

Secondary Publication



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Change of perspective in transformation processes : A case study of online teaching targeting underserved adult students

Date of secondary publication: 21.05.2026

Version of Record (Published Version), Article

Persistent identifier: urn:nbn:de:bvb:473-irb-115215x

Primary publication

Ress, Susanne; Njobati, Frederick F.; Scheunpflug, Annette (2025): Change of perspective in transformation processes : A case study of online teaching targeting underserved adult students, in: International review of education, Dordrecht [u.a.]: Springer Science + Business Media B.V., Vol. 71, pp. 137–158, doi: 10.1007/s11159-024-10097-3.

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Change of perspective in transformation processes: A case study of online teaching targeting underserved adult students

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Accepted: 24 June 2024 / Published online: 6 February 2025
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Abstract

This article draws on a case study of an international master's degree programme in educational quality and leadership for senior professionals in sub-Saharan Africa. It reflects the experience of adapting a blended learning approach to a purely online format in response to pandemic-induced lockdowns and travel bans in 2020–2021. Based on this case study, the authors propose a model for a change of perspective in transformation processes targeting underserved adult students which combines insights from complex problem-solving with culturally responsive teaching (CRT). The article highlights the vitality of intentional changes of perspective reified through systematic communication with relevant stakeholders, networks and (new) partners. The authors demonstrate that managing change has instructional, operational and emotional components. Their article contributes to the scholarship on lifelong learning by offering in-depth reflection on a rapid transformation process addressing *reflexivity*, *resources* and *ethics of care* as key dimensions.

Keywords adult education · underserved students · online learning · online teaching · culturally responsive teaching · complex problem-solving · ethics of care

Résumé

Changement de perspective dans les processus de transformation : une étude de cas sur l'enseignement en ligne destiné aux étudiants adultes mal desservis – Le présent article s'appuie sur une étude de cas d'un programme international de master en

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qualité et leadership de l'éducation destiné aux cadres en Afrique subsaharienne. Il examine l'adaptation d'une approche d'apprentissage mixte à un format entièrement en ligne, en réponse aux confinements et aux interdictions de voyager en lien avec la pandémie durant la période 2020–2021. À partir de cette étude de cas, les auteurs proposent un modèle de changement de perspective dans les processus de transformation qui visent les étudiants adultes mal desservis en combinant des points de vue issus de la résolution de problèmes complexes avec un enseignement culturellement réactif (Culturally Responsive Teaching, CRT). L'article met en lumière le dynamisme des changements de perspective intentionnels qui se concrétisent par une communication systématique avec les parties prenantes, les réseaux et les (nouveaux) partenaires. Les auteurs démontrent que la gestion du changement comporte des dimensions pédagogiques, opérationnelles et émotionnelles. Leur article contribue à la connaissance scientifique de l'apprentissage tout au long de la vie en offrant une réflexion approfondie sur un processus de transformation rapide axé sur trois dimensions clés : la *réflexivité*, les *ressources* et *l'éthique du care*.

Introduction

The global public health crisis of 2020–2021 rapidly elevated the issue of digitalisation in education as it forced schools, colleges and universities to switch to distance education. Since then, evidence has been mounting that this sudden shift reinforced existing social inequalities. Underserved student populations (i.e., cultural minorities, low-income students, students in remote areas, or those at risk of dropping out) who lacked skills and adequate access to technology were disadvantaged (Dube 2020; Devkota 2021; Drane et al. 2021; Manzoor and Bart 2021; Mathrani et al. 2021). Addressing social inequalities requires giving close attention to access and quality of teaching (Clark et al. 2021; Espasa and Meneses 2010), which is especially challenging in emergencies, and even more so in under-resourced educational contexts (Faturoti 2022). Moreover, education programmes targeting underserved students are often implemented by teachers and administrators in socially and culturally privileged positions whose everyday lives differ significantly from those of their students in terms of access to resources, predictability, experiences of trauma, and more (La Salle et al. 2020).

This article argues that a *change of perspective* is a key component of transformation processes aimed at achieving access and quality while considering privilege. Based on a case study of an international master's degree programme on educational quality and leadership developed for senior education professionals in sub-Saharan Africa (henceforth referred to as MA programme), we suggest a model for an intentional change of perspective in transformation processes targeting underserved adult students (henceforth referred to as students) in under-resourced and highly volatile contexts. Combining insights from complex problem-solving and culturally responsive teaching (CRT), the model maps *reflexivity*, *resources* and *ethics of care* as dimensions which offer distinct opportunities for changes of perspective.

We begin with a review of the literature on online teaching targeting underserved students and describe the conceptual framework of the study. Next, we explain the

context and methodology of the case study. Third, we describe the experiences of rapid transformation from blended learning to a purely online learning format. Fourth, we infer a model of a change of perspective along the dimensions of reflexivity, ethics of care and resources. We conclude our article with recommendations for educators and policymakers.

