compliance to and reproduction of cultural formalism of the teaching profession

The results of the study at hand especially in the type of subjective theories oriented to formalities by compliance as well as oriented to behaviour by imitation put emphasis on pedagogical, administrative, normative, and social formalities to comply with or to imitate as far as teacher education is concerned. Regarding pedagogical formalities, empirical findings show the conception of teacher education as scrupulously following pre-established recipes like unalterable lesson steps of introduction, development, and application as well as completion of pedagogical documents. In this regard, teacher education is concerned with conditioning prospective teachers about the same formalities and imitating them from teacher educators. For administrative formalities, a teacher is seen as obedient to unquestionably hierarchical power and scrupulously follows the political line in the context of Rwanda. Consequently, prospective teachers must be trained to be loyal and obedient to hierarchies and unquestionably follow the educational political line. Concerning normative standards, quality teaching is about observing, respecting, and imitating professional behavioural standards, ethical dressing, and socially acceptable behaviour.

Such subjective theories are more inclined to conceptions of teacher education in the technicist theoretical model (Tezgiden, Cakcak, 2016: 122-124). In this model, teaching is conceived from a mechanistic perspective whereby the teacher is seen as a technician who unquestionably follows a prescribed process (Hodkinson, 2011 & Tuinamuana, 2007). Teaching is judged of good quality only if a teacher follows “right” or “effective” methods and techniques as prescribed by experts (Tezgiden, Cakcak, 2016: 123). Accordingly, quality teacher education is primarily viewed in the sense of compliance to pedagogical recipes judged right and effective. In this perspective, the complexity of the teaching is oversimplified and teacher educators’ autonomy and responsibility, as well as student teachers’ participation, are neglected (Güven, 2008; Kincheloe, 2008).

Mirroring the empirical results of the study at hand, subjective theories evidence three unreflected dimensions of teacher professionalism to comply with and imitate in the perspective of quality teacher education. They include pedagogical, administrative, and ethical aspects. Considering the tenets of technical rationality theory (Tezgiden & Cakcak, 2016), two observations can be made. First, compliance to formalities and imitation of pedagogical recipes agree with technicist theory in the sense of conditioning student teachers to unquestionably teach formalities. However, unlikely, the technical rationality theory, the empirical results of the study at hand add two dimensions -administrative and ethical- to teachers' professional work. In this orientation, the results of the study highlight the importance of administrative hierarchies as well as socially defined ethics for contextual teacher education in the context of this study.

Moreover, subjective theories oriented to compliance and formalism can likely be related to the more centralized governance of education in Rwanda (Ansoms, Aoun, Chemouni, Niyonkur & Williams, 2022; GoR, 2021). At the national level, decisions are mainly made by the central government and must be implemented by delegated local systems in a participative-compliance-driven perspective (Niyibizi, Gahutu & Nyiramana, 2021: 18). If teacher educators believe that quality teacher education is about training prospective teachers to comply with administrative hierarchies by strictly following the prescribed procedures and unreflectively imitating teachers, it can be related to the compliance-orientated education system.

Furthermore, the twofold dimensions advanced in the two above-mentioned types of subjective theories as important for teacher education can, if reflected, represent the multidimensionality of teacher work. In addition to the pedagogical dimension of teaching, prospective teachers should be trained for referring to and reflecting administrative requirements of the teaching profession in their work. Moreover, individual engagement in working with others necessitates ethical requirements to be observed too. Unfortunately, inflexibility and fixity as evidenced in this study can lend teacher education to routinisation. Consequently, the latter can have challenges in relation to preparing prospective teachers for the teaching profession in the context of the dynamicity of changes affecting schooling and teacher education (Güven, 2008).

In conclusion, the reproduction of obedient teachers loyal to pedagogical formalities, unquestionably complying with administrative and ethically defined conduct show compliance-oriented teacher education by reproduction of cultural formalism of the teaching profession. In this perspective, it is oriented to preservation by the transmission of unreflected immutable cultural pedagogy of teacher education. Consequently, teacher education is considered as political and social instrument for maintaining status quo in teaching by reproducing technicist obedient teachers.

6.2.1.3 Teacher education in socio-pedagogical and normative implicit professional socialisation

The results of this study in the type of subjective theories oriented to behaviour by imitation emphasize the role of implicit role modelling through the consistency between behaviour and practices inside the classroom, school context and wide community. In this orientation, they believe in the power of close interrelatedness between personal, professional, and social behaviour. Inconsistency between three interconnected layers, they believe, is a challenge for the teaching profession. Moreover, they believe that theoretical and practical dimensions of teacher educators inside teacher training are of great importance. The assumptions are that student teachers learn to teach by observing teacher educators considered as pedagogical and social role models. The results at hand are theoretically reflected in the perspectives of role modelling in teacher education (Lunenberg, Korthagen & Swennen, 2007; Timmerman, 2009) as well as the symbiotic professional and social life (as well as her/ his status in the Rwandan context (Niyibizi, 2021: 99).

Role modelling in teacher education

The empirical results of this study reveal quality teacher education as a process through which student teachers learn to teach by imitation of teacher educators. In this perspective, they believe that student teachers implicitly learn to teach by observation of their training practices. As pedagogical role models, they assume that they learn to teach by imitation.

Research on teacher education agrees that the “how” of teacher education is already a training approach (Russell, 1997). This means that student teachers learn to teach by imitating the pedagogical decisions and practices of their teacher educators (cfr. Korthagen, Lunenberg & Rusell, 2006: 1020). Two forms of role modelling are reflected in scientific discourse: implicit and explicit (Loughran & Berry, 2002 & Loughran, 1996). Here, student teachers learn to teach by observing teacher educators’ pedagogical practices and behaviour in the process of teacher training. In this form, role modelling is not reflected. In this orientation, it is assumed that each student teacher personally learns through the teacher educator’s pedagogical practices and behaviour. Since it is not reflected, implicit role modelling may lead to misunderstanding and misinterpretations likely to negatively affect the quality of transfer to their future teaching. On the other hand, in the form of explicit role modelling, both teacher educators and student teachers mirror pedagogical practices and behaviour during the training process. In this orientation, they reflect for example the theoretical thinking behind pedagogical practice or behaviour. Moreover, student teachers reflect on the possible implications for their future teacher practices (Lunenberg, Korthagen & Swennen, 2007: 591). In relation to the complexity of teaching which requires reflective contextualisation, explicit role modelling is appreciated to contribute to quality teacher education from two perspectives. It likely prepares student teachers to be reflective practitioners in the sense of weighting the theoretical thinking behind teaching as well as pro-reflective possibilities of transferring the observed pedagogical practices and behaviour. Evidence from research shows that the quality of teacher education relies not only on “what and how”. Rather, the “why” is seen as important for training prospective teachers by developing decision-making-related competences (Lunenberg et al., 2007: 591-593).

Concerning the case of this study, subjective theories oriented to behaviour by imitation are embedded in implicit role modelling. This is because interviewees believe that they should serve as role models so that student teachers implicitly learn from them by imitation. However, interpretations of observations, as well as reflections of possible transfer in their future, are missing among subjective theories of interviewed teacher educators. They unilaterally, however, believe that student teachers will

teach the same way they are taught. This implies a lack of reflective dimension important for quality teaching education. Consequently, three insights can be observed. First, teacher educators considered themselves as experts (Korthagen et al., 2006: 1029) having the monopoly of teaching “right” models to be imitated. Therefore, they believe that student teachers imitatively copy their practices and behaviour for their future teaching practices. Second, their subjective theories show an immutability of teaching (cfr. Robinson & Mogliacci, 2019) and a monodirectional understanding of transfer. If they believe that student teachers will teach as they do, the question of transfer becomes uncontextualized. On the one side, teaching at different levels is likewise different. If a student teacher can apply teaching methods used at university for secondary education without contextualisation and adaptation, it would be a kind of mechanisation of teaching. Third imitation is the implicit conception of students as if they are the same and can be taught with the same standardized methods (Tezgiden Cakcak, 2016: 124). However, the conception of quality teacher education in an implicit role modelling ignores the heterogeneity of students in terms of age, uniqueness, social, cultural, and economic background to name a few. Therefore, the lack of reflective dimension in this form of modelling makes it inappropriate approach to the complexity of for teaching profession (Korthagen et al., 2007: 590). Despite that implicit modelling is judged ineffective and yet teacher educators in Rwanda stick to it as the quality of teacher training, research on benefits and limitations of implicit modelling (Korthagen et al., 2007: 590) are not clear yet scientifically explored in teacher education.

Socialisation for symbiotic social and professional life: Training a teacher of students and a teacher of and in society

In addition to serving as pedagogical role modelling as a training strategy, interviewees believe in the power of social and professional symbiotic relatedness. They believe that professional behaviour is learnt by imitation of teacher educators either in the school or wide community. For example, collaboration can be learnt by observing collaborations of teacher educators among themselves and with the wide community. Moreover, teach-

ing to teach is done through adopting socially normative behaviour in society. It is believed that misbehaviour in the wide community affects teacher training, especially trust.

In the context of Rwanda, social and professional life are symbiotic (Niyibizi, 2021: 99). This is building on the contextual role of teachers in society. The socio-pedagogical role of the teacher is double: A teacher of students, and a teacher of society. A teacher is not only an agent of social transformation through teaching (Rubagiza, Umutoni & Kaleeba, 2016: 2022). Rather, a teacher is a direct opinion leader through direct involvement in community-oriented activities. In this orientation, the teacher is not the only teacher in the classroom. She/he is considered as a teacher inside the classroom through pedagogical and behavioural practices, within the school and wide societal community through behaviour. Therefore, teacher educators believe that prospective teachers learn to become professional teachers by observing not only the pedagogical practices of teacher educators but also their behaviour in society. However, knowledge of the symbiosis of behaviours of teacher educators outside the school context influence her/his influence in teacher training is not yet clarified in educational discourse. Moreover, the contribution of role modelling outside teacher education institutions to teacher professionalism remains unclear in the scientific discourse of teacher education.

6.2.1.4 Teacher education in co-constructivist subjective theories

The empirical results of the study at hand especially the ideal type of competences by co-construction reveal two interrelated subjective theories about quality teacher education. On the one hand, teacher education is seen as constructivist and student teacher- centred teaching in terms of active, cognitively activating, and interactive process in classroom-based teacher training. In addition, individual support through academic and socio-psychological support to student teachers with learning, social and psychological needs. On the other hand, quality teacher education is viewed as the development of teacher professional competences: interpersonal competences and lifelong learning. Following the same line of order, the results are discussed in the perspectives of both empirical (Clandinin & Husu, 2017; Korthagen, Loughran & Russell, 2006; Loughran,

2005) and theoretical discourse on teacher education (Robinson & Mogliacci, 2019; Tezgiden Cakcak, 2016).

Quality teacher education as (co) constructivist and student teacher-centred teaching

In the perspectives of the type of subjective theories oriented to competences by co-construction, quality teacher education is about enhancing student teacher's participation through cognitively activating and interactive approaches. For example, active and cognitively stimulating methods like discussion, debates, summarizing texts, and scenario-based are seen as important for student-teacher competences development. Moreover, individual support in terms of equitable support for heterogenous student teachers' learning diversities is seen as important for quality teacher professionalisation. For example, interviewees in this type believe that student teachers must be academically supported according to their differentiated learning differences like quick and slow learners. More than that, individual support is seen as important for psychological cases like student teachers with post-genocide trauma.

Relating to the discourse, it is argued that if quality teacher education aims at quality teaching, the latter should be visible in teacher education (Korthagen, Loughran & Russell, 2006: 1020). The findings of this study are, then, partly related to constructivist pedagogical subjective theories of quality teaching (OCED, 2009: 93) which emphasize student-centred teaching from the perspective of student participation. However, the findings of this study do not only stay at the level of individual construction of knowledge. They rather put emphasis on co-constructivist pedagogical subjective theories whereby teacher educators with student teachers and among themselves co-construct knowledge and experiences through a joint learning adventure as co-learners. Accordingly, three insights can be observed. First, subjective theories are oriented to active and participatory pedagogy where active participation of students (Krogull et al., 2014, Fullan & Longworthy, 2013; Hattie, 2012; Vavrus et al., 2011), either individually or collectively, is seen as key quality for quality teaching. Moreover, subjective theories in this orientation are in line with cognitive activation (Kunter et al., 2013) through challenging tasks like summarizing texts and

re-telling a story is seen as an important quality of teacher education. In this regard, teacher educators' conceptions of quality teacher education are oriented to constructivist and co-constructivist subjective theories since tasks can, they believe, be done individually or together. Therefore, subjective theories of teacher educators in this regard are oriented to both student-centred pedagogy and cognitive activation as qualities of good teacher education.

In the same orientation of reflecting teacher education as quality teaching, unlike previous studies which mainly focus on the dichotomisation -transmission and constructivist-subjective theories (Fives et al., 2015), the present study widens the horizons by adding subjective theories oriented to individual support and learning climate. Though the latter is not explicitly reflected in the dichotomisation of subjective theories, they evidence context-relatedness in terms of quality teaching as well as local context (Martinez et al., 2017) of the study. In this orientation, individual support is viewed in the sense of social and psychological support for student teachers in the context of post-genocide. This dimension is evidenced that teacher educators are aware of the necessity of considering the social and psychological context of student teachers as an aspect of quality teacher education. Teaching and teacher education must be context-sensitive like counselling and active listening (Krogull et al., 2014: 68).

Subjective theories about individual support and classroom climate are in line with empirical research which shows both as key dimensions of quality teaching (Blömeke et al., 2009). Previous studies and the results of this study have commonalities of diagnostically identifying students' learning difficulties and finding mitigation responses in the perspectives of individual support (Baumert et al., 2013: 9). Particularly in this study, it is believed that student teachers are responsible for self-diagnose and collaboratively with teacher educators to understand risk factors hindering them from effectively learning. In this perspective, individual support is not seen as unidirectional -teacher educator- student teacher. Rather, self-given, and collaborative forms of individual support. Self-responsibility in self-giving support is important for quality teaching, especially promoting autonomy and self-responsible student teachers (Hattie, 2012; Cornelius-White 2007).

