VIDEO-BASED ANALYSES OF READING INSTRUCTION IN THE FOURTH GRADE BASED ON THE OBSERVATION SYSTEM LUPE

Nora Heyne

University of Koblenz-Landau

Correspondence concerning this article should be addressed to Nora Heyne, Graduate School Teaching & Learning Processes (Upgrade), University of Koblenz-Landau, Thomas-Nast-Str. 44, D-76829 Landau. E-mail: heyne@uni-landau.de

PROBLEM

Against the background of a lack of satisfactory achievement in reading as revealed by recent studies (e.g., IGLU), there is a strong need to optimize how reading is taught in school. Therefore, it is necessary to know which features of reading instruction affect the reading competences of pupils. Furthermore, it is important to know which of these features have recently been applied in reading classes and hence the direction that teaching must take to optimize the effects of teaching.

To address both of these subjects and as one of the first video studies on fourth-grade reading classrooms, the current study (Heyne, in press) was conducted within the project "VERA – Gute Unterrichtspraxis" (Helmke, Helmke, Heyne, Hosenfeld, Kleinbub, Schrader, & Wagner, 2007). Its first goal was to provide a detailed description of the instructional practices applied by teachers. A second aim was to supply results on how these instructional features are connected to the reading competences and other abilities of pupils.

As a first step toward diagnosing how reading is currently taught as well as one part of the study, the following presentation focuses on the observation and description of teaching practices in reading. Therefore, an introduction to the observation system that was used (LUPE) and the observational procedure will be given. Furthermore, the results of these observations will be presented, thus providing a detailed description of reading instruction in fourth-grade classes. Whereas these results were used to lay the foundation for deeper analyses of the effects on students' reading competences in further publications, in this chapter, they will be discussed with respect to psychological results, didactic concepts, and the national curriculum for practicing teachers. Hence, I will show whether and the extent to which features of reading instruction that have been applied recently are expected to be

effective based on the current state of scientific knowledge. Such features will be outlined in the following.

THEORETICAL BACKGROUND

In order to determine which features of reading instruction are most important for enhancing the reading competences of pupils, the first step of the study was to conduct a broad review of the recent literature. Therefore, different definitions of reading competence, concepts about processes of text comprehension, knowledge about the prerequisites of pupils, and methods to improve reading competence were taken into account and used as starting points from which to derive the beneficial features of reading instruction in fourth-grade classes. The resulting instructional features of reading classes became the focus of the analyses of the current study and will be introduced in the following. Furthermore, they will be shown in an overview and illustrated in Table 1 as well as assigned to different facets of lessons.

In particular, based on the national curriculum (KMK, 2005), various reading and learning activities (1.1), working with (new) reading materials (1.2), and teaching students different ways to find literature and related information in libraries and media (1.3) – summarized as reading-specific subjects (Facet 1) – are important for enhancing the reading competences of pupils. It is assumed that working with different texts (Facet 2) – e.g., informative (2.1) vs. literary texts (2.2) (e.g., Bos, Lankes, Prenzel, Schwippert, Walther, & Valtin, 2003) – enhances important knowledge about different kinds of texts and promotes the development of the ability to work with them in specific ways. Here, conversations about texts (Facet 6) – about formal features (6.1) or contents (6.2) – were expected to be of great importance. In addition, several authors have highlighted the beneficial impact of various reading exercises (Facet 3) – for example, in individual settings (3.1), with partners (3.2), or in the classroom plenum (3.3) – in particular to enhance basic reading skills (e.g., Artelt,