Literature review

Online education is increasingly used to reach underserved students (Smith et al. 2005; Adedara and Onwuegbuzie 2014). However, inquiries into enabling factors remain scarce despite warnings that online formats can create new access barriers (Edmonds and Li 2005). In a study on how providers of online education serve or fail to serve at-risk students, Regina Figueiredo-Brown (2013) describes access to resources and culturally relevant teaching as key to successful online teaching. Financial, technical, social and emotional resources are needed to remove barriers to access and participation and to build inclusive modes of communication with peers and teachers to avoid boredom, enhance students' self-efficacy and build trust (Payne et al. 2023).

An issue rarely broached in the literature is that educational services targeting underserved students are often delivered by teachers and administrators whose cultural and socioeconomic backgrounds differ markedly from those of their students (La Salle et al. 2020). Understanding students' needs demands a conscious shift between different ideas of normality. Culturally responsive approaches treat students as autonomous and self-responsible subjects (Ladson-Billings 2009 [1994]) in educational settings which support and respect students rather than viewing their circumstances and abilities from a deficit perspective (Figueiredo-Brown 2013).

Responding to underserved students' needs places particular responsibilities on teachers. Research shows that online teaching which combines content with motivation and personal investment in student-teacher communication increases students' engagement (Lehman et al. 2001). The role of teachers as facilitators is a vital dimension of quality online education (Seetal et al. 2021; McCombs and Vakili 2005). Commitment, self-regulation, emotional reflexivity and interpersonal communication skills are essential in promoting productive interactions in online teaching and learning through various modes of communication (e-mail, video chat, text messaging, etc.). The ability to nurture a positive culture of online teaching depends on a teacher's willingness and ability to engage with students in a highly individualised manner (Moser 2016), thereby potentially exposing teachers to their own vulnerability or their students' prowess (Song 2022; Zembylas 2008).

In the process of developing an online education programme for students in under-resourced education systems in various African countries, especially the Great Lakes Region of Central Africa, this article poses the following research questions (RQs):

RQ1 What instructional, organisational and emotional components are involved in creating a culturally responsive online education programme?

RQ2 How can these components be systematised into a model for a change of perspective which accounts for divergent privileges on the part of the educators?

Conceptual framework

Transformation processes represent problems consisting of a given situation, a desired situation, and obstacles. Problems are solved by applying a series of operations which nudge a given situation towards a desired situation (Funke 2003). If all aspects of the problem are known, it is merely a task. Transformation processes however target complex social realities. Complex problems are defined as spaces which contain many variables which are dynamically interrelated, opaque and influence each other in unpredictable ways with contradictory results (Frensch and Funke 1995; Dörner 1996). Complex problem-solving involves several operations: elaborating goals, forming hypotheses, prognosis, monitoring, and reflection (Dörner and Schaub 1994). The ability to perform these operations may be limited by cognitive capacities, the need to preserve self-esteem, and the high salience of current tasks, which can lead to reductive assessments. The subsequent collection of information thus tends to confirm prior hypotheses rather than providing input to help grasp complexity; this phenomenon is sometimes referred to as “cognitive fixation” (Ramos 2020).

To evade these shortcomings in human perception, a model for a constant change of perspective is needed which supports reflexivity to avoid “getting stuck” or “chasing a magic bullet”, especially in unfamiliar situations. After identifying the problem and describing the desired outcome, the first steps are to collect information and develop potential scenarios for how to act upon the problem situation. *Scenarios* are internally coherent, plausible descriptions of possible futures used in long-term decision-making or in short-term decision-making with long-term consequences (Amer et al. 2013; Mahmoud et al. 2009). Scenario development results in multiple, equally possible ideas for next steps. It offers a multi-perspective approach to prognosis which avoids the pitfalls of reductive assessment.

The case study we present in this article analytically combines an understanding of complex problems with aspects of culturally responsive teaching (CRT) in online settings to propose a model for a change of perspective in a North–South relationship marked by unequal access to resources and differing degrees of privilege. *Culturally responsive teaching* implies a racially encoded notion of culture which risks reproducing colonial hierarchies of difference (Schmeichel 2012). A transfer of the concept to North–South constellations of education for development is thus problematic. However, when Gloria Ladson-Billings developed the concept (Ladson-Billings 2009 [1994]), it was highly innovative since it shifted the focus away from students to contextual factors including teachers’ responsiveness to systemic rather than individual limitations. It is this connotation which we employed in

our case study. The model presented here aims at describing “enabling conditions” akin to Martha Nussbaum’s capability approach (Nussbaum 2015), and how to create them for students who work in under-resourced and highly volatile contexts in sub-Saharan Africa. Although the conceptualisation goes beyond notions of “culture”, the reproduction of “us” versus “them” continues to be prevalent in the MA programme, most notably when it comes to negotiating what counts as knowledge. Yet, the model builds on the Spivakian understanding that privilege comes with its own limitations in experience and perspective (Spivak 2004).