Conclusively, different insights can be drawn from the above confrontation. Quality teacher education is viewed as quality teaching. In the perspective of co-constructivist subjective theories, teacher education is viewed in the perspectives of not only constructivist but also co-constructivist subjective theories in the sense of cognitively activating and interactive methods. Moreover, subjective theories as evidenced in the type oriented to competences by construction are related to empirically evidenced studies which emphasize that cognitive activation, individual support, and a conducive learning climate are important dimensions of quality teaching (Baumert et al., 2013). This may be interpreted in two dimensions. First, a clear-cut line between subjective and objective theories is not always easy to delineate (Pajares, 1992). Second, the results of this study support the argument that subjective theories are context-sensitive (Martinez et al., 2017; Mansour, 2009) especially reflecting psychological individual support in a post-genocide context.

Quality teacher education as the development of teacher professional competences: Collaboration, lifelong learning and problem-solving

In addition to beliefs of quality teacher education, as co-constructivist and student teacher-centred teaching, the development of professional competences among prospective teachers is considered as important for the interviewed teacher educators in the type of subjective theories oriented to competences by co-construction. In this regard, quality teacher education is viewed as a development of interpersonal competences, lifelong learning and problem-solving. For interpersonal competences, they see the necessity of intra-school (with fellow teacher educators and school leadership) and intra-classroom (among student teachers and with teacher educators) as well as collaboration with parents regarding quality teacher education. Moreover, problem-solving skills for contributing to not only current but also future emerging problems as individuals or professionals are likewise considered as a dimension of quality teacher education. What is more, lifelong learning in terms of self-initiated professional development and reading is viewed as quite enriching in terms of quality teacher education.

Teacher education as the development of vicinity-centred collaboration

Subjective theories about quality teacher education in terms of interpersonal competences-collaboration are related to the empirical discourse which evidence collaboration as an important characteristic of teacher professionalization both initial and continuous (Postholm, 2012; Korthagen et al., 2006; Darling-Hammond & Richardson, 2009). The same authors, for example, argue that collaboration is needed especially for mutual support due complexities of teaching and then learning to teach as well as teaching to teach. Like the results of this study, Korthagen et al. (2006: 1032-1035) emphasise intra-classroom collaboration – among student teachers and with educators – and intra-school – among teacher educators and with school leadership – as important for quality teacher professionalisation. Looking at the self-verbalisation of teacher educators in this regard, this collaboration seems to be informal and spontaneous. Collaboration through learning communities which, from scientific discourse, constitutes the success factor of quality professionalisation (Darling-Hammond, Hyler & Gardner, 2017; Vescio, Ross & Adams, 2008) is not seen among the most important qualities of good teacher education.

Despite the belief of collaboration with parents, the importance of networking for learning: inter-schools/inter-university, school/university-practitioner as well with other stakeholders and institutions directly and indirectly connected to teacher education (Darling-Hammond, Hyler & Gardner, 2017: 8-10; Korthagen, 2007: 1034) is overlooked in teacher educators' subjective theories in the type of competences by co-construction. It is worth noting that vicinity-centred collaboration – intra-classroom and intra-school – is reflected in subjective theories of the interviewed teacher educators. However, especially due to globalisation through digitalisation, teacher training must prepare prospective teachers for collaborating in a more complex and socially abstract way. Therefore, teacher education, especially in the globalising world, should train prospective teachers as both global citizens and global teachers (Andreotti, 2010) capable of collaborating with other teachers as well as educational stakeholders and institutions and beyond physical contacts (Scheunpflug, 2022; 2020:2 011).

In a nutshell, teacher education is seen as training for collaboration in a physically closed perspective as intra-school and intra-classroom.

These perspectives constitute a basis for collaboration for quality teacher education. However, collaboration beyond schools in physical and digital ways can boost quality education in a more dynamic and global perspective.

Teacher education for lifelong learning: Self-initiated learning and reading

In relation to interpersonal competences, lifelong learning is evidenced as a commonality for different dimensions of educational quality in the empirical results of this study. It is expressed as important and necessary for quality teachers, teaching, teacher education and good teacher educators (see 5.3.4). Justification of the necessity of lifelong learning includes the dynamicity of knowledge in changing world. Consequently, the study indicates that the interviewed teacher educators in the type of subjective theories oriented to competences by co-construction value lifelong learning for quality teacher education. In this regard, self-initiated professional learning and reading are indicated as important for preparing prospective teachers for lifelong learning. Research indicates that initial teacher education is a lifelong process (Loughran, 2013; Korthagen & Lagewerf, 2001). Moreover, Hattie (2012: 14) expressed: “The remarkable feature of the evidence is that the greatest effects on student learning occur when teachers become learners of their own teaching, and when students become their own teachers”. Hattie argues that continuous professional learning of the teacher is an integral part of quality teaching. The statement of Hattie is in line with reflective teacher education whereby lifelong learning is seen as important through reflection-on- and in-action (Lunenberg & Korthagen, 2009; Zeichner, 2009; Tuinamuana, 2007). Unlikely previous studies, the results of this study are silent about strategies likely to facilitate self-professionalisation through for example journals and portfolios (Tezden Cakcak, 2019; Larrivee, 2008). Meanwhile, the visibility of self-initiated lifelong learning can be starting point for further practical reflections about strategies of lifelong learning strategies in teacher education.

Furthermore, reading is seen as a necessity and tool for enhancing quality teacher training in this study in the type of subjective theories oriented to competences by co-construction. Reading competences are empirically evidenced as a cornerstone for not only learning achievements

but also professional and dealing with everyday life demands (Gehrer, Zimmermann, Artelt & Weinert, 2013: 51). Several empirical studies have been conducted regarding reading competence development among children and students (for e.g., Kamil, Pearson, Birr, Moje & Afflerbach, 2011). In this study, though little is known in the discourse, reading is expressed as a key dimension for lifelong learning in the framework of quality teacher education. This can be particularly important for the context of the study at hand where reading competences are still critical among children, students, and student teachers and graduates including teachers (HEC, 2015: 95; Ruterana, 2012). Unfortunately, how reading is to be taught in teacher education is not reflected among subjective theories in this study. In the context of Rwanda, literacy with the aim of enhancing reading competences among prospective teachers in Rwanda is integrated as cross-subject competence in teacher education curriculum for nursery and primary prospective teachers (MINEDUC/REB, 2020: 59). However, little is known about how far and which reading competences are developed among prospective teachers. Moreover, there are initiatives especially in international development cooperation like USAID and UKAID to support in-service training for teachers and teacher educators (Allan, Raupp, Protik & Ndirangu, 2018). Indeed, unfortunately, empirical research about the organisation, process and outcomes of training for reading is yet to be done.

Teacher education for problem-solving

The interviewed teacher educators in the perspective of the type of subjective theories oriented to competence by co-construction see training for problem-solving as an important dimension of quality teacher training. For them, learning to teach is about learning problem-solving skills. In this orientation, problem-solving is considered as a cross-subject competence. Similarly, they believe that quality teacher education does not only focus on current but also plausible future problems at individual and professional levels. In their perspectives, problem-solving can be operationalised as the application of knowledge to solve problems. To Popper (1999), “All life is problem-solving”. If life is about problem-solving, teach-

ing should be centred on learning how to equip students with related competences. Therefore, quality teacher education should focus on learning and learning to teach problem-solving at three intermingled levels. First, as individuals, student teachers must learn problem-solving skills in their daily and professional life. Second, prospective teachers should learn teaching-related problem-solving. Third, they should learn to teach problem-solving to students in the classroom. From the perspective of teaching, problem-solving has been evidenced as important for learning achievement (Hattie, 2009: 201). In the context of teaching and teacher education, problem-solving can be either approach or outcome or both (cfr. Xie, & Masingila, 2017; Masingila, Olanofi, Kimani, 2017; Caballero, Blanco; Guerrero, 2011; Boser, 1993). Moreover, problem-solving is considered as one key factor of teacher's professional competence of teachers likely to contribute to students' learning achievement (Hattie, 2012: 29). Concerning the case of this study, problem-solving is considered as both process and outcome of quality teacher education. In terms of process, problem-solving is seen as the sine qua non condition cross-subject dimension where the application of knowledge to solving problems is at the centre of quality teacher education. As an outcome, interviewees in this study believe that quality teacher education equips student teachers with competences enabling them to solve current and future problems.

In a nutshell, teacher education in the co-constructivist subjective theories is oriented to participatory, interactive and cognitively activating methods for developing interpersonal, lifelong learning and problem-solving-related competences important for quality teacher education in the dynamic and globalising world.

6.2.1.5 Plausible simultaneity of multiplicity of subjective theories and teacher education

The empirical results of the study at hand reveal four generated ideal types of subjective theories oriented to (1) formalities by compliance, (2) knowledge by transmission, behaviour by imitation and competences by co-construction (5.4). Due to the ideal nature of the generated types, there seems to be a plausibility of the simultaneity of holding a multiplicity of types by one interviewed teacher educator. As indicated earlier, generated

types crosscut within and between interviewees (5.2.2). Based on the international and contextual scientific discourse, the simultaneity of holding multiple subjective theories can be interpreted from two perspectives. First, it can be explained by the complexity of teaching (Fives, Lecatana & Gerard, 2015; Fives & Gill, 2012) which cannot be uniquely reduced to one type. Second, the simultaneity of the multiple subjective theories can be interpreted from the perspectives of the post-genocide educational system featured by frequent changes (Gahutu, 2023; Muvunyi, 2016; WB, 2011). Additionally, risk or success conditions for holding multiple subjective theories are discussed.

Simultaneous subjective theories due to the complexity and contextuality of teaching and teacher education

It is worth noting that results regarding the simultaneity of holding multiple subjective theories partly agree with previous studies (Snider & Roehl, 2007; Chen, Chan, Tang & Cheng, 2009; Verjosky & Waldegg, 2005). In these studies, discourse shows that prospective student teachers and teachers hold mixed, sometimes contradictory subjective theories about teaching. For example, it was found that teachers hold both student- and teacher-oriented beliefs at the same time (Verjosky & Waldegg, 2005: 473). One of the explanations is the complexity and dynamicity of teaching whereby teachers can hold a diversity of subjective theories. Hence, teacher educators can hold multiple subjective theories which can be related to different tasks and contexts of teaching (Fives, Lecatana & Gerard, 2015: 256; Fives & Buehl, 2012). Therefore, the simultaneity of multiple subjective theories can be related multi-perspective understanding of teaching or teacher education whereby different approaches can be related to different tasks and contexts. In this perspective, for example, teacher educators holding two types like knowledge by transmission and competences by co-construction can be related to two contexts: i.e., explaining a notion through lecture (transmission) and involving student teacher by deepening their understanding of the notion and apply it in their own context.

In addition to the complexity and dynamicity of teaching, the simultaneity of holding multiple subjective theories can be due to teacher educators who might not have yet been familiar with teaching and without reflective positionality (Fives et al., 2015: 256). Regarding the study at hand, the plausible explanation of the simultaneous subjective theories can be interpreted from two perspectives in teaching and teacher education in Rwanda. On the one hand, it can be related to the professional profile of teacher educators in Rwanda. As indicated (see 4.2.1 & appendix 6), teacher educators in Rwanda are mainly trained as subject teachers or subjects without pedagogical training. Moreover, the same profile shows that no in-service training on teacher professionalisation. Therefore, multiple subjective theories can be interpreted as a lack of theoretical basis in teacher education. Probably, they hold multiple subjective theories related to their diversity of professional learning experiences as students, teachers, or teacher educators. Additionally, the multiplicity of subjective theories can be related to the context of the education system in the post-genocide context. Due to its historical background of returned refugees from different countries after the 1994 genocide against Tutsi, the education system is managed by a combination of teachers and teacher educators from a diversity of education systems with different educational and professional backgrounds. Accordingly, the multiplicity of holding different subjective can be explained by a diversity of learning and professional backgrounds from different education systems. For instance, educational systems with English colonial background are likely to be open as compared to those with Belgium colonial legacy (Dupraz, 2019; Lee & Schultz, 2011; White, 1996). Therefore, teacher educators from DRC and Uganda education systems may have multiple subjective theories in a more centralised education system of the post-genocide context.

On the other hand, the simultaneity of holding multiple subjective theories can be explained by the persistence of the pedagogical dilemma of a policy-practice gap. Learner-centered pedagogy is advocated as pedagogical policy for teaching and teacher education (MINEDUC/ REB, 2020). Nevertheless, transmission pedagogy is still a reality (WC, 2011; De Kulian et al., 2019). One of the explanations of the persistent policy-practice gap is that learner-centred pedagogy was imposed and is still seen as imported pedagogy without contextualisation (Van de Kulien et al., 2019).

Moreover, research shows that some teachers have negative attitudes towards learner-centred pedagogy (Otara et al., 2019). Coming to the case of this study, the simultaneity of holding multiple subjective theories can be explained by this pedagogical policy-practice gap. On the one hand, teacher educators may hold subjective theories in relation to past learning experiences likely to be teacher-centered and politically advocated learner-centred for example. Therefore, the possible simultaneity of holding subjective theories can be a sign of mixed subjective theories of teacher educators in relation to their previous teaching and learning experiences as well as the nationally recommended and internationally advocated pedagogy (van de Kulien et al., 2019).