Stanat, Schneider, & Schiefele, 2001). Moreover, the activation of pre-knowledge (4.1), the mediation of knowledge about text-related words and concepts (4.2), as well as reflecting on texts (4.3) seem to be important from the perspective of text-comprehension concepts (e.g., Van Dijk & Kintsch, 1983). As these activities can be characterized as cognitive involvement with texts, they have been summarized as features that are expected to activate cognitive text processing (Facet 4). In order to support this – in particular, to enhance attention and interests – it is also recommended that teachers stimulate multiple senses of their students, which was taken into account in Facet 5. For example, it is recommended that visual and acoustic input be combined in moderate amounts (5.4; e.g., Schnotz 2006) instead of using long spoken (5.2) or mere visual presentations (5.1). Whereas some concepts highlight the importance of multimodal presentations (5.5; e.g., Ministerium für Bildung, Frauen und Jugend, 2005), others recommend providing variety in the presentation by using different modalities (Helmke, 2010). Furthermore, instructions on strategic knowledge and behaviors (Facet 7) – for example, on cognitive strategies (7.1), meta-cognitive strategies (7.2), or the management of resources (7.3) – are very important for improving the reading competences of pupils (e.g., Artelt, Stanat, Schneider, & Schiefele, 2001). Thereby, it is also necessary to present precise instructions (Facet 8) on goals (8.2), procedures (8.1) or on both (8.3); in particular, to mediate meta-cognitive knowledge as an essential precondition of strategic reading (e.g., BMBF, 2005). Furthermore, it can be assumed that instructions to improve pupils' motivation (9.1), their attitudes toward reading (9.2), as well as their self-concepts (9.3; e.g., Rheinberg, 2006) – summarized as the reinforcement of pupils' reading activities (Facet 9) – may enhance their reading activities, habits and hence their reading competences.

Table 1

Overview of Features of Reading Instruction with the Expected Impact on the Reading Competences of Pupils, Assigned to Facets of Reading Classrooms

Facets of reading classrooms	Features of reading instruction
1) Reading-specific subjects	1.1 Reading and learning, e.g., reading of texts
	1.2 Reading materials, e.g., introduction of books and searches in media
	1.3 Facilitation of reading activities, e.g., talking about favorite books
2) Working with texts	2.1 Informative texts, e.g., scientific reports
	2.2 Literary texts, e.g., fairy-tales
3) Reading exercises	3.1 Reading alone, e.g., pupils read quietly
	3.2 Partner reading, e.g., pupils read with one partner
	3.3 Classroom reading, e.g., individuals read aloud while classmates listen
4) Activating cognitive text processing	4.1 Activation of pre-knowledge, e.g., talking about experiences related to a text heading
	4.2 Acquisition of concepts, e.g., introducing new words
	4.3 Reflecting on texts, e.g., discussion about the meaning of a passage after reading
5) Presentation of text-related information	5.1 Visual, e.g., presentation of a picture
	5.2 Auditory, e.g., listening to a radio feature
	5.3 Sensomotoric, e.g., feeling out an object
	5.4 Visual-auditory, e.g., presentation of a verbal introduction to a picture
	5.5 Multimodal, e.g., scenic presentation of the story from a text
6) Conversation about texts	6.1 Formal topics, e.g., talking about text structure
	6.2 Content-related topics, e.g., talking about the main characters of books
7) Reading strategies	7.1 Cognitive, e.g., rehearsal exercises
	7.2 Metacognitive, e.g., exercises to control learning results
	7.3 Management of resources, e.g., talking about learning times
8) Instructions about how to work with texts	8.1 On procedures, e.g., instructions on the next step in learning from a given text
	8.2 On goals, e.g., instructions about the goal of the lesson
	8.3 On goal-related procedures, e.g., instructions to take notes to give a short summary later
9) Reinforcement	9.1 Motivation-related, e.g., offers and free choice of texts appropriate to individual interests
	9.2 Attitude-related, e.g., talking about one's favorite books and fascinating reading experiences
	9.3 Achievement-related, e.g., constructive feedback on a given summary

Whereas all of the features mentioned above about reading instruction – except for mere visual (5.1) or auditory presentations (5.2) – are expected to be important for improving students' reading competences with respect to recent scientific concepts and results, only a few of them have been evaluated so far. Moreover, until now, there has not been much knowledge or empirical evidence regarding the degree to which these features have to be realized in lessons, how they interact, and the ways in which they are related to the individual prerequisites of pupils.

From a more generic and teaching-subject-independent perspective, one can expect that the features of reading instruction introduced above will be even more effective at improving pupils' reading competences if these features are taught regularly and are thus exercised continuously. This assumption was derived from the results of studies that have highlighted the importance of exercising, in particular to automatize basic capabilities to finally acquire more complex functions (e.g., Helmke, 2006; Meyer, 2004). Corresponding processes of learning can also be supposed for the acquisition of reading competence. Although the importance of reading exercises is beyond dispute, based on recent conclusions that student achievement has been unsatisfactory, there still seems to be a lack of implementation of exercises in reading instruction in school in general (Helmke, 2010). In other advice on doing exercises, the generic educational literature also recommends providing a variety of instructional conditions and methods. As alternating methods, media, and materials are expected to have a positive impact on students' attention, motivation, and interests, appropriately varying those aspects in reading instruction is also recommended (e.g., Helmke, 2010). Based on the outlined literature and with regard to the features mentioned, this seems to be even more important with respect to the features that are assigned to the same facets in order to improve multiple skills and abilities of pupils that are related to reading competence.