Context

This section introduces the international MA programme which was the subject of the case study on which this article is based. It describes students’ background and the shift to online teaching and learning.

The International Master’s programme

The MA programme is funded by the German development organisation *Brot für die Welt* (Bread for the World) which, in turn, is co-funded by the Protestant churches of Germany and the German Ministry of Economic Cooperation and Development (BMZ). The MA programme was established in 2013 as a small-scale seed initiative which would evolve over time into an MA programme and higher education hub in the Great Lakes region of Central Africa. Initially, administrative responsibilities lay with the Protestant University of Rwanda (PUR) and academic responsibilities with the University of Bamberg (UNIBA). Since 2022, partners have been in the process of transferring academic responsibilities to PUR as well. A steering committee comprising representatives of all partners meets once per semester to report on activities, reflect on changes and take joint decisions.

Entitled “International Master Programme in Educational Quality (IMPEQ)”, the MA programme trains educational leaders, teacher trainers and education researchers in a blended learning programme.¹ It overcomes the shortcomings of other degree programmes which require students to leave their home countries, families and employment to study abroad full-time. Students are recruited primarily from schools in the Protestant education system. A legacy of the colonial era, these faith-based, government-aided, low-fee schools are an important part of the educational landscape in many African countries. For instance, churches of different denominations run 80 per cent of schools in the Democratic Republic of the Congo (DRC) and 60 per cent of schools in Rwanda and Burundi (Scheunpflug and Wenz 2015). The languages of instruction are English and French.

¹ The IMPEQ profile is available at <https://www.uni-bamberg.de/ma-educationalquality/profile-of-the-programme/> [accessed 13 January 2025]. The background and rationale of the programme are available at <https://pur.ac.rw/mquam?value=1> [accessed 13 January 2025].

The MA programme is organised into 15 modules covering theories of educational quality, normativity, quality development at system, school and classroom levels, international educational assessments, research and evaluation methods, project management, leadership and theories of change (*documents*).² Prior to 2020–2021, teaching alternated between five in-person block seminars in Rwanda and Germany and self-learning periods while students continued working.³ In-person periods are four weeks long and cover four modules, oral and written exams, and advisory sessions. During self-learning periods, students write seminar papers, implement small-scale projects and conduct research. Throughout the MA programme, students receive substantial in-person and online feedback based on their individual learning (*observations*).

The MA programme admits 20 students every two years. Students comprise school system coordinators, quality assessment officers, pre-/in-service teacher trainers, school principals and department heads. By the end of 2023, more than 100 students from twelve countries had graduated from the MA programme. Students' average age is 40. About one-third of them are women. About ten per cent have been promoted within their organisations and about 15 per cent have pursued a PhD since completing the MA programme (*statistics*). The alumni network holds annual conferences, prepares publications, conducts further training, and realises joint research projects. External evaluations in 2017 and 2021 have documented the programme's relevance to students' professional contexts (*documents*).

Student contexts

The cohort affected by the global pandemic started in September 2019. It included 23 students (11 female, 12 male) from eight countries (Rwanda, DRC, Cameroon, Burundi, Tanzania, Zambia, Liberia and South Sudan), located across four time zones. According to the Fragile State Index (Messner de Latour et al. 2020), all of these countries are fragile or are at risk of fragility. Conflicts dominate students' private and professional lives. They regularly experience economic hardship and suffering and navigate unstable environments which include shortages of learning materials, power outages and unstable internet connectivity (Kasereka Lutswamba 2022). Students are often the primary provider for up to ten immediate and extended family members, contributing to school fees, weddings, funerals and medical costs (*observations*).

Shifting from in-person to online teaching requires access to internet and IT equipment. According to the ICT Development Index, sub-Saharan African countries are among the least technologically equipped countries in the world (ITU

² As we explain in more detail later on in the Methodology section, data collection included participatory observations, a student baseline survey, internal documentations, teaching evaluations and external evaluations. Here, in the Context section, we already provide the relevant method in italics in a bracket for each type of information emerging during our research.

³ The study programme is full-time, but organised into block sessions, which allows students to continue working in their day jobs.

2017). Although bandwidth has improved, ICT infrastructures are uneven across the region. Coastal countries are generally better equipped than countries of the interior (Sarkar et al. 2015). Costs for mobile data and fixed broadband internet continue to be significantly higher than in other world regions (ITU 2017). Research has shown that internet access has particularly strong positive effects in low-income countries (Asongu and Odhiambo 2019). Yet, the high direct costs still prevent many young people from acquiring digital skills (Pinet et al. 2021), despite a growing uptake (Cariolle 2021) and the increasing popularity of mobile phones and social media (Madge et al. 2019).