Simultaneous subjective theories for quality teacher education: Risk and success conditions

Furthermore, the plausibility of holding multiple subjective theories simultaneously can be beneficial to quality teacher education if ever related risk and success conditions are reflected. The four generated types of subjective theories (5.4) can, if reflected, constitute multidimensional facets of quality teacher education. First, teacher education prepares prospective teachers for the formal – legal, administrative, pedagogical, and moral – dimensions of the teaching profession (Cooke, 2017; Mitchell, 2017; Hansen, 2008:10). Therefore, subjective theories oriented to administrative, pedagogical and normative formalities are important for this formal dimension of quality teacher professionalisation. The challenge in this conception relies on the unquestionability of the formalities and yet teaching and teacher education are dynamic and complex hence requires flexibility and reflectivity (Loughran & Russell, 2006; Korthagen et al., 2007). Second, knowledge -content, pedagogical, pedagogical content and contextual is important for effective teacher professionalisation (Schulman, 1998) especially when it is research-based (Korthagen, 2001: 18; Kessels & Korthagen, 2001: 27). Nevertheless, believing in the stability of knowledge would be a blind understanding ignoring the epistemological complexity and dynamicity especially in the open context of knowledge production due to digitalisation (Holmwood & Marcuello Servos, 2019; Arora, & Vermeulen, 2013).

Third, learning to teach through role modelling has been documented in different empirical and conceptual studies as engine for quality teacher preparation (Lunenberg, Dengerink & Korthagen, 2014; Loughran, 2006). Loughran & Russell (1997: 32), for example, expressed “How I teach is a message”. This recalls the necessity of the complexity of teaching teachers, especially the dual role expected from teacher educators: teaching and teacher professionalisation (Loughran, 2005). However, when it remains implicit, role modelling might have a challenge of quality transfer especially due to the fact that it does not provide theoretical reflections underlying their decisions and practices as well as the plausible contextual transferability to a prospective teaching career (Lunenberg, Korthagen & Swennen, 2007). This means that subjective theories oriented to behaviour by imitation constitute an important dimension of teacher education. However, if ever combined with intentional and reflective imitation, it can be more useful in the context of teacher education in a dynamic context.

Fourth, the type of subjective theories oriented to competences by co-construction, due to its dynamicity in terms of reflectivity, contextualisation, and interactivity, support the argument of participation and interaction as indicators of quality teacher education (Korthagen et al., 2007: 1025-1029). Though it is advocated as important for quality teaching in the discourse (Fives et al., 2015; OECD, 2009), the success of teacher education can depend on other qualities from previously indicated types. If ever the process of compliance, transmission and unintentional imitation are minimised, qualities of the type oriented to competences by co-construction, if ever reflection is included, can make administrative formalities, knowledge and behaviour more useful in teacher education.

6.2.2 Subjective theories and teacher education for resilience building

As discussed earlier, subjective theories are at the heart of teacher professionalisation (see chap. 3.3). Teacher education requires to prepare prospective candidates for dealing with the complexities, unpredictability, and uncertainties of teaching and teaching profession (Zhu & Zeichner, 2013; Scheunpflug, 2011). The complexities and uncertainties of the teaching profession are not only related to the multiplicity of the classroom situation (Kunter & Voss, 2013; Eilama & Poyas, 2009). Rather it is

likewise related to the dynamicity of the changing and globalizing world (Scheunpflug, 2020: 1) which directly and indirectly influence teaching. In the context of the study at hand, interviewees believe that teacher education could prepare prospective teachers for dealing with the post-genocide situation. Moreover, prospective teacher teachers need to be professionally, emotionally, and socially prepared to deal with adversities related to not only the hardship of working and living conditions but also the resilience to face the dynamic changes in the education system (de van Kulien et al., 2019; Muvunyi, 2016). This recalls the necessity of reflecting the resilience in teacher education. Based on the undebatable role of teacher educators in facilitating the quality of teacher education, it is imperative to reflect on the significance of the generated typology of subjective theories in relation to building resilient teacher education.

Resilience is a multi-semantic concept and can be defined in different perspectives and contexts. For example, resilience is conceptualised as the “process and outcome of successfully adapting to difficult or challenging life experiences through mental, emotional, and behavioural flexibility and adjustment to external and internal demands” (APA, 2022). Accordingly, dealing with adversities requires flexibility, creativity and problem-solving and adjustments due to the unpredictability and uncertainty of life-related challenges (Roslan et al., 2022). Resilience is a multifaceted and multidimensional concept reflected by the multiplicity of theoretical perspectives including but not limited to social, economic, psychological, and academic (Mansfield et al., 2012). In the perspective of teaching and teacher education, resilience, for example, is conceptualised in fourfold interconnected dimensions: emotional, motivational, social, and professional. First, the professional dimension concerns process-related aspects as well as teaching skills worth contributing to resilience building. They include teacher’s flexibility, adaptability, reflectivity, problem-solving, efficient time management and effective teaching skills (see also ahmed Shafi & Templeton, 2020). Second, the emotional dimension concerns the emotionality-oriented capability which includes stress and emotional management, self-care, and teaching enjoyment. Third, the motivational dimension is concerned with the capacity to stay committed to teaching and the teaching profession despite adversities. This included but was not limited to positivism & optimism, persistence, self-confidence, and self-

belief including self-efficacy, motivation to learn and learning improvement, and high expectations. Finally, the social dimension concerns the context- (school or system) oriented aspects worth maintaining resilience among teachers. Interpersonal and communication skills like collaboration and networking, seeking help and problem-solving are important aspects of the social dimension as far as teacher resilience is concerned (Mansfield et al., 2016: 84; Mansfield et al., 2012: 45). Basing on this framework, how can the generated typology of subjective theories be theoretically reflected. I start by discussing how subjective theories are related to resilience building in teacher education (6.2.2.1) and proceed with teacher educators' subjective theories and their professional resilience (6.2.2.2).

6.2.2.1 Subjective theories and resilience building in teacher education

The empirical results of the study at hand revealed a diversity of subjective theories teacher educators hold about teaching and teaching teachers. As mentioned earlier (5.1), generated typology revealed that subjective theories are oriented to, on the one hand, fixity and statism in terms of pedagogy of compliance (type of formalities by compliance), didactic transmission (type of knowledge by transmission) and implicit imitability (type of behaviour by imitation) (see 5.4). On the other hand, in the type of competences by co-construction, subjective theories of teacher educators are oriented to dynamism in terms of flexibility, reflectivity, self-reflectivity, responsibility, autonomy, contextualisation, lifelong learning and heterogeneity of learning needs. Though the concept of resilience was not explicitly reflected in the interviewed teacher educators' subjective theories, the generated typology shows different dimensions relevant to building resilience as far as quality teacher education is concerned.

Resilience building requires dynamic approaches (ahmed Shafi & Templeton, 2020). Concerning teacher education, dynamic approaches can facilitate the preparation of prospective teachers to deal with unpredictable circumstances due to the complexity of teaching as well as the dynamicity of uncertainties in schools, the education system and the world in general. Regarding the case of this study, subjective theories oriented to statism can be seen as risk factors for building resilience among

prospective teachers. Due to the unpredictability of the complexity of the class situation, the changing education system and the world, subjective theories oriented to formalism et statism can jeopardise the quality of teacher education. For example, the education system including teacher education has been a plethora of frequent changes in policies, curricula and pedagogy (Gahutu, 2023; Muvunyi; World Bank, 2011). Moreover, the teacher education curriculum went through three different curricular reforms in only ten years (Bikorimana, 2020). This requires coping strategies for both teacher educators and teachers to successfully deal with such frequent changes. Moreover, education like other sectors faces global changes which require not only relying on fixist knowledge and skills but rather need continuous adaptability and learning as well as the flexibility to cope with the new demand of the teaching profession. During the pandemic of Covid-19, for example, the use of technology in teaching and learning was accelerated for the continuity of education (Mugiraneza, 2021; Niyibizi et al., 2020). This required teachers to adapt to new situations. This implies that pedagogy of compliance, didactic transmission with a mono-epistemic understanding of knowledge as well as implicit imitability of behaviour with very limited reflection are likely to be risks for building skills worth to building resilience among prospective teachers in challenging contexts.

Furthermore, subjective theories oriented to competences by co-construction seem to be conducive to contributing to teacher resilience. In this type, subjective theories are oriented to dynamism in terms of reflectivity, autonomy, and responsibility as well as adaptation and contextualisation of curriculum and flexibility. Such qualities can serve as success factors in building resilience among prospective teachers (ahmed Shafi, 2020; ahmed Shafi, 2020). For example, Middleton & Millican (2020: 83) indicate that active, reflective and interactive-activating approaches emphasizing learner-centeredness are important for building reliance. The same author emphasizes the importance of training prospective teachers for problem-solving which is also emphasized by the empirical results of this study. Dealing with adversities requires openness to new perspectives and continuous learning. In the context of teacher education, continuous professional learning is seen as key for dealing with uncertainties and complexities and then important for building resilience (Beltman, 2021;

Fernandes et al., 2021). If interviewed teacher educators, via their subjective theories, emphasize lifelong learning as key quality to both teacher and teacher education, it likely implies that they emphasize openness to learning. Arguably, subjective theories oriented to lifelong learning are success factors for resilience building. This is due to the fact that they are related to openness to dealing with diversities and adversities of professional, personal and contextual changes and challenges in relation to the teaching profession.

Building resilience requires interpersonal and communication skills (Mansfield et al., 2016). Relating to the case of this study, the results reflect the dimension of interpersonal competences necessary for building resilience among prospective teachers. On the one side, intra-school collaboration and networks are reflected as dimensions of quality teaching and teacher education and they are likewise important for building resilience (Beltman, 2021; Le cornu, 2009). However, the inter-school networks at local, national, regional and international levels are not reflected as key to quality teacher education and yet important for building resilience among teachers (McDonough & McGraw, 2021).

Empirical results (type of competence by co-construction) show that interviewed teacher educators believe that quality teacher education supports student teachers according to their learning and social heterogeneity (see. 5.3.4). This can be related to one of the dimensional aspects of the motivational dimension of resilience in terms of focus on learning and learning improvement (Mansfield et al., 2012: 45). Particularly, self-responsibility and self-reflectivity are believed to facilitate quality teacher education reflecting their learning progress. This could support not only their learning achievement but also their self-esteem important for building resilience (Roslan et al, 2022: 103).

Building on the fact that subjective theories are important drivers of how people see themselves and the world in which they live (Voss et al., 2013; Fives & Gill, 2015) as well as the theoretical framework for building resilience in teacher education, it can be concluded that subjective theories are either risk or success factors for building teacher resilience. This means that teacher education oriented to formalities by compliance, knowledge by transmission and behaviour by imitation are likely to be

ineffective in contributing to building resilience among prospective teachers due to their statism which is ineffective for dealing with the dynamicity of the teaching, teaching profession and well the world in general. On the other hand, subjective theories oriented to competences by co-construction are likely to be conducive to building the resilience of prospective teachers due to the dynamicity, flexibility, adaptability and contextuality dimensions of teacher education.

6.2.2.2 Subjective theories and teacher educators' resilience

In describing what is important for teacher education by interviewed teacher educators, the empirical results show that they have differentiated subjective theories about the professional self. From the perspectives of the empirical results of this study, interviewed teacher educators see themselves as either strictly obedient to administrative, pedagogical, and normative formalities (type 1), knowledge experts and conveyors of knowledge (type 2), pedagogical and social role models (type 3) and reflective practitioners, lifelong learners, facilitators, and interpersonally skilled professionals (type 4). If teacher educators are core for teacher education for resilience (Mansfield et al., 2020), one would wonder which subjective theories can be success factors for that end. The question here is whether generated typology of teacher educators' subjective theories about the professional self can be either conducive or unconducive to self-related professional teacher educators' resilience. Learning to teach and teaching to teach are complex endeavours (Loughran, 2005; Russell, 1999). The complexity of teaching to teach is based on the duality -teaching and teaching to teach- of their role in teacher education (Swennen, 2014). If subjective theories are important resources to dealing with personal and professional adversities, it is worth to reflect the significance of the typology (5.4) in building their resilience.

First, if teacher educators see themselves as passive professionals whose role is to comply with pre-determined political and social formalities in terms of pedagogical, administrative and normative recipes, such beliefs are likely to be unconducive to building their resilience. Resilience requires flexibility and reflectivity as far as contextualisation and adaptability are concerned (Mansfield et al, 2020). This implies that this type of

subjective theories is unlikely to help teacher educators deal with the dynamic professional requirement. For example, in Rwanda, curriculum reform was initiated in 2015 in school and teacher education to move from knowledge to competence orientation (Bikorimana, 2020; Ndiokubwayo & Habiyaremye, 2018). Pedagogical formalities in terms of lesson planning, teaching and assessment for example must change. Teachers should then deal with such changes and related challenges. Therefore, the unquestionability of this type of subjective theories can be a challenge for dealing with adversities in teaching due to inflexibility and loyalty to existing formalities.

Second, though teacher educators see themselves as knowledge expert, the dynamicity of the world especially due to the ever development of digitalisation minimises the monopoly of knowledge. Knowledge and its production are no longer in the hand of expert producers like authors of textbooks (Holmwood & Marcuello Servos, 2019: 309). The internet gives possibilities to everyone to be both consumer and producer of knowledge. Moreover, knowledge is no longer in the hand of teachers or teacher educators. Therefore, teacher educators who see themselves as knowledge expert are likely to be lost in the world of multiplicities and dynamicity of knowledge production. This kind of subjective theories is like to increase the vulnerability of teacher educators in the changing knowledge society.

Third, subjective theories about the professional self which concerns the unquestionability of being role models may be a challenge for teacher educators' vulnerability as a result of monopolised subjective theories about role modelling. In the context of the digitalised world, student teachers do not only learn from teacher educators. Rather, they learn to teach through different digital means. For example, youtube has plenty of lessons which can serve as learning to teach. This means that student teachers can have different role models in the journey of teacher professionalisation. The immutability of seeing themselves as role models seems to be narrow-sided and monopolised without considering the openness of the world offering a diversity of learning opportunities for student teachers. Teacher educators who see themselves as role models whose student teachers unquestionably imitate can be exposed to the vulnerability of dealing with a diversity of role models beyond her/his influence.