QUESTIONS

With reference to the state of knowledge outlined above, the current study focused on the pertinent features of reading instruction with regard to their occurrence as well as their variability within lessons. Therefore, first, it was important to determine whether all of these features were observable in all classes and hence, whether they were being practiced as they are important for improving reading competences from a theoretical point of view (Question 1). Second, the analyses were also intended to show whether there was variation with respect to the features of instruction that were assigned to the same facets of reading classrooms (Question 2): Is there any variation in dealing with reading-specific subjects (Facet 1), working with texts (Facet 2), reading exercises (Facet 3), cognitive text-processing-activating methods (Facet 4), modalities of presentation (Facet 5), conversations about texts (Facet 6), using reading strategies (Facet 7), instructions about working with texts (Facet 8), and reinforcing measures (Facet 9)?

METHOD

In order to describe how reading is taught in fourth-grade classes with reference to the pertinent features introduced above, the observation system LUPE was developed. The label LUPE refers to "*L*ese*u*nterrichts*p*rozess-*E*rfassung" as a term for capturing the processes that are applied in reading classes. This observation system allows for low-inference microanalytic observations of the mentioned features that are expected to impact the reading competences of pupils. It contains various observational schemes that are each focused on the features that are assigned to one facet: in particular, one sign system – as an observational system that allows for the simultaneous occurrence of several categories – for the analyses of exercises on reading strategies (Facet 7) and several categorical observational schemes for the

measurement of the features that are assigned to the remaining facets. Within single categories in correspondence to the pertinent features of instruction, all observational tools contain one additional category that is supposed to be used for situations that could not be appropriately assigned.

In this study, these observational tools were used in the analyses of 42 fourth-grade reading classrooms in Germany that were videotaped within the project "VERA – Gute Unterrichtspraxis." Whereas analyses of reading strategy instructions (Facet 7) were conducted for all phases of reading instruction, the coding of the features of the remaining facets was limited to classroom teaching time that involved instructional communication directed toward all members of the class. Therefore, the previously defined video sequences – they were fixed as semantically distinguishable units beforehand in the frame of a transcription – were assigned to the categories of the observational schemes with the help of the software "Videograph" (Rimmele, 2007). This procedure resulted in amounts of time that measured the occurrence of each of the observed features. These were finally used as a foundation for the calculation of percentages of time spent on specific instructional features (Facet 3) as values for further analyses.

RESULTS

A first summary of the results of the observations is given in Table 2. For a deeper insight, the outcomes are illustrated and described in the following with regard to all individual classes. For this purpose, Figures 1 to 9 show the percentages of (classroom) teaching time devoted to the observed features of reading instruction in each facet, beginning with the classes with the largest amounts of the most dominant features from the left side of each figure.

Table 2

Descriptive Statistics on the Occurrence of the Observed Features of Reading Instruction across All Classes as Percentages of Lesson Duration

Facets of reading instruction	Single features or methods of reading instruction	Mean	*SD*	Min	Max
1) Reading-specific subjects	1.1 Reading and learning	83.40	7.69	58.96	93.19
	1.2 Reading materials	0.84	4.36	0.00	27.88
	1.3 Facilitation of reading	1.45	2.46	0.00	10.86
2) Working with texts	2.1 Informative texts	22.33	34.97	0.00	88.91
	2.2 Literary texts	55.45	40.05	0.00	94.28
3) Reading exercises	3.1 Reading alone	15.00	19.62	0.00	73.85
	3.2 Partner reading	13.25	20.39	0.00	83.21
	3.3 Classroom reading	8.22	10.28	0.00	45.10
4) Activating cognitive text processing	4.1 Activation of pre-knowledge	6.90	8.94	0.00	30.12
	4.2 Acquisition of concepts	3.91	5.04	0.00	20.11
	4.3 Reflection of texts	36.13	21.66	0.00	84.15
5) Presentation of text-related information	5.1 Visual	4.78	4.43	0.00	16.81
	5.2 Auditory	17.30	16.58	0.00	59.56
	5.3 Sensomotoric	3.33	11.62	0.00	54.04
	5.4 Visual-auditory	53.01	21.75	0.00	90,89
	5.5 Multimodal	2.62	9.93	0.00	47.11
6) Conversations about texts	6.1 Formal topics	2.12	4.02	0.00	17.78
	6.2 Content-related topics	38.65	18.56	0.88	78.71
7) Reading strategies	7.1 Cognitive strategies	43.76	16.75	0.00	70.34
	7.2 Metacognitive strategies	14.55	12.10	0.19	62.39
	7.3 Management of resources	2.71	3.20	0.00	15.44
8) Instructions about how to work with texts	8.1 On procedures	10.06	10.37	0.17	59.17
	8.2 On goals	0.63	1.37	0.00	7.70
	8.3 On goal-related procedures	3.12	5.95	0.00	26.33
9) Reinforcement	9.1 Motivation-related	0.85	5.10	0.00	33.06
	9.2 Attitude-related	1.05	4.26	0.00	23.50
	9.3 Achievement-related	1.09	1.85	0.00	10.39