Structural and individual circumstances and financial obligations posed considerable barriers to students' online participation. Only nine per cent (2 out of 23) indicated having stable internet (*survey*). Students often used more than one provider, switching between them when connectivity fluctuated (*observations*). All of the students included in this study required additional equipment (i.e., modems) and bandwidth (i.e., data packages) to participate in video conferences (*observations*). Most (77%, $n = 17$) used messaging applications (e.g., WhatsApp) and were very familiar with texting an individual (82%, $n = 18$), creating group chats (55%, $n = 12$), making video calls (68%, $n = 15$), sending and receiving photos/videos (73%, $n = 16$), and sending and downloading documents (77%, $n = 17$). Fewer than half (41%, $n = 9$) had participated in video conferences before the shift to online teaching (*survey*).

As part of the MA programme, students were given laptops for academic writing and accessing the university's digital infrastructure (*documents*) and received training in word processing, calculation and presentation programmes (e.g., LibreOffice), creating storage systems and using remote access (e.g., VPN client) for literature research (*documents, observations*). The study cohort ($N = 23$) had completed in-person basic training prior to the rapid shift to online learning (*observations*).

Implementation timeline

Two out of five in-person study periods (one in Germany and one in Rwanda) had already taken place when the COVID pandemic reached Europe and Africa in February 2020. In order to continue the programme, five of the 15 modules were converted into online units spread across three online study periods in September 2020, February 2021 and May 2021 (*documents*). Between June 2021 and September 2022, online teaching was followed up by online exams and individual writing retreats according to students' progress and needs. In July 2021, weekly group mentoring sessions were initiated for those students who were progressing the fastest. Other students received individualised support including co-development of work plans, weekly follow-ups and detailed written feedback on seminar papers. In March 2022, online graduation was organised for most students (78%). By September 2023, 91 per cent had graduated while two students continued to study towards their degree with mentoring support (*documents, observations, statistics*).

Methodology

This article reviews the experience of shifting from a blended to a fully online teaching and learning format in 2020–2021. Our case study, which we conducted in English and French, draws on participatory observations, a student baseline survey, internal documentations, teaching evaluations and external evaluations (see Table 1).

Data analysis

Our data analysis followed Grounded Theory methodology (Glaser and Holton 2004; Strauss and Corbin 1996). Observations, documents, survey, teaching evaluation and statistical information were coded in an iterative-cyclical process and triangulated with literature (Miles et al. 2020 [1994]). Through “permanent comparison” (Falkenberg 2018; Breidenstein et al. 2013) we formed assumptions and hypotheses about instructional, operational and emotional components and recorded them in analytical memos (Mey and Mruck 2011 [2007]). We visualised components and linkages (Clarke et al. 2022 [2015]) and condensed our findings into the model for a change of perspective presented below.

Authors’ involvement in the MA programme

Our own responsibilities in the MA programme included project management (incl. finances and reporting), the provision of financial, technical and emotional support to students, communication with funders/donors and stakeholders, selecting and training mentors, developing materials for “flipped classroom” instructions,⁴ teaching, supervising seminar papers and MA theses, written and oral examinations. At the time of our study, the core programme development team included four part-time educators and one programme leader. While recognising that decolonialising higher education structures requires more than mere confession of privilege (Smith 2013), it should be mentioned that the educators involved in the programme include individuals from various backgrounds, including the students’ home countries. All team members have extensive experience in international education settings.

Experiences with online teaching of underserved students

This section describes the rapid shift from blended/in-person teaching and learning to online teaching and learning.

⁴ Blended learning includes an arrangement where students are asked to find out about a topic before class, and the teacher then guides them to actively and interactively clarify and apply their findings during class. This “flips” the more traditional classroom setting where the teacher introduces new knowledge during class and sets homework designed to make students engage with that new knowledge.

Table 1 Description of sources

Data source	Description	Data quantity
Observations	Observations conducted by the authors included participatory and informal conversations with students, alumni, teachers, administrators and other stakeholders.	Approx. 24 months of observations
Documents	Documents refer to internal documents such as funding applications, contracts between universities, project reports, financial documentations, programme module catalogue, steering committee meeting protocols, reports from external evaluations, and teaching materials.	About 25 documents
Survey	In May 2020, a baseline survey was carried out via online questionnaire distributed by messaging apps to determine students' technical equipment, internet access, and prior experiences with online teaching methods.	1 survey with 22 students
Teaching evaluation	Online teaching sessions were evaluated using questionnaires with closed- and open-ended questions.	2 online teaching sessions
Statistics	Statistics include numerical information about students, including gender, age, country of origin, completion, promotion, further education (e.g., PhD), etc.	MA programme statistics collected for each cohort

Access to online teaching and learning

The global pandemic in 2020–2021 demanded an “agile” approach to transformation. In order to tentatively develop feasible scenarios in relation to location, time and the student–mentor constellation of online study periods, the MA programme built on the contextual knowledge of stakeholders and constant monitoring of the spread of COVID. To supplement information available through news channels, the team communicated with programme alumni mostly via messaging applications. Information was reviewed in frequent staff meetings and the team compiled lists of potential obstacles to student participation (*observations*).