Fourth, the dynamic and interpersonal qualities of teacher educators including reflectivity, lifelong learning, learning facilitator and social relationships are likely to be conducive to their own resilience in dealing with the dynamic complexity of teaching to teaching in an ever-changing context. For example, seeing themselves as lifelong learners can increase their invulnerability to changing teacher education due to dynamic changes in education systems and the world. In this type and referring to Hattie (2012:12), teacher educators see themselves not only as teachers but learners who learn with and from their student teachers as well as fellow teacher educators. Professional resilience especially in teacher education requires continuous professional learning (D'Emidio-Caston, 2019). Therefore, such a conception is likely to reduce their vulnerability to teacher education-related challenges through its openness to new perspectives. Moreover, research shows that resilience can be enhanced by positive and supportive social relations (Mansfield et al., 2012). Therefore, the conception of having and nurturing good relationships with student teachers, and fellow teacher educators is an important tool for resilient teacher educators. In the context of complexities, uncertainties and challenges which teacher education faces, positive relationships can be supportive for teacher educators.

Conclusively, the generated typology of subjective theories can be either conducive or unconducive for resilience building and strengthening for teacher educators. On the one hand, self-conception as obedient to formalities, knowledge expert and unquestionable role models are likely risky for their vulnerability as far as dealing with professional adversities is concerned. However, on the other hand, subjective theories oriented to reflectivity, lifelong learning and positive relationships can be conducive to teacher educators' resilience building in terms of their dynamicity and openness to flexibility and diversity of perspectives.

6.2.3 Teacher educators' subjective theories and their professionalisation

The role of teacher educator in facilitating educational quality is of great importance (Swennen & White, 2021; Loughran, 2005). However, their professionalisation is still an issue in political and scientific discourses

(European Commission, 2013; Villegas-Reimers, 2003; Vavrus et al., 2011). The professional and educational background of the interviewed teacher educators shows that they are trained as either nationally qualified teachers¹⁸ or subject specialists without pedagogical training (4.3 & appendix 6). Based on the contribution of subjective theories in shaping pedagogical and didactical decision-making processes and practices (Fives & Gill, 2015), it is worth to reflect the significance of the generated typology of teacher educators in relation to teacher educators' professionalisation. In this orientation, epistemological and pedagogical subjective theories as generated in different types are reflected in the light of discourse on subjective theories and teacher professional development.

6.2.3.1 Epistemological subjective theories and teacher educators' professionalisation

The empirical research shows that the generated typology is related to different epistemological perspectives. In their verbalisation of quality teaching and teacher education, interviewees express a diversity of epistemological subjective theories. First, in the type of formalities by compliance, certainty and immutability of pedagogical, administrative, and normative recipes are observed. Second, the type of knowledge by transmission reflects the unchangeability of pre-determined knowledge. Third, the fixity of behaviour and practices to be imitated is observed in the type of behaviour by imitation. Fourth, dynamicity and flexibility in context-dependent adaptation and contextualisation of knowledge are seen in the type competences by co-construction. Accordingly, generated types of subjective theories embed a diversity of epistemological subjective theories regarding the stability of knowledge. The following table gives a synopsis of the generated types of subjective theories considering the dimensional features of epistemological beliefs from the discourse (Hofer and Pintrich, 2002; Hofer & Pintrich, 1997).

¹⁸ Trained according to national qualification standards as teachers.

Table 7: Epistemological subjective theories across generated typology

<i>Qualities & meaning: Epistemological subjective theories</i>	Empirical findings: Subjective theories oriented to			
	Formalities by compliance	Knowledge by transmission	Behaviour by imitation	Competence by co-construction
Stability: Certainty & uncertainty: unchanging to tentative, absolute truths vs. a relativistic conception, changeable to context-dependent	Compliance to immutable pedagogical, administrative, and normative processes	Pre-established knowledge	Fixed behaviour and practice (right & wrong)	Context-dependent adaptation & contextualization
Structure: Simplicity & complexity (isolated bits and pieces to integrated concepts; accumulation of isolated facts vs. highly interrelated concepts	Isolated formalities	Simplicity: Separate knowledge	Isolated behaviour and practice: implicit observation	Complexity of knowledge from formal, non-formal & informal spaces
Source: omniscient authority to reason and empirical evidence	Curriculum-based pedagogical recipes, legal and normative frameworks	State-based curriculum & teacher	Teacher & teacher educator (behaviour & practice)	Multiplicity: curriculum, teacher, student, teacher educator, context,
Speed of learning: Quick or not-at-all to gradual; accumulation of established truths vs. as a process of social construction	Quick and controllable	Accumulation of knowledge	Gradual learning by imitation	Graduality in terms of construction & co-construction, contextualisation
Ability to learn: Fixed to improvable	Improvability by compliance & based on innate features	Improvability: additivity of knowledge	Improvability (behaviour & practice) by imitation	Improvability through reflectivity and lifelong learning
Justification and validation: Justification of knowledge through objective procedures vs. coexistence of multiple theories	-	-	Normatively & personally defined behaviour	Reflective, contextualisation of the diversity of approaches and theories

Source: Own designed based on Duell and Schommer-Aikins (2001); Hofer and Pintrich (1997) and empirical results

The generated typology of subjective theories reflects the diversity of epistemological subjective theories. For instance, the four generated types show that teaching-related qualities are learnable. However, the improva- bility of learning is reflected in different orientations. While learning is seen as improvable in the sense of compliance for pre-pre-established pedagogical and normative formalities as well as additivity to the innateness of learning abilities (type 1: formalities by compliance); the improva- bility of learning is oriented to additivity of knowledge (type 2:

Knowledge by transmission). In the type of subjective theories of behaviour by imitation, the improbability of learning is orientated to unreflectively imitated practices and behaviour (type 3: behaviour by imitation). Finally, learning is seen as a dynamic and lifelong learning process through construction, deconstruction and reconstruction, and contextualisation of knowledge (type 4: competence by co-construction).

Research shows that epistemological subjective theories are connected to conceptions of teaching and learning as well as professional development. For example, students believing in certainty of knowledge tend to learn by memorizing facts rather than understanding their meaning (Harteis, Gruber & Lehner, 2006:126). This implies that the diversity of epistemological subjective theories held by teacher educators is likely to be related to their professional learning. The recent research on teacher educators' professional development highlights the trend of self-study research as a process, at the same time, for professional learning and researching teacher educators' professional work (Lunenberg & Samaras, 2011). Though it is not yet documented how this might be the reality in the context of the study at hand, the generated typology is likely to be a success or risk factor for their professional learning. Empirical research by Atlı & O'Dwyer (2021) and Chine, Chine & Teo (2006) evidenced that epistemological subjective theories are related to the professional development of teachers. Epistemological subjective theories are shaped and influenced by professional development. On the one hand, the decisions and sustainability of getting engaged in professional development (of teachers for example) are influenced by epistemological subjective theories (Atlı & O'Dwyer, 2021; Mataka, Saderholm & Hodge, 2019). Consequently, the diversity of the interviewed teacher educators' epistemological subjective theories as identified in this study are likely to shape their uptake of engagement in professional development. Therefore, the ideal typology of subjective theories reflecting the multiplicity of epistemological orientations ignites different hypotheses like "epistemological subjective theories of teacher educators predict their decisions and processes in in-service teacher professional learning".

It is worth noting that teacher professional development depends on the interconnected plurality of factors which include not only epistemo-

logical subjective theories but also pedagogical beliefs, motivation, individual personality and capacity (Lipowsky & Rzejak, 2015) for example. In the following section, I discuss how generated pedagogical subjective theories can be related to teacher educators' professional development.

6.2.3.2 Pedagogical subjective theories and teacher educators' professionalisation

One of the debates in the scientific discourse is about the professionalisation of teacher educators (Vavrus et al., 2011; Villegas-Reimers, 2003). In the type of subjective theories oriented to competences by co-construction, lifelong learning through both non-formal and informal channels is viewed as an important quality of a quality teacher educator. Subjective theories of this type can be framed in constructivist and socio-constructivist pedagogical orientations in terms of dynamicity, flexibility and interactivity, to name a few (Fives et al., 2015; OECD, 2009). Previous research reveals that pedagogical subjective theories are related to professional development. While, for example, learner-oriented subjective theories were found to be positively related to teachers' engagement in reflective and collaborative professional learning, no relationship was found between content-oriented subjective theories and the engagement of teachers in professional development (de Vries, van de Grift & Jansen, 2012: 213). Moreover, research shows that pedagogical subjective theories are either risk or success factors for student-teacher professionalization during initial teacher education (Sue, 2005). This likely applies to the professionalisation of teacher educators. It can be deduced that pedagogical co-constructivist subjective theories are hypothetically related to conceptions of professionalisation as lifelong learning. In this orientation, different hypotheses can be generated:

- (1) General pedagogical subjective theories (teaching and teacher education) are related to teacher educators' conceptions of their professionalisation.
- (2) Knowledge-oriented transmission pedagogical subjective theories are hypothetically related to additivity-knowledge-oriented teacher professionalisation.

(3) Subjective theories oriented to behaviour-oriented imitation teaching are related/correlated with teacher observational professionalisation.

(4) Constructivist subjective theories of teacher educators are related to dynamic lifelong professional professionalisation.

Therefore, generated types of subjective theories can be risk or success basic conditions for teacher educators' professional development.

6.2.4 Subjective theories and teacher education in a globalising world

The study at hand generated a fourfold typology of subjective theories held by teacher educators about quality teacher education (see 5.3). The typology shows a diversity of perspectives of pedagogical orientation ranging from compliance, transmission, and imitation to co-construction and four foci ranging from formalities, immutable knowledge, behaviour, and competences. In terms of process, pedagogy of fixity and dynamicity are observed. On the one hand, interviewees believe that predetermined knowledge is transmitted (type 2) through pre-defined methods (type 1) and specific professional practices and behaviours are imitated by student teachers (type 3). Nevertheless, formalities, knowledge and behaviour are seen as a basis for reflection through dynamic active, reflective, and dialogical approaches (type 4). In this type, reflectivity, self-reflectivity, autonomy, responsibility, problem-solving, and welcoming heterogeneity of learning and learning spaces are believed to be important for quality teacher education. Regarding teacher training in a globalising world, teacher educators' subjective theories are oriented toward preparing prospective teachers for the global open labour market through teaching ICT and international languages.

In addition to basic knowledge like subject matter (i.e., maths, sciences, languages, including global issues like human rights, global warming and climate change), competences like tolerance to ambiguity especially in the context of dynamic complexity and uncertainties, communication, and networking in multicultural contexts are of great necessity for quality teacher education in globalising context (Scheunpflug, 2011; Hicks, 2003; Merryfield, 1998). Moreover, higher-order competences including problem-solving, learning to learn, lifelong learning, self-reflectivity, and self-reflexivity requiring changes of perspectives are on high demand than ever (Scheunpflug, 2022; 2011).

Concerning teacher education, professional knowledge must be framed in global perspectives, teacher's affective-motivational competences like values, attitudes, professional motivations, and self-regulation seem to be important in global teacher education. For example, though little is known, epistemological knowledge, subjective theories about and attitudes towards global issues, motivations for global engagement and self-regulation in the globalizing world are signposts toward global teacher education (Scheunpflug, 2011: 35-39).

Reflecting on the results of the study at hand in light of the existing discourse on teacher education in a globalising world, four perspectives emerge. They include the nationalisation of teacher education, instrumental subjective theories towards global teacher education, subjective theories as foundations for global teacher education as well as subjective theories and teacher education in the digitalising world.

6.2.4.1 Subjective theories framed and oriented to the nationalisation of teacher education in vicinity orientation

The world has been becoming a global village, especially through digitalisation. Transnational and transcontinental networking is an inescapable truth of the world today. The world society as an abstract reality has been becoming a reality lived in everyday life. World interconnectedness is an important aspect to which prospective teachers should be trained to be able to qualitatively prepare students for global openness and engagement. For example, Covid-19, a virus that started in one city in China affected the whole world. The war in Ukraine has been affecting the day-to-day life of people living far away. If subjective theories shape how people interact, make decisions and how people interact with the world (Martinez et al., 2017; Fives Gill, 2015; Pajares, 1992), it is worth to reflect how globality is reflected in subjective theories of teacher educators in the study at hand. Global education requires beliefs beyond vicinities. In this regard, relations are not only limited to physical but also social abstract interconnectedness of people around the world. Accordingly, local and global as well as how local is reflected in the global and how the global is reflected in the local (glocalization) are necessary for quality education in the globalising world (Scheunpflug, 2022; Niyibizi, 2022). Regarding the case of this study, teacher training is thought to solely comply with nationally established standards and values. Moreover, training teachers for national

purposes and aspirations are seen as important for interviewed teacher educators (see 5.4). In this perspective, the dimension of globality in the sense of preparation of teachers ready to live and serve as global citizens in the dynamic and complex world is quite missing in the subjective theories of teacher educators. Therefore, subjective theories of teacher educators in this study are oriented more toward the nationalisation of teacher education.

6.2.4.2 Instrumental subjective theories towards teacher education in a globalising world

As indicated earlier subjective theories of the interviewed teacher educators about quality teacher education in relation to global education are oriented to preparing prospective teachers for the global labour market through ICT and international languages. It is worth noting that ICT and international languages especially English are tools that materialize communication, interactions, learning and networking in globalizing world (Phillipson, 2001). The results of this study show that subjective theories of teacher educators are oriented to the global employment approach of global (Hartung, 2017; Schattle, 2008). However, this approach is criticised to have a narrow-sighted and instrumental view of globalisation. Learning to become global citizens or global teachers go beyond the possibility of employment worldwide. Rather, it is about reflecting global issues like inequality, global warming, and human rights to name a few (Bourn, 2015; Scheunpflug, 2011). Moreover, the understanding of abstract social interconnectedness must be key in this regard (Scheunpflug, 2022; 2020). Therefore, reflecting multiple heterogeneities including culture, religion and views is important. For instance, foreign students with a diversity of backgrounds are accommodated in the Rwandan education system (MINEDUC, 2021). Teachers must be prepared about to welcome diversity of linguistic and cultural backgrounds in their respective classrooms.