Note. SD = standard deviation; Min = minima; Max = maxima.

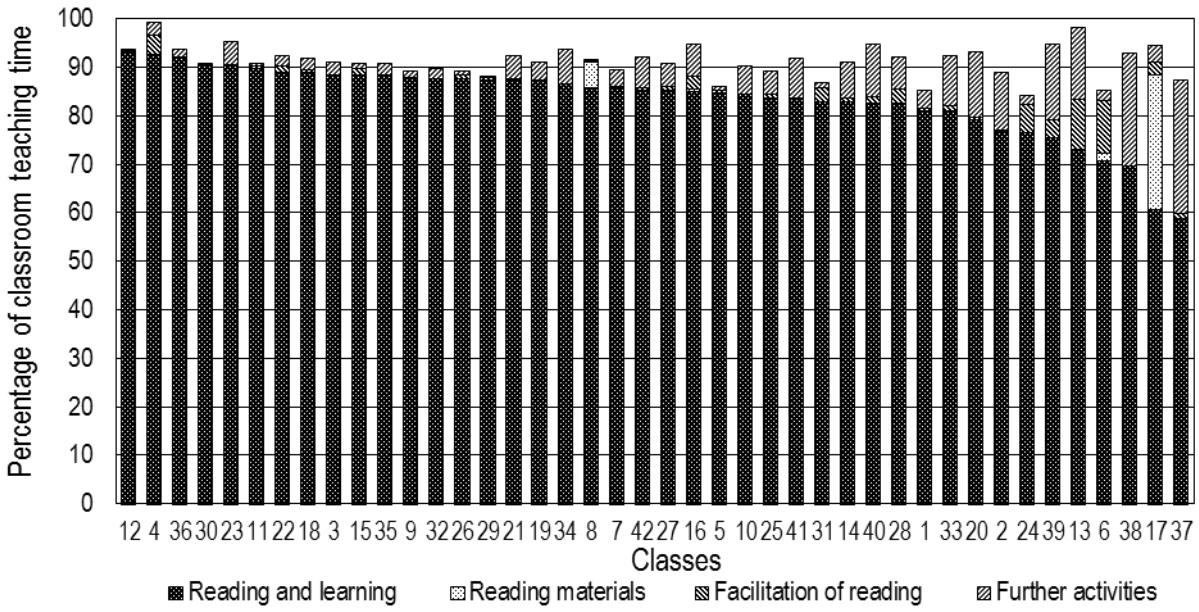

Figure 1. Percentage of classroom teaching time spent on different reading-specific subjects across all classes. Phases of instruction that could not be assigned to one of the categories were not coded.

As the results on reading-specific subjects (Facet 1) in Figure 1 show, at least two of the topics were present in all classes. In four classes (ID 6, 8, 16, 17), all of these activities were observable. Reading and learning (1.1) as well as further activities were subjects in all classes. Whereas reading and learning predominated to a large extent, additional activities were used second most often but were applied far more rarely. The third largest amount of time was spent on activities that were designed to facilitate reading (1.3). They did not occur at all in eight classes and appeared only briefly in all other classrooms. The most seldom observed activities were addressed toward reading materials (1.2), which occurred in only four classes as mentioned above.