Collecting information, making decisions, preparing learning materials, transferring funds, and making agile adjustments to teaching and mentoring required constant communication. Due to their widespread use and relative reliability in African countries (Bobrov 2018), messaging applications were primarily used to communicate with students. Exchanges with the universities’ administrations about regulations and permissions occurred through formal online meetings, e-mails and phone calls in lieu of “hallway conversations” (*observations*).

Working with the universities’ administration and IT departments required the forging of new collaborations. For example, an online learning platform (Moodle) was initially used to provide access to learning materials (i.e., readings, podcasts, worksheets). Seventy-three per cent ($n = 16$) of students reported being able to access this platform only occasionally due to unstable internet connections (*survey*). Also, the selected online learning platform is hosted behind an institutional firewall. Each time students’ internet connection dropped due to instability (even if only for seconds), the download process stopped and students had to re-enter their account information. This made the process of downloading materials nearly impossible, except at night. Most students had sufficient connectivity only at their workplaces. Yet moving between home and work at night was often not feasible for safety reasons (*observations*). In close communication with UNIBA’s IT department, which was itself in the process of learning how to provide remote teaching to students located in Germany, the team switched to an alternative platform with lower security measures and narrower bandwidth (OneDrive) between the first and second online study periods (*observations*).

The most persistent challenges from the perspective of staff involved the provision of funds, time zone differences and extremely high workloads for team members. Harmonising university bureaucratic procedures with short-term student demands and project funding regulations represented a frequent challenge. Time zone differences were primarily a coordination issue, since all lectures, meetings and mentoring sessions had to be scheduled across four different time zones, respecting, for example, meal preparation times, which take considerably longer in many students’ contexts than in those of the instructors (*documents*). Figure 1 shows how online sessions were scheduled across time zones. Efforts to address the issue included developing work plans with start and end times for each time zone communicated to students daily during online sessions (*observations*).

In addition to systematic communication for scenario development, implementation, reflection and adjustment, the MA programme constantly monitored

Time zone information

For the online study period, IMPEQ students and staff will be located in FOUR DIFFERENT time zones. The starting time for the different activities will therefore differ between places. Please make sure that you know where your students, mentors and working group members are located before scheduling meetings and one-on-one tutoring sessions.

Time				Section
Liberia	Cameroon/ UK	Rwanda/Burundi/ Zambia/Germany/ Norway	Tanzania/ South Sudan/ Madagascar	
07:00–07:15	08:00–08:15	09:00–09:15	10:00–10:15	Morning meeting
07:15–09:15	08:15–10:15	09:15–11:15	10:15–12:15	Preparation
09:15–09:30	10:15–10:30	11:15–11:30	12:15–12:30	Health break
09:30–10:30	10:30–11:30	11:30–12:30	12:30–13:30	Online meeting
10:30–11:30	11:30–12:30	12:30–13:30	13:30–14:30	Self-learning
11:30–13:00	12:30–14:00	13:30–15:00	14:30–16:00	Lunch break
13:00–14:30	14:00–15:30	15:00–16:30	16:00–17:30	Group learning
14:30–15:00	15:30–16:00	16:30–17:00	17:30–18:00	Submit work
15:00–17:00	16:00–18:00	17:00–19:00	18:00–20:00	Self-learning
17:00–19:00	18:00–20:00	19:00–21:00	20:00–22:00	Dinner break
19:00–20:00	20:00–21:00	21:00–22:00	22:00–23:00	Self-learning

Figure 1 Example of a daily schedule during online sessions (*documents*). While all students ($N = 23$) were located in African countries, some of the MA programme teaching staff and mentors were located in the United Kingdom (UK), Germany or Norway

students' progress. The process followed a circular motion with repeated iterations to avoid bias in decision-making. At the height of the pandemic, however, decisions ultimately relied on imperfect knowledge. The objective was to interact with the situation proactively to create an inclusive format responsive to changing student contexts. The greatest motivating factor was the students themselves, who appreciated the programme's continuation despite international travel bans and lockdowns. As one student stated:

“I praise the courage of the team for being able to organise the September 2020 session which seemed hypothetical to me” (*teaching evaluation*).

This is not to suggest that everything was perfect. On the contrary, this cohort took longer to graduate (*statistics*), and students were not always able to concentrate on their studies due to professional and family demands (*observations*).

Meeting students' needs for high-quality instructions

Scaling up enabling factors for online teaching and learning in under-resourced contexts depends on the availability of resources, as this student comment attests:

“The circumstances are beyond our control. Well-structured programmes like this can go on unperturbed, but the underprivileged have no choice but to keep waiting. The virtual learning was an additional experience to the learners because the necessary means were provided, but if compared to similar programmes with less funds, would be a significant limitation” (*teaching evaluation*).

The shift to online teaching and learning depended greatly on providing financial resources directly to students so they could buy equipment like data packages (*documents, observations*).