In a nutshell, subjective theories oriented to sole global employment are short-sighted, instrumental and show a very basic understanding of global learning.

6.2.4.3 Subjective theories as foundations for global teacher education

Reflecting the subjective theories about quality teacher education especially in the type of competences by co-construction in light of the existing discourse of global teacher education, it revealed a pool of foundational competences and processes conducive to teacher education for a globalizing world. In this type, reflectivity, self-reflectivity, autonomy, responsibility, critical thinking, problem-solving, collaboration, welcoming and integrating heterogeneity of learning spaces (non-formal and formal) into formal teacher education and student teachers' learning diversity and life-long learning and interactivity are viewed as important for quality teacher education. Teacher education in the globalizing world focuses on context-sensitivity, appreciation of diversity, changes of perspectives, pluri-epistemic, interdisciplinarity and transdisciplinary, participation, critical thinking, value-driven, local and global reflections (Scheunpflug, 2022; 2011; Scheirer, 2016; Räsänen, 2009). It can be seen that, though reflected in vicinity-national orientations, some of the dimensions of subjective theories about quality teacher education are related to both competences and processes likely to facilitate global learning in teacher education. However, some aspects like the change of perspectives, reflecting the global in the local and vice versa (Scheunpflug, 2022; 2020) are not visible in the subjective theories of teacher educators who participated in this study.

It can be concluded that subjective theories held by teacher educators are either success or risk factors for global teacher education. On the one hand, subjective theories can be success factors for enhancing quality teacher education. In this regard, subjective theories open to dynamicity, flexibility, reflectivity, and self-reflectivity for example are like to serve as foundations for global teacher education in case they are widened beyond institutional and national vicinities. However, subjective theories with fixity, compliance and imitation are likely to be risk factors for teacher education in a globalizing world.

6.2.4.4 Subjective theories and quality teacher education in a digitalised world

Digitalisation has been and will be invading human relations and endeavours. For example, digitalisation facilitates the massification of knowledge production with epistemological challenges (Shamsul, Mohamed & Hamzah, 2004). These consequences impact education not only its organisation but teaching and learning. Particularly, it remains debatable about which teacher's pedagogical and didactical competences needed for facilitating digital competences among students (Skantz-Aberget al., 2022). While teacher educators verbalise what is important for quality teacher education, it is worth to reflect how digitalisation is reflected among subjective theories of teacher educators in Rwanda. In this section, empirically drawn subjective theories about digitalisation as well as the theoretical significance of the generated typology in the digitalisation of education are discussed.

The empirical results of this study show different subjective theories about digitalisation in the framework of teaching and teacher education. From one perspective, digitalisation in the sense of integration of ICT in teacher education is seen as an instrument for preparing prospective teachers for more international employability and living in the world which is becoming a global village. In this regard, some interviewees believe that it is of great necessity to teach teachers with digital tools (i.e., online teaching). Digitalisation, on the other perspective, is seen as a tool important for teacher knowledge-centred continuous self-professionalisation. Accordingly, digital tools like search engines and digital media like radios and televisions are considered as tools for teacher self-professionalisation.

Scientific educational discourse on digitalisation and education shows a fourfold interconnected framework of digitalisation of education. They include teaching digitalisation (digital tools and technology use), teaching about ICT (general reflections and its impact on society); teaching with digitalisation (organization of teaching and learning using digital tools (Johannesen, Ogrim & Giàver, 2014: 301). Moreover, digitalisation can also serve for the organisation and administration of education

(Douse & Uys, 2018: 3). Teaching digitalisation and organisation of education using digital tools can be instrumental in the sense of limited reflectivity. However, teaching with and about digitalisation requires more reflectivity in the sense of searching for contextualisation (geographical, and levels of education) and didactical transposition (Skantz-Aberg et al., 2022; Johannesen et al., 2014). The results are discussed from two perspectives. First, I start by the theoretical contextualisation of generated subjective theories about digitalisation of teacher education. Second, I discuss the theoretical significance of subjective theories as blockage or precondition for digitalisation of teacher education.

Subjective theories about the digitalisation of teacher education

Coming to the case of the study at hand especially explicit subjective theories about digitalisation in teacher education, two orientations can be observed in relation to the discourse. First, the results of the study at hand are embedded in the argument that, due to its infusion in different spheres of work, digitalisation is a necessity for employability in the open international labour market (Hanell, 2018: 137). Therefore, the necessity of teacher training with digital tools is seen as important for quality teacher education in the globalising world. The employability approach to digitalisation is supplemented by the argument of using digitalisation to prepare candidates capable of living in the globalised village. In this regard, digitalisation is considered as a socialisation function in the sense of preparing and facilitating prospective teachers not only for teaching in the globalising world but also for becoming active members of the global community. Furthermore, especially through the lenses of the fourfold perspectives of digitalisation of education, digitalisation constitutes a professionalization function (Redecker & Punie, 2017; Johannesen et al., 2022). This is due to the fact that teacher educators in this study see digitalisation as an opportunity for their continuous professionalisation.

Conclusively, subjective theories of teacher educators about quality teaching have three functions of digitalisation in teacher education. They include pedagogical (teaching with digital tools), global socialisation (preparation for participation in the global society) and professionalisation (continuous self-professionalisation via digital media) functions in

teacher education. However, technical (teaching of digital tools and related use) and administrative (organisation of education with digital means) functions of digitalisation in education are not expressed in the subjective theories of teacher educators in this study. Moreover, the concept of digital competences (Guitert et al., 2021; Law et al, 2018; Napal Fraile, Peñalva-Vélez & Mendióroz Lacambra, 2018; Redecker & Punie, 2017) is missing in their subjective theories about quality teacher education.

Subjective theories as blockage or precondition for digitalisation of teacher education

The success of digitalisation can not only depend on the availability of digital tools. Rather technical and critical competences are likewise needed for the responsible use of digital tools in professional and daily life (Amhag, Hellström & Stigmar, 2019). In the context of teaching for example, research shows that teachers' subjective theories about digitalisation of teaching are important success or risk factors for the quality use of digital media for teaching and learning (Ertmer, 2005: 25). Digitalisation in general and particularly in teaching and teacher education requires transversal competences including but not limited to technical skills (instrumental side) and well cognitive and metacognitive, socio-emotional competences for navigating and make navigate students or student teachers. Technical skills can include for example formalities related to the understanding of algorithmic automation of digital tools (Ertmer, 2005: 25). Moreover, competences like adaptability, lifelong learning (World Bank, 2016: 9), analytical, creativity and autonomous learning (p. 16), digital skills and participation as key requirement of living and serving in digitalising world of work (p.17) creativity, reasoning, problem-solving, the capability to apply knowledge and a variety of socio-emotional and behavioural skills (p.10). In the context of teaching and learning, a diversity of frameworks of digital competences to be developed among students are reflected. For example, a sixfold framework of digital competences was developed in the European context. This includes for instance the competences of management of the plurality of information, communication and cooperation, production and presentation of information, protection

and safety, problem-solving as well as reflection in digital world (Reiglu & Cebi, 2020; EU, 2017). Consequently, both transversal competences for digitalisation and digital competences require flexibility, participation, lifelong learning and openness. It is worth discussing how generated typology of subjective theories can be factors for digitalisation of teacher education.

The empirical results of this study revealed two perspectives in regard to teacher education. On the one side, the maintenance of status quo (6.1.2) by conditioning prospective teachers to compliance with formalities (5.3.1), transmission of immutable knowledge (5.3.2) and behaviour by imitation (5.3.3) is seen as quality teacher education. On the other side, the interviewees see quality teacher education as dynamic whereby flexibility, lifelong learning, active, reflective and interactive pedagogical processes are valued (6.1.2 & 5.3.4). Reflecting the empirical results as summarised above in light of the discourse on digitalisation of education, two observations can be revealed. First, subjective theories focusing on the statism are likely to be blockage to digitalisation of teacher education. Technology in all dimensions develops at an uncontrollable space. Fixed ideas, immutable and mono-epistemic understanding of knowledge and unreflective imitation can lead to failure of digitalisation. Meanwhile, for example, believing that teacher education is about compliance with formalities (pedagogical, administrative, and normative) can be related to the instrumental automation side of digitalisation. In this perspective, compliance to formalities can only be related to the routinisation as a very basic technical competence of digitalisation. Second, the tenets of subjective theories which value flexibility, participation, reflectivity and lifelong learning are related to both transversal competences for digitalisation and digital competences (Reiglu & Cebi, 2020; EU, 2017; World Bank, 2016; Ertmer, 2005). Consequently, subjective theories focusing on dynamicity and openness are likely to precondition for digitalisation of teacher education. For instance, research shows that constructivist pedagogical subjective theories strongly influence the use of technology in teaching (Sang, et al, 2010a; 2010b). This implies that subjective theories held by teachers or teacher educators can be success or risk factors for digitalisation of teaching and teacher education.

The discussion of the empirical results of this study in light of the scientific discourse on digitalisation lead to two major hypotheses. First, it can be hypothesized that subjective theories focusing on compliance to formalities, knowledge by transmission and behaviour by imitation can likely be hindering factors for the process of digitalisation of teacher education. Second, teacher educators who hold subjective theories oriented to competences by co-construction are likely open to digitalisation and can facilitate the digitalisation of teacher education.

6.2.5 Subjective theories and teacher education for inclusion

The empirical findings of this study show different perspectives as far as subjective theories about quality teacher education are concerned. First, teacher education is considered as maintenance of statism through either compliance to pedagogical and administrative formalities, the transmission of pre-determined knowledge or unreflective and implicit imitation (see 5.3.1-5.3.3). Second, teacher education is considered as dynamic in terms of preparation for lifelong learning, interactive, reflective approaches accompanied by social and academic individual support in a conducive training climate (5.3.4). While teacher educators express what is important regarding quality teaching and teacher education, it is worth discussing their subjective theories in regard to theoretical and empirical discourse on inclusive education. Since the end of the 20th century especially with the Salamanca declaration in 1994 (UNESCO, 1994), inclusive education has been permeating political, scientific, and practical discourse around the world (Ainscow, Slee & Best, 2019). For the 2050 agenda, inclusion is seen as a key to achieving not only education-related goals but also other SDGs (UNESCO, 2020). Inclusive education can be reflected in a plurality of perspectives. For instance, inclusive education can be understood as adapting to and responding to the heterogeneity of students and their needs to help them reach their full potentials through increasing participation and reducing exclusion from and within education (Howes, Davies & Fox, 2009; UNESCO, 2005). Heterogeneity of students' needs can refer to disabilities, special talents, learning difficulties and cultural and linguistic background whose effects on students' learn-

ing should be minimised (Gargiulo & Metcalf, 2022: 146-165) In the context of teaching and teacher education, learner-centred pedagogy, valuing learning and learners' diversity, individual support, conducive learning climate and continuous professional learning are success factors for inclusive education (Dewsbury & Brame, 2019; Vrasmas, 2018; Ainscow, 2011; Donnelly, Watkins, 2011; Forlin, 2010; Florian & Rouse, 2009) This means that inclusive education in the context of teaching and teacher education, flexibility of pedagogical processes and collaboration of stakeholders can contribute to helping students with diverse needs reach their full potentials.

Empirical research reveals that subjective theories are important for quality inclusive education (Dignath et al., 2022; Metsala & Harkins, 2022). For instance, research shows that teachers' constructivist epistemological teachers' epistemological beliefs are associated with their beliefs about inclusive education and inclusive pedagogy especially the view that all students can learn together with their peers (Sheehy et al., 2017: 50). in the sense of flexibility and dynamicity. In addition, teacher self-efficacy beliefs about inclusive education i.e., students with and without disabilities in the same school and classroom are positively correlated with the implementation of inclusive education (Opoku et al., 2020; Miesera et al., 2019). Among others, the above examples show how beliefs are likely to be related to inclusive education. Though studies on this topic focused on teachers, it is worth reflecting the theoretical significance related to inclusive education by the interviewed teacher educators.

A closer look at the empirical findings, the concept of inclusive education was not explicitly expressed as important either for quality teaching or quality teacher education by the interviewed teacher educators. Nevertheless, the qualities of the generated typology can be reflected in light of existing discourse on inclusive education and as well as subjective theories about inclusive education. On the one hand, inclusive education requires flexibility and learner-centred pedagogy (Dewsbury & Brame, 2019; Drummond & McIntyre, 2007). This implies that subjective theories focusing on the preservation, reproduction and transmission of pedagogical formalities, pre-determined knowledge and unreflective imitation of behaviour can be challenges for inclusive education. On the other hand, the qualities of the type of subjective theories oriented to competences by co-

construction share some characteristics with the principles of inclusive education. The commonalities include for example flexibility, collaboration, openness to perspectives, a conducive climate, individual support and engagement in professional development (Amayo, 2021; Dewsbury & Brame, 2019). Moreover, the qualities of the type of subjective theories oriented to competences by co-construction including for example learner-centeredness like active, reflective, interactive and participative approaches are in line with constructivist subjective theories (Fives et al., 2015; OECD, 2009). As indicated earlier, constructivist epistemological subjective theories are associated with inclusive education (Sheehy et al., 2017). Consequently, this study enriches scientific discourse by hypothetically arguing that subjective theories oriented to competences by co-construction are likely associated with inclusive education. Relatively, teacher educators holding subjective theories oriented to competences by co-construction are likely open to heterogeneity and hence can facilitate teacher education for inclusion.