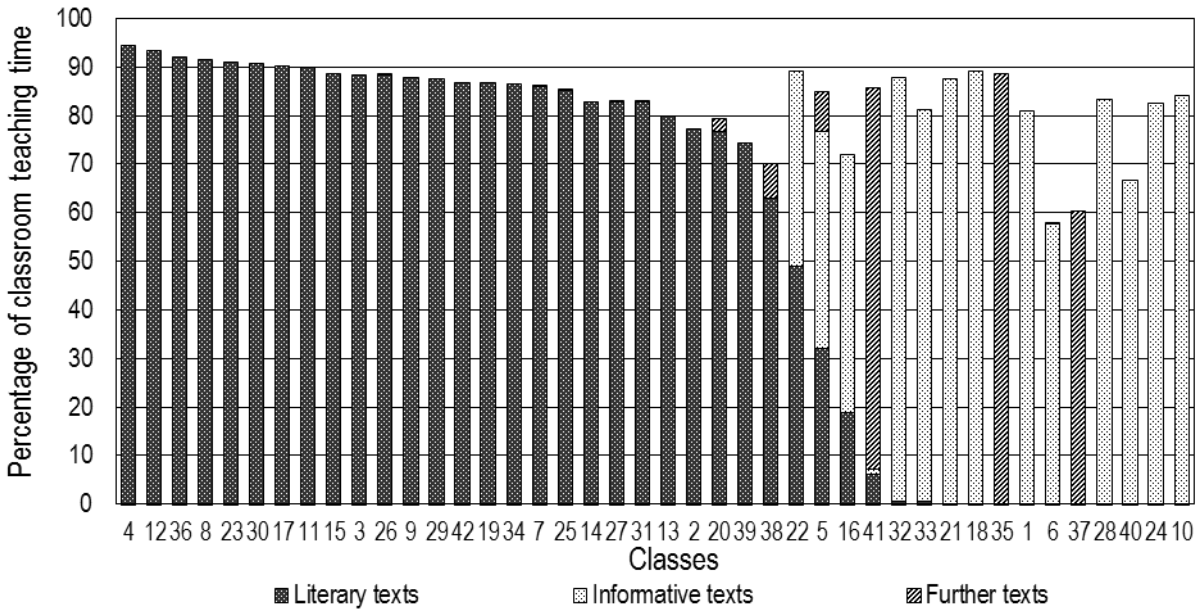

Figure 2. Percentage of classroom teaching time spent working with different types of texts across all classes.

The amount of classroom teaching time that was devoted to working with different types of texts (Facet 2) is shown in Figure 2. It illustrates that all of the kinds of texts that we distinguished between were discussed in reading classrooms. Furthermore, it indicates that most classes (N = 24) worked with only one type of text: Whereas 18 classes addressed literary texts (2.2), five classes addressed informative texts (2.1), and one other class discussed texts of another kind (ID 37). In all remaining classes, two different kinds of texts (N = 14; e.g., ID 16) or three different kinds of texts (ID 5, 20, 41) were discussed. Thereby, conversations about literary texts (observed in all classes except seven) seemed to be predominant (Table 2). The second-largest amount of classroom teaching time on average was spent on informative texts. Rarely was class time focused on texts of other kinds (e.g., the bible); this was observed in only nine classes.