During the two-week online study periods, virtual lectures, advanced preparation of podcasts and work assignments were combined with peer learning and highly individualised support to remedy some of the shortcomings of online learning and to address the heterogeneity of students. Virtual lectures took place in the morning. These incorporated presentations, Q&A phases and breakout rooms. Initially, lectures were pre-recorded and made available as podcasts for downloading. Live sessions were also recorded and made available for downloading. Over time, the pre-recording of presentations was replaced by the recording of live sessions. Students received handouts of all presentations and two to three worksheets to complete either in advance or after the lecture with support from peers and mentors (*documents*). Students also received remote training on asynchronous teaching and flipped classroom pedagogies (Gómez-Rey et al. 2018; Milman 2020).

A technical team augmented by student assistants supported students in setting up video conference applications and desktop versions of messaging applications on their laptops. As students sought to fulfil professional and family obligations amid the uncertainty of the pandemic, it took more than two weeks with frequent follow-ups at all hours of day and night to reach all students, set up their technical infrastructure, and train them in its use. When students experienced persistent problems of connectivity, the technical team forwarded missing documents via messaging app in addition to routinely making downloads available (*observations, documents*). Providing learning materials to all students thus often required doing things “double”.

To further stabilise students' learning environment and allow them to concentrate on their studies full-time, they were encouraged to move to a shared study location as soon as national health precautions permitted this. This was the case in Rwanda, DRC, Cameroon and South Sudan. In other countries (i.e., Burundi, Tanzania, Zambia and Liberia) students stayed home or relocated to a nearby hostel. Costs for accommodation, food, travel, modems and additional data packages were covered

by the programme (*documents*). To determine the best options for the latter and for understanding local/national health regulations, students were involved in furnishing real-time, updated, locally relevant information (*observations*).

Each student was assigned an individual mentor. Together they created work plans based on students' needs and availabilities. They met daily via video conference or phone call to reflect on the content of the virtual session, to answer questions, and to determine the next steps. In addition, every student was part of a working group involving three to five students. These groups were assigned mentors and met daily. Working groups completed assignments, provided peer-feedback, held each other accountable, and provided emotional support (*observations*).

Emotional support

The rapid implementation of online teaching and learning presented many challenges in addition to the challenges posed by the pandemic (e.g., salary cuts, lack of child care) which needed to be overcome as part of the process. From the students' perspective, personal and professional difficulties were most problematic (*observations*). Despite many efforts to create enabling conditions, internet connectivity remained a serious challenge. Students often had to complete tasks by themselves, without exchanges and communication (*observations*). This caused significant levels of anxiety and stress (*observations, teaching evaluations*). The MA programme is very demanding even during non-pandemic times. It requires high levels of self-discipline but also provides a learning community. The pandemic-affected cohort had experienced this community and intensive closeness among teachers and students during prior in-person sessions (*observations*) and missed this balancing factor during online sessions. They missed the "singing and prayer times together" (shared religious practices had been an important element of pre-pandemic sessions) and felt the "loss of the warmth of classroom groups [and] good learning atmosphere that teachers created" (*teaching evaluation*).

Moments of celebration and joy had to be created to motivate students. The use of messaging apps was particularly helpful to regain some of the supportive, informal culture which was otherwise missing. Students and mentors shared pictures, videos, voice messages and seminar outputs (e.g., worksheets, personal reflections). This messaging allowed for moments of celebration through emojis as a form of nonverbal communication (*observations*). In the words of one student:

"The idea of providing students with a mentor for individual support made a big impression on me. [...] I realise too that among so many challenges of online learning the strong [community] is capital" (*teaching evaluation*).

To create an inclusive learning environment in line with students' needs and levels of progress required substantial effort and personal dedication especially in the beginning (*observations*). The first online session involved 19 mentors from eleven countries contracted for the two-week period from programme alumni and partner universities (*documents*). It quickly became clear that this was not sustainable. Mentoring hours had to be reduced for subsequent online sessions. This was possible

because the core team developed routines to better manage the workload (e.g., feedback routines) (*documents*).

Moreover, students were heterogenous in terms of their levels of preparedness. They differed considerably in terms of self-discipline, time management, ability to follow online lessons, and experiences of academic writing (*observations*). About one-third of the students worked independently, one-third was able to succeed with regular follow-ups supported by structured work plans, and about one-third needed intensive individual support through phone calls, feedback on seminar papers, and repeated assistance with learning materials (*observations*). Preparing learning materials in advance allowed students to work at their own pace exercising their autonomy and enhancing self-responsibility as part of the learning process. In the words of one student:

“Initially, there were some fears about effectively navigating between these platforms given the low capacity or knowledge on online learning. However, with the support from the technical team, I realised that it was rewarding and I learned a lot of new things” (*teaching evaluation*).

A model for a change of perspective in transformation processes

This section reflects the experiences described above along the dimensions of *reflexivity*, *ethics of care* and *resources* to develop a model for a *change of perspective* in transformation processes targeting underserved students in volatile contexts. Looking at processes, people and operations, the model traces moments of an intentional change of perspective. It provides an abstract understanding which increases cognitive complexity and improves the ability to envision multiple scenarios. Developing a range of possibilities from different perspectives, weighing up advantages and disadvantages, and identifying areas where more information is needed to reduce the likeliness of unknown or unforeseen factors and avoid premature decisions or cognitive fixation on a single solution (Dörner and Schaub 1994; Ramos 2020) (Fig. 2).