In nutshell, the theoretical contextualisation of the empirical results of this study shows that subjective theories about inclusion in teaching and teacher education of the interviewed teacher educators remain implicit. Consequently, inclusion education, despite the international political concern (UNESCO, 2020; 2015) and the existence related policies and its integration in school and teacher education curricula in Rwanda (MINEDUC/ REB, 2020; MINEDUC, 2007), it seems to be less important for quality teacher training from the perspectives of the interviewed teacher educators. Nevertheless, the generated ideal types have qualities like to be conducive or risk factors for inclusion as far as teaching and teacher education are concerned. On the one hand, subjective theories focusing on formalism, compliance and imitation can be risk factors for inclusion in teaching and teacher education due to the statism and immutability. On the other hand, subjective theories focusing on flexibility, heterogeneity of learning spaces are likely to facilitate inclusion in teaching and teacher education.

Discussion of the results: A summary

The discussion of the results of this study led to the following conclusions. First, reflected from the scientific discourse on teacher education, the

study enriches science in the different hypothetical perspectives including but not limited to the multiplicity of subjective theories beyond the dichotomisation of transmission versus constructivist (6.2.1.1 – 6.2.1.4). Second, it became clear that there is a plausibility of simultaneously holding multiple subjective theories by one teacher educator (6.2.1.5). Third, the generated types are seen as either success or risk factors for quality teacher education (6.2.1.1 – 6.2.1.4), teacher educators' professional development (6.2.3.2), teacher education for inclusion (6.2.5), digitalisation of teacher education and teacher education in globalising world (6.2.4). Furthermore, the study stimulates further implications for science, policy and practice of teacher education in Rwanda and possibly similar contexts (see 7).

7 Outlook

The purpose of the study at hand was to explore subjective theories held by teacher educators about quality teaching in the context of their profession in Rwanda. Through theory-generating qualitative research, a four-fold typology of subjective theories was generated based on the identified horizons of comparison (5.2). The results of the study (6.1) as well as their theoretical contextualisation (6.2) stimulate further venues for research (7.1) and implications for policy and practice of teacher education (7.2).

7.1 Mapping further research on subjective theories

The results of the study at hand show hints for mapping further research in terms of the nature and development (7.1.1), distribution of subjective theories and correlational studies (7.1.2), research on subjective theories of educational stakeholders (7.1.3), and conceptual research on subjective theories in teacher education (7.1.4).

7.1.1 Nature and development of subjective theories

The study at hand is cross-sectional. The empirical results represent subjective theories of interviewed teacher educators solely at a specific time without considering their episodic development. Yet, research shows that subjective theories are not only context-related but also time-bound (Martinez et al., 2017: 3; Fives & Buehl, 2012: 119). Therefore, narrative biographical and longitudinal studies should be done as steps forward to further the scientific discourse on subjective theories. Concerning narrative biographical study, narrative interviews could be used to explore subjective theories held by teacher educators through the personal, social and professional lifespan. Moreover, existing empirical research shows that change/development of subjective theories is an integral part of educational background, teacher training as well as lifelong experiences (cfr. Levin, 2015). The results of this study did not indicate trajectories of the generated typology of subjective theories. Questions like: How do teacher educators' subjective theories change or not over professional experiences? Moreover, the research could be extended to prospective and in-

service teachers. How do student teachers' subjective theories change/develop over the initial teacher education? How do in-service teachers' subjective theories change/develop over their professional careers? Moreover, further studies could investigate, through longitudinal research, the extent to which teacher educators' subjective theories change/develop over their professional career and how they are correlated or not with the change/development of the ones of student teachers.

Furthermore, the typology generated from this study shows that some of the types may not all lead to quality teaching and teacher training in the dynamic and globalising world (6.2 & 6.3). The question might then be about the professional development of teachers to change/develop subjective theories important for quality education. Therefore, action research is recommended to understand the dynamic and contextualised professional development of teacher educators through engagement in the process of action-reflection cyclic professional learning with both fellow teacher educators and student teachers.

7.1.2 Distribution of and correlational studies on subjective theories

The study at hand especially the qualitative methodological approach as well as its descriptive nature gives room for further empirical research in terms of generalisability-, correlation- and multimodality-oriented empirical studies.

Generalisation by a representative sample

The empirical results of this exploratory study constitute a basis of qualities of subjective theories which can be generalised in further quantitative study. Therefore, further empirical quantitative study is recommended to examine the distribution of subjective theories among teacher educators in Rwanda. Additionally, the education system of Rwanda including teacher education likely shares some commonalities with other education systems, especially in developing countries (see Vavrus et al, 2011). Accordingly, a quantitative comparative cross-country study could delineate the distribution of subjective theories among teacher educators in almost similar education contexts. Examining the quantitative distribution of

subjective theories requires a contextualisation of research instruments for data collection. While results especially the scales from the Global North show dichotomisation of teachers' beliefs (transmissionalist and constructivist) (Fives, Lacatena & Gerard, 2015), this study reveals heterogeneity of subjective theories (5.2 & 5.3). Therefore, the contextualisation of empirical scales for measuring subjective theories of teachers and teacher educators about teaching and teacher education on the basis of the results of this study especially categories and types in the context of Rwanda and similar contexts is recommended.

Furthermore, the results of the present study did not only show subjective theories about quality teaching. Rather, the generated typology reflects the conceptions of teacher educators about teacher professionalisation, too. Therefore, the development and validation of contextualised scales are recommended for further empirical research. The scales could help to examine the quantitative distribution of subjective theories about teacher professionalisation among teacher educators. The generated typology could serve as the starting point for developing and contextualising quantitative scales for subjective theories. Generated types likely crosscut within and between interviewees (5.1-2). This is likely to reflect the simultaneity holding of a multiplicity of subjective theories (Fives, Lacatena & Gerard, 2015: 255-256). Further empirical quantitative studies should explore the distribution of typology-related qualities of subjective theories within and between teacher educators. Accordingly, inter-, intra- and cross-analysis of type-related qualities of subjective theories among teacher educators could be examined quantitatively. For example, to what extent one participant is more oriented to each of the identified types?

Though the characteristics of interviewed teacher educators were considered during the theoretical sampling process, the findings of the study do not show the distribution of subjective theories in relation to the personal, educational and professional characteristics of interviewed teacher educators. There is a need for further empirical quantitative study for disaggregating subjective theories in relation to demographic and professional characteristics of teacher educators like gender, experiences, qualification, specialisation, type of institution, and location. For example, how do subjective theories vary according to gender? Empirical results by OECD (2009: 88) show that female teachers tend to hold constructivist

beliefs and male have more transmissionalist ones. Further empirical studies should examine the extent to which teacher educators' subjective theories are or are not related to gender. Previous studies indicate that subjective theories develop along personal, educational, and professional profiles (Martinez et., 2017). Further empirical studies are recommended to examine if there are variations of subjective theories according to qualification (level of education), specialisation (areas like sciences and mathematics languages, foundations of education, to name few) as well as professional experiences (like years of professional service, professional biography like professional non-formal and informal learning opportunities. Furthermore, educational statistics in Rwanda show that two-thirds and a half represent respectively church-owned secondary schools and universities in Rwanda (MINEDUC, 2022). Moreover, three-thirds of the sampled interviewees come from church-owned teacher training colleges and universities (appendix 6). Meanwhile, the study did not investigate if teacher educators' subjective theories are differentiated according to the type of institution. Further empirical studies could include this dimension. Moreover, churches may be differentiated according to their beliefs as well as perspectives about how education can look like. Consequently, it could be interesting for future research to disaggregate, for example, teacher educators' subjective theories in relation to teacher educators from teacher education institutions owned by churches. How are subjective theories of teacher educators/teachers differentiated according to Protestant, Catholic or Muslim educational institutions, for example?

Correlational studies and mixed methods

The results of this study stimulate further correlational studies including but not limited to subjective theories about quality teaching and quality teacher education, teacher educators and student teachers' subjective theories, subjective theories and teaching practices, the relationship between types of subjective theories, teacher educators' subjective theories and their professional learning.

First, the results of the present study show teacher educators' subjective theories about quality teaching and quality teacher education from an ideal descriptive perspective. The study did not reveal if teacher educators'

subjective theories about quality teaching are either associated or not with those held about quality teacher education: How are subjective theories held by teacher educators about quality teaching related to those held about quality teacher education? It could be interesting to include such a dimension in future empirical studies.

Second, discourse shows that teacher educators likely influence the quality of teacher professionalisation for prospective teachers (Eu, 2013; Vavrus et al., 2011; UNESCO, 2003). If subjective theories exercise great influence on teacher professionalism, it can be assumed that subjective theories of teacher educators likely influence those of student teachers. Therefore, further empirical correlational studies are needed to understand how teacher educators' beliefs are associated with the ones of student teachers. Moreover, the extent to which subjective theories of teacher educators influence or are influenced by those of student teachers needs further empirical research.

Third, this study generated a typology of subjective theories without relating them to practices. Existing correlational empirical research reports a diversity of results: consistent, inconsistent with or unrelated to practices (Fives et al., 2015). Reflecting the discourse on quality education, especially the policy-practice gap in the context of the Rwandan education system (see chapters 1 & 2). Further researchers could start from the generated typology to examine the relationship between subjective theories and teaching as well as teacher professionalisation practices. Empirical studies could investigate the extent to which generated subjective theories of teacher educators (even teachers) are consistent or not with training practices in the context of teacher education. Questions like: What is the relationship between teacher educators' subjective theories about teaching practices? How are teacher educators' subjective theories related to their practices in teacher training? Moreover, previous research beliefs influence and are influenced by practices (Buel & Beck, 2015: 68-69). Consequently, it could be interesting to integrate this reciprocity of relationship in the future empirical research. In this orientation, triangulation of methods like classroom observation, questionnaires and interviews can be reflectively used. Furthermore, to enrich the educational scientific dis-

course, it could be important to examine underlying factors of consistency, inconsistency or unrelatedness as far as subjective theories and practices are concerned.

Fourth, the results of the study reveal ideal types from a descriptive perspective. However, how are types related to one another? For example, how are subjective theories oriented to formalities by compliance and knowledge by transmission correlated? The study shows the plausibility of the simultaneity of holding a multiplicity of subjective theories by one teacher educator. The question about the complexity of relationships between types for one interviewee remains unanswered. Consequently, further studies should investigate the intra-correlation of types within one interviewee as well as the extent to which they are related to practices.

Fifth, the study at hand focused solely on subjective theories of teacher educators about quality teaching in the context of their work. Previous studies reveal that subjective theories held by teachers are part of the person's system of subjective theories /beliefs likely or unlikely to influence educational beliefs (see Pajares, 1992). Unfortunately, the present study did not explore the nature of existing beliefs in which the generated typology is likely to be embedded. On the one hand, subsequent ethnographic studies are recommended to delineate teacher educators' belief systems. On the other hand, further studies could deepen the extent to which the generated typology is related to other constituents of the whole belief system. For example, the results of this study show a diversity of beliefs for example epistemological and pedagogical (teaching and learning) without indication of their relationships. Further studies are needed to investigate for example: How are teacher educators' epistemological subjective theories related to their pedagogical beliefs? Moreover, and deeply, multimodal studies are needed. For example, how teacher educators' epistemological beliefs are related to beliefs about teaching, learning and learning to teach? How are teacher educators' subjective theories about quality teaching related to the ones about learning and learning to teach as well as how they are, likewise, related to their practices?

7.1.3 Research on subjective theories of different educational stakeholders

Education is a joint venture. Different stakeholders include teachers, students, student teachers in the context of teacher education, parents, administrators like school head teachers, inspectors as well as policymakers do jointly collaborate for education quality improvement. The diversity of the educational stakeholders likely implies the multiplicity of expectations as well as perspectives on how education should look like. This study focused on the subjective theories of important education stakeholders “teacher educators”. If subjective theories are important in understanding and contributing to improving educational quality, it is of great necessity to empirically delineate subjective theories of educational stakeholders at different levels in Rwanda and similar contexts on different dimensions of education. Empirical studies like: What are parents’ beliefs about education, teaching and assessment for example? What are head teachers’ and inspectors’ beliefs about quality teaching? How are their beliefs related to their practices of supervising teaching, learning and assessment in school?

Teacher educators and student teachers are key to quality teacher education. The present study focus was put on teacher educators with a sole aspect of subjective theories. As indicated previously (see chap 3), scientific discourse on teacher educators is very limited. Therefore, the present study stimulates further scientific reflections as venues for research on teacher educators as a contribution to scientific enrichment in this area. Moreover, and especially in relation to the generated typology of subjective theories (5.2), the study ignites further scientific research on student teachers.

Hints for future research on teacher educators

The results of the study especially the educational and professional characteristics of the interviewed teacher educators show that they are either subject specialists with or without pedagogical training. Moreover, the status and professionalisation of teacher educators are quite silent in Rwandan political and scientific discourse. Consequently, numerous questions

may arise as windows for further research. How do they become teacher educators? What experiences do they have from teachers to teacher educators? What is their self-understanding as professionals and understanding of their profession? What are their professionalisation trajectories? What types and processes for the professionalisation of teacher educators? Additionally, the concept of teacher educator has a wide conceptualisation which includes all agents that professionally support student teachers during the course of their initial training as well as across the continuous professional accompaniment. They include for example university, teacher training institution-based teacher educators as well as school-based mentors. The same questions remain valid for the extended groups of teacher educators.

Research (Loughran, 2005: 8), shows that teacher education is about unpacking or developing beliefs both their own and the ones of student teachers. In relation to this study, the empirical results show a typology of subjective theories through individual verbalisation of perspectives about quality teaching. However, the question of whether teacher educators are aware of their own subjective theories remains unanswered. For example, the present empirical study shows a multiplicity of holding diversity of subjective theories by one interviewed teacher educator. Therefore, further research could explore how teacher educators are aware of and reflect their own beliefs in their work as well as the ones of student teachers without forgetting their implications for their own professionalisation and teacher training practices.