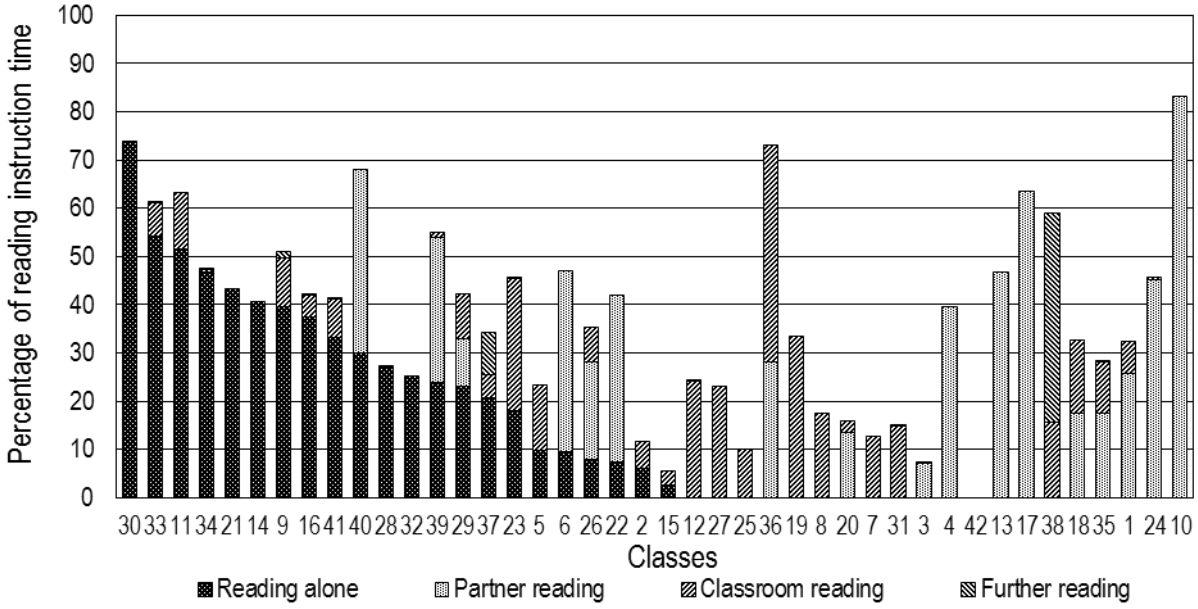

Figure 3. Percentage of reading instruction time spent on reading exercises across all classes.

Figure 3 illustrates the percentage of reading instruction spent on reading exercises (Facet 3) across all classes. At first glance, Figure 3 shows that reading was present in all classes except for one (ID 42). Furthermore, the figure indicates that all of the forms of reading occurred when all of the classes were considered. Eighteen classes conducted two of them (e.g., ID 16), 15 classes conducted just one form of reading exercises, and 11 classes conducted three forms of reading exercises. In the sample, the predominant form of reading exercise was reading alone (3.1), which was shown in 22 classes (Table 2). The second most utilized form of reading practice was reading with a partner (3.2), which was observed in 17 classes for a large amount of time. Third, classroom reading (3.3) was conducted in 31 classes up to about 45% of the time. More seldom, additional unspecified forms of reading were observed ($N = 11$).

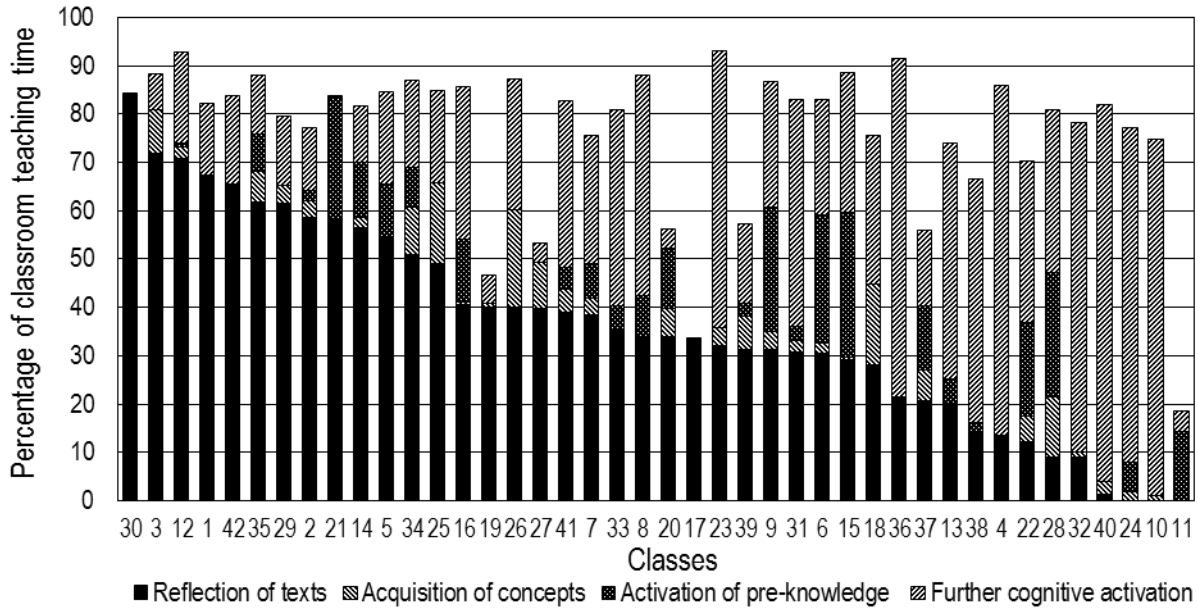

Figure 4. Percentage of classroom teaching time spent on methods to activate the cognitive processing of texts across all classes.