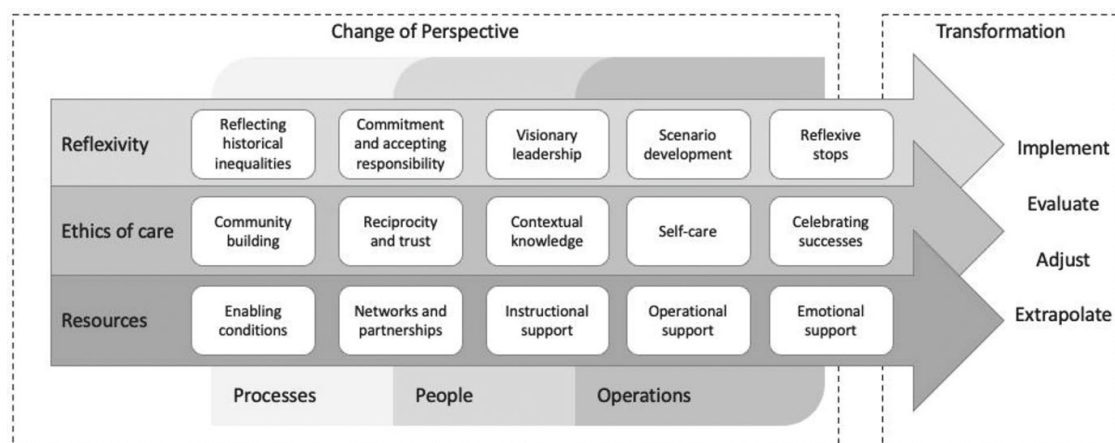


Figure 2 A model for a change of perspective in transformation processes (authors' own depiction)

Reflexivity

The need for reflexivity arose consistently during the conceptualisation and implementation of online teaching due to the complexity and unpredictability of the situation. As such it depended on visionary leadership to plan for and enforce reflexive stops in the process (Harwanti 2013). When it became clear that teaching had to move online to prevent the MA programme coming to a halt, the coordination team developed a series of possible scenarios for this move. They first systematically collected information using operations such as a student baseline survey, informal conversations, news reports and written communication. Information was gathered about students' circumstances (e.g., internet connectivity, resources), university regulations (e.g., duration of study and enrolment regulations), and available resources (e.g., IT department, mentors). Scenarios were then shared and discussed repeatedly with students, mentors, leadership of the universities, the programme steering committee and funders/donors to identify potential blind spots concerning student limitations (e.g., firewalls). Time presented the greatest challenge in the process, since study periods had to be planned despite imperfect knowledge of factors such as students' location or funding. The latter demanded a change of perspective. Regardless of efforts to collect contextual information, knowledge remained incomplete and uncertain. Decisions were working hypotheses to be verified through actual implementation. Reflexivity was particularly pertinent after the first round of implementation (September 2020) to assess what worked well and what needed adjustment for further online sessions. Reflexivity was reified as circular communicative processes to calibrate costs and benefits, approaching decisions in incremental steps.

Ethics of care

Students, team members and mentors operated under challenging conditions (e.g., balancing childcare with home office work, fear for life, reduced or halted incomes). Besides the use of operations such as team debriefing sessions after each virtual encounter, this required an openness and flexibility on the part of the team which was challenging on more than one occasion, pushing their resilience and at times their health to the limits. While everyone was committed to the continuation of the programme, conditions often made it difficult to stay engaged and motivated. To maintain the professional commitment of team members, teachers and mentors, self-care was an important dimension of the transformation process (Moorhouse and Tiet 2021).

Ethics of care has emerged as a theme in teacher education in recent years (Owens and Ennis 2005), reflecting on challenges of cultivating caring relationships in the distanced and disembodied online environment (Rabin 2021), instructional behaviours which suggest the presence of care (Kızılcık and Türüdü 2022), and care-centred leadership practices beyond the pandemic (Schultz 2022). Finding community in times of crisis is paramount to mitigating the impact of emergency situations (Zaalouk et al. 2021). Emphasising cognitive, social and emotional access to virtual

settings (Zeng 2023) relies on contextual knowledge. In the context of North–South partnership, this includes reflecting on historical inequalities. The MA programme’s postcolonial context potentially limits students’ self-efficacy (albeit not in all cases) as they navigate a programme which may be culturally alienating or demand performance levels for which students are not sufficiently prepared. Yet, the programme maintained high expectations of student performance.