Furthermore, the results of this study especially the educational and professional profile reveal that some interviewed teacher educators are pedagogically untrained and ill-trained teacher trainers. This implies that theoretical-pedagogical and didactical knowledge seems to be missing. In this context, practical knowledge seems to orient their work as teacher educators. Therefore, a documentary method could be used to explore action-guiding knowledge orientating their pedagogical and didactical practices.

Research on subjective theories of student teachers and teachers

If the interviewed teacher educators believe that student teachers learn to teach by imitation teacher educators (5.2.3); further empirical studies are needed to explore not only what but also how they learn (cfr. Niyibizi, 2021). What do student teachers learn through implicit role modelling? How do they learn? How does their learning influence their beliefs about teaching and teacher professionalisation? How does implicit learning influence their professionalisation process? How does implicit teacher training influence their teaching practice during initial and later in-service work?

Additionally, this study focused on subjective theories of teacher educators. Due to the contextuality and subjectivity of subjective theories, the results of this study cannot be generalized to either teacher educators or teachers in Rwanda. Therefore, it could be interesting to explore subjective theories of teachers at different education system levels (i.e., Early Childhood Education, primary, secondary, and university) about different dimensions of education like teaching, learning, and assessment, to name a few.

Further research on subjective theories on different aspects of education

The results of this study show that subjective theories about quality teaching and teacher training in a general way with limited reference to subject-related and wide-education-related topics. Further knowledge is needed about subjective theories about different important dimensions of and perspectives through which education is reflected. This can include but is not limited to inclusive education, microteaching, practicum, globalisation and global learning, digital teaching and learning, education for sustainability, self-efficacy, education for social justice, democracy, environmental education, human rights education, gender and sexual education, gender equality, religious education, to name a few. For example, the study at hand shows instrumental perspectives about teacher education from global perspectives (6.2). Further research is needed to explore teacher educators' conceptions of teaching and teaching to teach in the globalizing world.

Moreover, quality teaching and teacher education require a reflection on different dimensions like assessment, feedback, social and pedagogical relationships in the classroom, classroom management, homework, and planning. The study at hand did not show in deeper perspective subjective theories held by teacher educators about such dimensions. Therefore, further empirical studies on the beliefs of teacher educators about different dimensions of education are of great importance to enrich the scientific discourse on educational quality. For instance, research evidence that beliefs about error influence student engagement in learning and learning strategies (Hübner & Pfof, 2022). It could be interesting, for example, to explore teacher educators' beliefs about error and how such beliefs are related to their own professional learning as well as training practices.

Despite the diversity of interviewees according to subject specialisation, the results of this study did not show differentiation of subjective theories across subjects. Previous empirical studies, especially in Mathematics (see COACTIV project in Germany, Kunter et al., 2013) and English (Gilakjani & Sabouri, 2017; Farrel & Lim, 2005) reveal beliefs specific to the nature of the subject and related didactics. Therefore, further empirical studies on subjective theories across subjects and related didactics like Mathematics and sciences, languages, geography, and history should be explored. For example, a contextualised empirical study can be done to explore teacher educators' subjective theories about mathematics and teaching and learning mathematics as well as teaching to teach mathematics in the context of Rwanda.

7.1.4 Conceptual research

The results of this study especially the educational and professional background of sampled teacher educators show that they are either trained as teachers or subject specialists (4.2 & 5.1). They seem to be either untrained or ill-trained concerning teacher professionalisation. Moreover, specialised knowledge and competences of teacher educators are yet to be conceptualised in the context of Rwanda. Consequently, there is a need for conceptual research concerning the formalised in-service training for teacher educators: Which content? Which competences? Which approaches for professional development of teacher educators?

Moreover, especially on the basis of the theoretical contextualisation of the results of this study (6.2) as well as the critical role of subjective theories in quality of teacher education (Martinez et al. 2017; Fives & Gill, 2015), further conceptual research is needed to conceptualise the integration of subjective theories in the curriculum of teacher education.

7.2 Implications for policy and practice of teacher education

In addition to scientific stimulations, the study at hand ignites further political and practical reflections concerning teacher education as well as the professional development of teacher educators.

Implications for policy of teacher education

This study focused on teacher educators, their professional status and development are not recognised in the context of Rwanda. Accordingly, it could be interesting to reflect the explicit integration of the status of teacher educators in educational policies. Moreover, their professionalisation is limitedly reflected in the context and based on their critical role in quality teacher education, there is a need for policy guidelines concerning the professional development of teacher educators. The policy could include not only the organisation and professionalisation of prospective or in-service teachers but also the section on the status and professional identity and professional development of teacher educators.

Implications for the practice of teacher education

The results of this study stimulated practical implications regarding the improvement of teacher education. They include in-service pedagogical training for teacher educators and subjective theories in teacher education, enhancement of their professional learning through self-studies, professional learning communities and networks, nexus research-practice in teacher education and establishment of Programme of Educational Research on Subjective Theories.

Professional development of teacher educators and subjective theories in teacher education

Basing on the results of the study at hand especially the educational and professional profile of teacher educators especially the lack of specific training on teacher professionalisation: How to professionalise teachers? The typology of subjective theories held by teacher educators in Rwanda is likely to be conducive or hindrance to quality education, there is a need for systematic certifying training for teacher trainers primarily on teacher professionalisation. Therefore, the conception, experimentation, and validation of training modules for teacher educators in Rwanda is a necessity for the systematisation of teacher educator professional development.

In relation to subjective theories held by both teacher educators and student teachers, there is a need for the integration of reflections on changing/developing subjective theories in teacher education practices. In this regard, active and cognitively and interactively activating methods (cfr. Krogull et al., 2014) with reflectivity, self-reflectivity, and self-reflexivity could likely bring awareness and possibly change/shape of subjective theories. Reflective approaches like journal writing, case studies, portfolios, lesson analysis, group seminars, autobiographical memos, self-study, problem-solving tasks project-based learning and action research (Robinson & Mogliacci, 2019: 18-19; Tezgiden Cakcak, 2016: 126-128) could be used. Such approaches could serve as a contribution to deep learning likely to change and develop subjective theories of both teacher educators and student teachers. Accordingly, cognitive activation by complex tasks, without forgetting other dimensions of quality teaching (Baumert and Kunter 2006) could be explicitly integrated into in-service training for teacher educators and initial teacher education (Niyibizi, 2021: 118) as a tool for changing and shaping teacher educators and student teachers' subjective theories (Baumert & Kunter, 2013: 182).

Professional learning through self-study, professional learning communities, and networking

Research on subjective theories indicated that they are shaped by professional experiences teachers or teacher educators may have undergone. In these perspectives, learning from and with student teachers, and peer teacher educators within and between teacher education institutions could reinforce the professional learning of teacher educators including change/development of subjective theories. On the one hand, professional learning communities of teacher educators and student teachers could be organized in the form of explicit role modelling: mirroring teacher educators' teaching practice. This can be for example the reflection on the underlying theoretical background, and limitations, and reflecting contextuality of the possibilities to adopt the same approach in their prospective teaching practice (Lunenberg et al., 2007: 590-592). For example, in what conditions, contexts and approaches can an approach used at teacher education be used at another level of teaching? For instance, how can a strategy used at university-based teacher education be reflected to be transferred to the secondary school education level? Moreover, peer professional learning communities could be established to facilitate peer feedback and collaborative reflection on their teacher training practices. In this orientation, intra- and inter-institutional professional learning communities could be enhanced. More than that, teacher educators should be encouraged to network with teacher education institutions at national, regional, and global levels learning from and with teacher educators from different backgrounds and perspectives. Different learning opportunities like staff exchanges, joint seminars, and learning through encounters are likely to promote professional learning. Finally, reflective practice in form of either self-study (Swennen, 2014) or professional self-reflective practice to learn from their practice could be initiated.

Nexus research-practice in teacher education

The results of the study revealed that scientific knowledge is not referred to as far as teacher educators' subjective theories are concerned (6.2.1.1).

To facilitate their professional development especially, professional competences for quality teacher education without forgetting the process of changing/developing subjective theories, there is a need for research-practice nexus. This implies the establishment of mechanisms for making teacher education centres of research on teacher education. Additionally, teacher education should be based on contextualised evidence-enlightened practice in teacher education to foster scientific theories in teacher education.

Programme of Educational Research on Subjective Theories

Based on the critical role of subjective theories in educational quality (Fives & Gill, 2015 & Martinez et al., 2017), the paucity of scientific research in the context of the study including the rarity of discourse on this topic and the findings of this study (5.2), their theoretical contextualisation (6.2) which, all, stimulated further scientific (7.1), political and practical implications (7.2); there is a need of establishing a “*Programme of Educational Research on Subjective Theories*”. The programme is reflected to accommodate knowledge generation and sharing on subjective theories (see 7.1) for example. Research may include but not be limited to cross-sectional, longitudinal and action-related reflecting the plurality of the perspectives subjective theories may be reflected in education. Moreover, the programme may extend its scope beyond research. It can, likewise, focus on knowledge sharing through seminars, conferences, and workshops for political and practical implications as far as subjective theories in education are concerned. Different stakeholders like teacher educators, teachers, student teachers, and institutions like teacher education colleges, universities, non-governmental organisations intervening in education, and schools could benefit from this programme.

Subjective theories in education: Yes, but not alone

The results of this study on subjective theories of teacher educators are a contribution to the discourse on educational quality in Rwanda and possibly similar contexts. Moreover, implications for research, policy and practice (chapter 7) can serve for further discourse on the topic. However, this should go hand in hand with addressing other challenges to educational quality in Rwanda and similar contexts. They include but are not limited to equitable financing in education, internal and external efficiency like dropout, repetition, transitions and learning outcomes. Moreover, enhancing networking for mutual learning: intra- and inter-institutional, regional and international is of great necessity as well as changing the paradigm of pedagogy from teacher-centred to transformational teacher education.

Final statement

It must be pointed out that the knowledge resulting from the examination of teachers' subjective theories justifies granting a central place to the line of research within studies on teachers' professional knowledge, since its contributions not only improve our understanding of teacher education, but also orient the change processes necessary for their professional development (Martinez et al., 2017: 14).

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Appendices

Appendix 1: Guide for the semi-structured interview (in English)

To have more details about development and related quality control, see 4.3.1 & 4.3.2.

Introduction: I am Emmanuel Niyibizi. I thank you for having accepted to spare your time and share your experiences. I am interested to have more knowledge and experiences about teacher education in Rwanda. In this regard, I am interested to learn from your experiences as the one who teaches in TTC, faculty of education. Information provided will be treated confidentially and used only for the purpose of the study. To save our conversation for future use, I would like to kindly ask you if you could allow me to record.

Sub-themes	Questions
Initial question	<ul style="list-style-type: none"> You told me that you teach at TTC, Faculty of education, could you tell me more about your work as a teacher trainer?
Questions for in-depth data	
Self-understanding as a teacher of teachers	<ul style="list-style-type: none"> You are a teacher of teachers, what does it mean for you to be a teacher of teachers? Tell me
Teacher professionalism	<ul style="list-style-type: none"> How do you prepare your students to become good teachers? Tell me. Could you help me understand what a good teacher educator does? Or could you help me understand how a good teacher educator looks like? How does good

	teacher education look like? How does bad teaching teachers look like?
Beliefs about quality teaching and a good teacher	<ul style="list-style-type: none"> • Basing on your experiences, what makes for you a good teacher? Could help me understand this by examples from your teaching practices? For you, what makes bad teaching? Tell me, what does a good teacher do? Or tell me how does a good teacher look like?
Final question	<ul style="list-style-type: none"> • Is there anything else you would like to share with me about what we have been talking about?

Examples of probes: Could you help me understand more about ..., you talk about ...could you, please, help me understand more about ..., could you please clarify ... for me to understand it more, I still like you tell me more about, could you tell me more about..., could you please give me examples of...

Appendix 2: Guide for the semi-structured interview (in Kinyarwanda)

Intangiriro: Nitwa Emmanuel Niyibizi. Ndagushimira kumpa uyu mwanya ndetse no gusangira ubunanibonye bwanyu nk'umwarimu w'abarimu. Ikinshishikaje ni ukwiyungura ubumenyi ndetse n'ubunararibonye cyana cyane bijyanye no kwigisha barium mu Rwanda. Ni muri urwo rwego nifuzza kwigira ku bunararibonye bwanyu nk'umwarimu wigisha mu ishuri nderabarezi / ishami ry'uburezi. Amakuru mumpa azakoreshwa mu buryo bw'ibanga kandi mu ntego z'ubu bushakashatsi

gusa. Mu rwego rwo kugira ngo amakuru yose nshobora kuyakurikirana ndetse kuyifashisha nyuma y'ikiganiro nabasaba ko mwampa uburenganzira ngafata amajwi.

Ingingo	Ibibazo
Ikibazo nyinjirakiganiro	Mwambwiye ko mwigisha abarimu mu Ishuri Nderabarezi / Ishami ry'uburezi, ese umurimo wanyu wo kwigisha abarimu uteye ute?
Ibibazo byimbitse	
Ibyiyumviro byihariye bijyanye no kuba umwarimu w'abarimu	Uri umwarimu w'abarimu. Ese kuri wowe bivuze iki kuba mwarimu w'abarimu? Mbwira nguteze amatwi
Gutegura abarimu	Ese mutegura gute abanyeshuri banyu ngo bazavemo abarimu beza? Mbwira, ndashaka kukwigiraho. Ese umwarimu w'abarimu akora ate? Ese ni ibiki biranga umwarimu w'abarimu mwiza? Ese gutegura / kwigisha abarimu u kwiza /gukwiye/ gufite ireme ni ukumeze gute? Ese kwigisha abarimu kudakwiye ko kwaba kumeze gute? Kwaba kurangwa ni iki?
Imyemerere ku birebana no kwigisha kwiza ndetse n'umwarimu mwiza	Mushiniye ku bunanararibonye bwanyu, ni ibiki bigaragaza kwigisha kwiza/ gukwiye? Ese mwamfasha kumva neza ibyo muri kuvuga mwifashishije ingero mu kazi kanyu ko kwigisha abarimu? Ese kuri wose, ni ni iki kiranga kwigisha kwiza/ gukwiye? Mbwira ndashaka kukwigiraho. Ese umwarimu mwiza akora ate? Ese umwarimu mwiza arangwa ni iki?
Ikibazo nsozakiganiro	Ese hari ikindi mwumva mwansangiza kijyanye n'ibyo twaganiriye mwaba mutigeze gukomozaho kandi mubona ari ingenzi kunsangiza

Ingero z'ibibazo bishishikariza gusubiza: Mushobora kumfasha kumva byinshi kubyerekeye..., uravuga ..., mwavuze kuri ..., ese mwamfasha kumva birushijeho icyo mwashakaga kuvuga? ... Ese ushobora gusobanura birushijeho ... Ndashaku kumva birushijeho ..., ushobora kumbwira ibindi kubyerekeye ..., ushobora kumpa ingero za... mwambwira...

Appendix 3: Guide for the semi-structured interview (in French)

Introduction: Je suis Emmanuel Niyibizi. Je vous remercie d'avoir accepté de consacrer votre temps et de partager vos expériences. Je suis intéressé à avoir plus de connaissances et d'expériences sur la formation des enseignants au Rwanda. À cet égard, je suis intéressé à apprendre de vos expériences en tant que personne qui enseigne à TTC, faculté d'éducation. Les informations fournies seront traitées de manière confidentielle et utilisées uniquement dans le cadre de cette étude. Dans le but de conserver les informations et de les utiliser par la suite, je vous demande de bien vouloir accepter que j'enregistre notre dialogue.

Thèmes	Questions
Question initial	Vous m'avez dit que vous enseignez à la TTC, Faculté d'éducation, pouvez-vous m'en dire plus sur votre travail de formateur d'enseignants ?
Questions pour des données approfondies	
Compréhension de soi en tant qu'enseignant d'enseignants	Vous êtes un enseignant d'enseignants, qu'est-ce que cela signifie pour vous d'être un enseignant d'enseignants? Dites-moi
Professionnalisation de l'enseignant (e)	Comment préparez-vous vos étudiants à devenir de bons enseignants? Dites-moi. Pourriez-vous m'aider à comprendre ce que fait un bon formateur d'enseignants? Ou pourriez-vous

	m'aider à comprendre à quoi ressemble un bon formateur d'enseignants? A quoi ressemble un bon formateur d'enseignants? A quoi ressemble un mauvais formateur d'enseignants?
Convictions sur la qualité de l'enseignement et les bons enseignants	Sur la base de vos expériences, qu'est-ce qui fait pour vous un bon enseignement? Pourriez-vous m'aider à comprendre cela par des exemples tirés de vos pratiques d'enseignement? Pour vous, qu'est-ce qui fait un mauvais enseignement? Dites-moi, que fait un bon enseignant? Ou dites-moi à quoi ressemble un bon enseignant?
Question finale	Y a-t-il autre chose que vous aimeriez partager avec moi à propos de ce dont nous avons parlé?

Exemples de questions de stimulation: Pourriez-vous m'aider à mieux comprendre ..., vous parlez de ..., pourriez-vous, s'il vous plaît, m'aider à mieux comprendre ..., pourriez-vous clarifier ... pour que je comprenne mieux, j'aimerais toujours que vous m'en disiez plus sur, pourriez-vous m'en dire plus sur ..., pourriez-vous me donner des exemples de ...

Appendix 4: Background questionnaire of interviewees

The background questionnaire is about collecting data about personal, educational and professional information about interviewed teacher educators in relation to the sampling table (for more details, see 4.3.1)

I. Personal information

1. Age:

2. Gender: Female Male

II. Educational background

3. Qualification:

4. Areas of specialization:

III. Professional background

5. Work experiences:

a) As a teacher (in years):

b) As a teacher educator (in years):.....

c) Other, indicate how long:

6. Subject taught:

7. Academic Rank:

8. In-service training:

• Subject related:

• General Pedagogical:

• Pedagogical Content Knowledge:

• Others (specify).....

IV. Institutional background information

Type of institution: Private Semi-Public Government-Aided

9. Levels of teacher training:

TTC Higher education 10. Location of the institution: Urban Semi-Urban Rural

11. Additional academic and administrative responsibilities:

Appendix 5: Anonymisation of interviewees and institutions

No	Interviewees	Institutions	No	Interviewees	Institutions
1	Aigle	Mali	17	Fauve	Central African Republic
2	Amavubi	Rwanda	18	Fennec	Algeria
3	Bafana	South Africa	19	Flame	Malawi
4	Banyana	South Africa	20	Harambee	Kenya
5	Baréa	Madagascar	21	Hirondelle	Burundi
6	Black Star	Ghana	22	Kilimamjaro	Tanzania
7	Bleu	France	23	Léopard	DRC
8	Bright Star	South Sudan	24	Lion	Cameroon
9	Crane	Uganda	25	Mamba	Mozambique
10	Crocodile	Soudan	26	Mena	Niger
11	Diable Rouge	Congo	27	Ocean Star	Somalia
12	Dodo	Mauritius	28	Oranje	The Netherlands
13	Dragon	China	29	Palanca	Angola
14	Eagle	Nigeria	30	Pharaoh	Egypt

15	Elephant	Ivory Cost	31	Quina	Portugal
16	Etalon	Burkina Faso	32	Scorpio	Gambia

As indicated (chapter 4.3.2 & 4.6), the interviewees were anonymised for confidentiality. Therefore, names of the interviewees were covered by names of national football team in singular. Additionally, their teacher education institutions were anonymised by names of the countries related to the national football teams. For example, the national football team of Nigeria is Eagles. Accordingly, Eagle was used to cover one interviewee and Nigeria was used to cover the teacher education institutions the same interviewee teaches.

Appendix 6: Sampling table

Aspect	Description	Aigle	Amavubi	Bafana	Banyana	Baréa	Black Star	Bleu	Bright Star	Crane	Crocodile	Diabie Rouge	Dodos	Dragon	Eagle	Elephant	Etalon	Fauve	Fennec	Flame	Harambee	Horondelle	Kilimanjaro	Léopard	Lion	Mamba	Ména	Ocean Star	Oranje	Palanca	Pharaon	Quina	Scorpio	
Gender	Female	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Male	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Age	21-30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	31-40	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	41-50	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	51 and above	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Qualification with Education	A1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	A0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Master	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	PhD	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Qualification without Education	A0	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Master	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	PhD	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Experiences as teacher	1-5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	6-10	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	11 and above	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Experiences as teacher educator	1-5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	6-10	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	11 and above	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Category of the institution	University	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	College/TTC	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Nursery & Primary	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Secondary teacher training	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Secondary teacher	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Subject taught	Education related	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Maths & Sciences	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Arts and Humanities	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Social sciences	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	Languages	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Status	Public	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Government aided	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Private	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Location	Urban	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Semi-urban	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Rural	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
In-service training	Subject didactics	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	General/peda	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Additional responsibility	TE (-)	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
	TE (+)**	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**TE (-) Teacher educator without additional responsibilities
 **TE (+) with additional academic responsibilities like dean, head of departments

The sampling table indicates the summary of the variety of the characteristics of interviewed teacher educators which, progressively guided the

data collection until saturation at the 32nd interviews (see in detail 4.3.2 & 4.4.2). As far as gender is concerned, for example, a half of interviewees is female. During the empirical part, it was realised that some teacher educators hold different academic and administrative responsibilities. Accordingly, this was added in the sample table. Therefore, fourteen interviewees have additional responsibilities including in-service teacher trainer, author of school textbooks, and head of a unit at university like faculty and directorate.

Appendix 7: Deductive coding system

Quality Teacher education (Darling-Hammond, Hyer & Gardner, 2017; Korthagen et al, 2006; Lunenberg et al., 2007 & Loughran, 2006; Izadinia, 2012; Bai & Ertmer, 2008; Abar et al., 2013; etc)		
	Traditional/ behaviourist (technical-rationality model)	
	Methods of teaching	Teacher- and content- centered methods,
	Learning climate	Hierarchical relationship, failure-related fear, quiet classroom
	Classroom management	Highly structured & Imposed rules and regulations, use of severe punishment,
	Assessment	Standardized: assess predetermined knowledge and processes
	Training process	Transmission of subject knowledge and specific teaching methods
	Training of practice	Imitate and use specific methods of teaching as learnt
	Modelling	Unawareness
	Constructivist and transformational	
	Methods of teaching	Learner-centered orientation Competency-oriented: Activating methods, contextualization
	Teaching-learning climate / environment	Good relationship with student teacher, errors accepted, respect, initiative and responsibilities for students, laughing, high expectations
		Respect and tolerance of students' diversity /heterogeneity
	Classroom management	Students' participation in setting rules and regulations, de-escalation
	Assessment	Self, peer and formative assessment used
Professional training	Feedback and reflection	
	Learning communities	
Professional practice	Micro-teaching, practicum (internship), teaching practice, lesson observation (at demonstration school)	
Reflective practice	Meta-learning (reflecting their own learning)	
	Meta-teaching (reflecting teaching)	
Modelling (Lunenberg & Swennen, 2007; Korthagen, Loughran & Russell, 2006; Loughran, 2006)	Implicit (aware of being role model for student teachers)	
	Explicit modelling (reflecting theory behind teaching, why of the teaching practice, and implications for future student teachers' practices)	
	Co-teaching among teacher educators	
Mixed (traditional & constructivist)	Holding both traditional and constructivist beliefs	
Quality teacher educator (Lunenberg & Swennen, 2007; Korthagen, Loughran & Russell, 2006; Loughran, 2006).		
Teacher educator' characteristics (personal, ethical, social)		
Qualification and professionalism		
	Qualification	Having a degree/certificate in education
	Professional Knowledge (content, general pedagogical, pedagogical content and context Content / subject knowledge	

	Professional competence	Reflective & reflexive
		Action-Related
	Professional learning	Individual (portfolio, self-development, learning culture)
		Group (seminar, workshop, coaching/ mentorship, ...)
		Networks (with other schools, institutions)
Role model (Lunenberg, Korthagen & Swennen, 2007; Korthagen, Loughran & Russell, 2006; Loughran, 2006)	Implicit	
	Implicit (aware of being role model for student teachers)	
	Explicit modelling (reflecting theory behind teaching, ...)	
Researcher		Doing research in teacher education related topics

The deductive coding system was developed on the basis existing literature on subjective theories (especially of teachers). More details about the deductive coding system can be found in 4.4.2.

Appendix 8: Deductive- inductive coding system

Perception of teacher education (+)	
	Previous teaching and learning experiences
	As result of training
	As innate/vocation/calling
	As difficult/ challenging
	As good job
Subjective theories/ beliefs	
Educational quality	
Good teacher	
	Teacher as important in the community
	Teacher's characteristics
	Teaching profession
	Professionalism
	Experience
	Qualification
	Professional knowledge
	Professional competence
	Professional learning (in-service, peer learning, ...)
Quality/good teaching	
	Consideration of students
	Logical sequences
	Research
	Teaching aids
	Formalities
	Mastery of content
	Adaptation of content
	Correctness of knowledge
	Clarity of teaching
	As collaborative venture
	God-driven inspiration
	Implicit teaching by example
	Value-oriented teaching
	Integration of ICT in teaching
	Feedback
	Preparation/ planning (+)
	Teaching approaches
	Learner & competence oriented
	Teacher & Content centered/transmission/formalities
	Mixed (teacher & teacher-centered)
	Individual support

Inclusiveness: respect & tolerance of diversity
Learning climate & Relationships
Classroom management
Assessment
Good teacher educator
Teacher educator's characteristics
Professionalism
Qualification
Professional Knowledge
Professional learning
Professional competence
Quality teacher education
Motivation
Culture of learning
Content of teacher education
Purpose / mission
Training for reading
Value-oriented training
International orientation of teacher education
Theoretical training
Teaching aids
Feedback
Professionalisation of student teachers
Compliance with formalities
Preparation/ planning
Methods of training
Student teacher- & Competence-Oriented
Teacher & content-oriented
Mixed (learner- & teacher-oriented)
Individual support
Respect & tolerance of diversity/inclusiveness
Learning climate
Classroom management
Assessment
Practical training
Role modelling
Approaches/ methods of practical training
Professional support to student teachers
Reflective practice: Meta-teaching, -learning
Mixed: Theory & Practice
Other learning opportunities

Source: From MAXQDA

During the process of coding of the transcripts, the deductive coding was enriched by inductive codes as emerged from interviews. Therefore, the above table summarized the deductive-inductive coding system. As example of inductive, value-based teaching, implicit teaching and international orientation of teacher education inductively emerged during the study data collection along with coding interviews (see also 4.4.2 & 4.4.3)



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This study focuses on exploring subjective theories of teacher educators about quality teaching in the context of their profession in Rwanda. It is based on determinant role of subjective theories in educational quality improvement. Additionally, teacher educators are the driving forces due to their role in the initial and continuous teacher education.

However, empirical research on teacher educators' subjective theories is very limited in the Global South including Rwanda. Due to the exploratory nature this study, a qualitative approach using semi-structured interviews was used to collect data from 32 teacher educators theoretically sampled.

Using content analysis, iterative deductive-inductive process as well as the generalisation of results through abduction, the results show that interviewed teacher educators have four ideal types of subjective theories. They include subjective theories focusing on: formalities by compliance (following pedagogical and administrative formalities); knowledge by transmission (transmission of immutably prescribed knowledge); behaviour by imitation (learning by imitation) and competences by co-construction (development of competences through active, interactive and reflective approaches). The generated typology enlightens research, policy and practice regarding quality teaching and teacher education in Rwanda and possibly similar contexts.



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