Students’ heterogeneity was a core factor in implementing a culturally responsive online teaching and learning environment. Unlike more anonymous higher education settings, the MA programme strove to create an inclusive environment which promoted the success of all students, nurturing a sense of community while allowing ample space for student autonomy. Student progress, especially of those who struggled, was tracked on a case-by-case basis (e.g., identifying the most suitable mentors in terms of age, gender, language, patience). It further relied on the engagement of learning communities. Virtual teaching and mentoring sessions started with a “look around” to identify missing students followed by efforts to “call them in” or support them. Applying an ethics of care which centres community-building through mutual trust and reciprocity without prejudice, the MA programme sought to provide emotional support to students to relieve stress and mitigate inevitable frustrations (Payne et al. 2023).

Cultural responsiveness also calls for critical reflections on assumptions embedded in regulations and administrative processes. For example, organising cash flows in university settings requires a series of administrative processes (e.g., documenting expenses) put in place to ensure accountability for public spending. Yet, such processes may be incompatible with the time pressures imposed by the immediacy of study periods (*observations*). While operations such as organisational learning to familiarise administrators with students’ contexts provide a possibility to enhance compatibility, administrators are themselves bound by these regulations. Thus, workarounds within legal boundaries had to be devised in order to provide necessary resources, which in turn required substantial personal and professional commitment on the part of the team (Moser 2016).

Resources

Accepting the responsibility for inclusive, quality education and the community of students, mentors and teachers became a *resource* to draw on. It required self-discipline (e.g., showing up on time) and management of emotions. Commitment included supporting students at short notice. The Nyiragongo volcano in DRC erupted in summer 2021 while a student was returning from a writing retreat. The MA programme used donations to help evacuate her and support other students and alumni living in and around the city of Goma. The success of a culturally responsive shift to online teaching targeting underserved students depends on creating enabling conditions not least through the provision of instructional, financial and emotional resources. The MA programme was able to do that because it benefited from a stable and adequate funding source.

Conclusion

Based on a case study of an international MA programme in educational quality and leadership for senior professionals from countries in sub-Saharan Africa, this article reflected on the experience of rapidly adapting a blended learning approach to a purely online teaching and learning format in response to the global public health crisis in 2020–2021. We have proposed a model for a change of perspective in transformation processes targeting underserved students. Regardless of whether the aim is short- or long-term transformation, the model offers a heuristic for systematically thinking about and planning change by combining insights from complex problem-solving with principles of CRT. From the model, several recommendations for practitioners and policymakers can be deduced:

- Changes of perspective should be intentional. They should be built into the transformation process through operations such as scenario development, reflexive stops and circular communication with students, stakeholders and team members as well as through subsequent adjustment of scenarios.
- Culturally relevant transformation calls for in-depth contextual knowledge of underserved students' realities while simultaneously being keenly aware of its inadequacy to avoid a reductive approach to complex problem-solving. When teachers' contexts vary significantly from those of the students, this dynamic is amplified.
- Transformation processes in contexts of resource-scarcity and uncertainty targeting already vulnerable populations can cause feelings of anxiety and stress. An ethics of care is needed to balance these emotions; that is, a commitment to reciprocity and mutual trust as well as deliberate efforts to build a community through reliable and dependable communication and joint celebration of successes.
- Providing enabling instructional, operational and emotional conditions depends on resources, networks and partnerships. While this highlights the need for a long-term commitment to community building, it also involves forging new alliances and reaching out to hitherto unrecognised or unacknowledged sources of expertise.

The shaping and steering of transformation processes with a change of perspective at its core requires a shared narrative of belonging. In the case of the international MA programme in educational quality and leadership, this was achieved by deliberate zooming in on transnationally shared religious practices.

The generalisability of the findings based on this single case study is limited. The main limitation is the funding situation of the MA programme. At the time of the shift to online teaching and learning, the programme was in its fourth funding cycle. Financial resources were thus stable at the time, although they had to be re-dedicated, which occurred in communication with donors and the steering committee. Moreover, the MA programme had been a well-established initiative at the time of transformation, with ample support from partnering universities,

which strongly facilitated communication. Before moving to an online mode of learning, students had participated in two face-to-face teaching sessions. Educators and students thus knew each other before shifting online and had already had ample time to build mutual trust.

Competing interests and Funding This article is based on a case study of an international master's degree programme funded by *Brot für die Welt* (development organisation of the German Protestant churches) with co-funding from the German Government. The programme is hosted by the University of Bamberg in Germany and organised in partnership with the Protestant University of Rwanda. At the time of writing, the authors of the article were employed by the University of Bamberg and were responsible for coordination and teaching. The research was conducted according to the *Guidelines for Safeguarding Good Research Practice* issued by the German Research Foundation (DFG 2022). Ethics approval was not sought for this study because it draws on materials and documentations produced within an ongoing MA programme during the COVID pandemic 2020–2021, which could not have been foreseen. However, oral consent was obtained from programme participants concerning the materials.

Data availability statement The data supporting the findings of this study are available from the corresponding author [SR], upon reasonable request.

Funding Open Access funding enabled and organized by Projekt DEAL.

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