As Figure 4 shows, all methods that were expected to activate the cognitive processing of texts (Facet 4) occurred in 18 classes and hence in about 50% of the sample. In 22 classes, two or three forms (e.g., ID 16) occurred, whereas in two additional classrooms, only reflecting on texts occurred (4.3; ID 17, 30). The largest amount of time was spent reflecting on texts, which was shown in 40 classes (Table 2). The second largest amount of classroom teaching time was focused on additional cognitive activating forms, which did not occur in two classes. Less time was spent on the activation of pre-knowledge (4.1), which was observed in 25 classes. More rarely was the lesson time focused on the acquisition of concepts and strategies (4.2), which occurred in 30 classes but only for a very small amount of time.

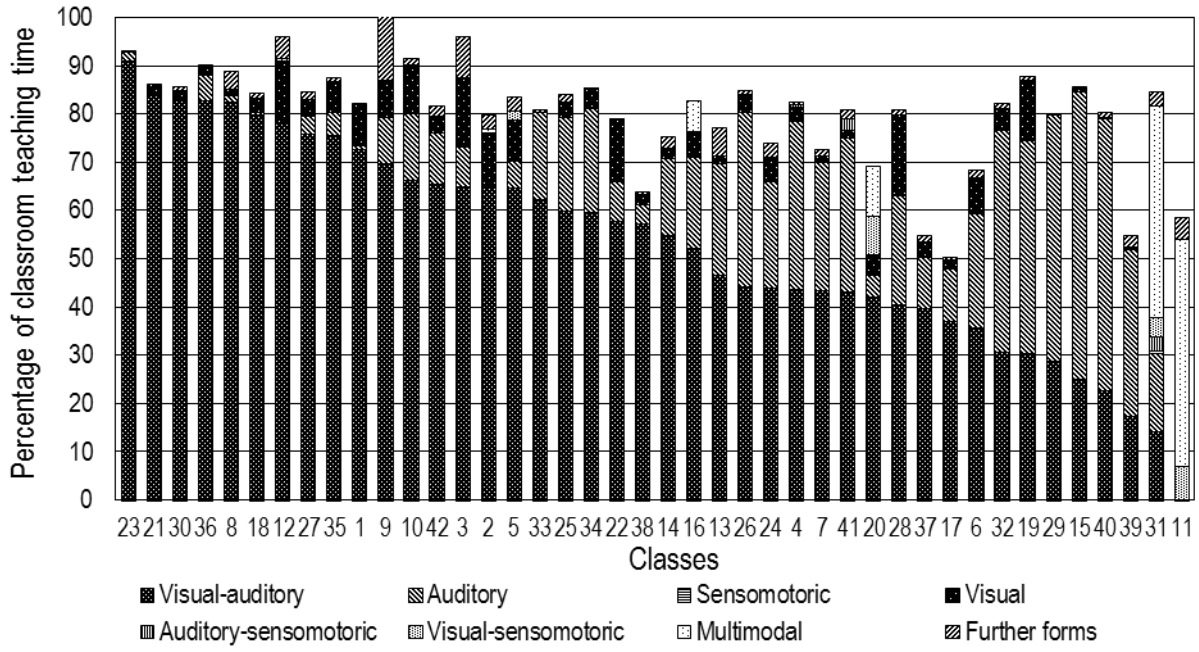

Figure 5. Percentage of classroom teaching time dedicated to presenting information through different modalities across all classes.

Figure 5 shows the amount of time dedicated to presenting text-related information through different modalities (Facet 5). In most classes ($N = 26$), text-related information was presented in three different ways. In eight classes, four modalities were used (e.g., ID 16), and in the remaining classes, text-related information was presented through two, five, or six different modalities. Auditory-visual presentations (5.4) were used most (Table 2) and were observed in 41 classes. More rarely, information was presented only visually (5.1; $N = 40$) or orally (5.2; $N = 38$). Multimodal presentations (5.5) came in fourth and were observed in eight classes. More seldom, situations occurred in which the presentation of information could not be clearly assigned to one of the given categories. This occurred in the coding of all classes. By contrast, forms of sensomotoric presentation (5.3) appeared in just a few classes ($N = 15$).

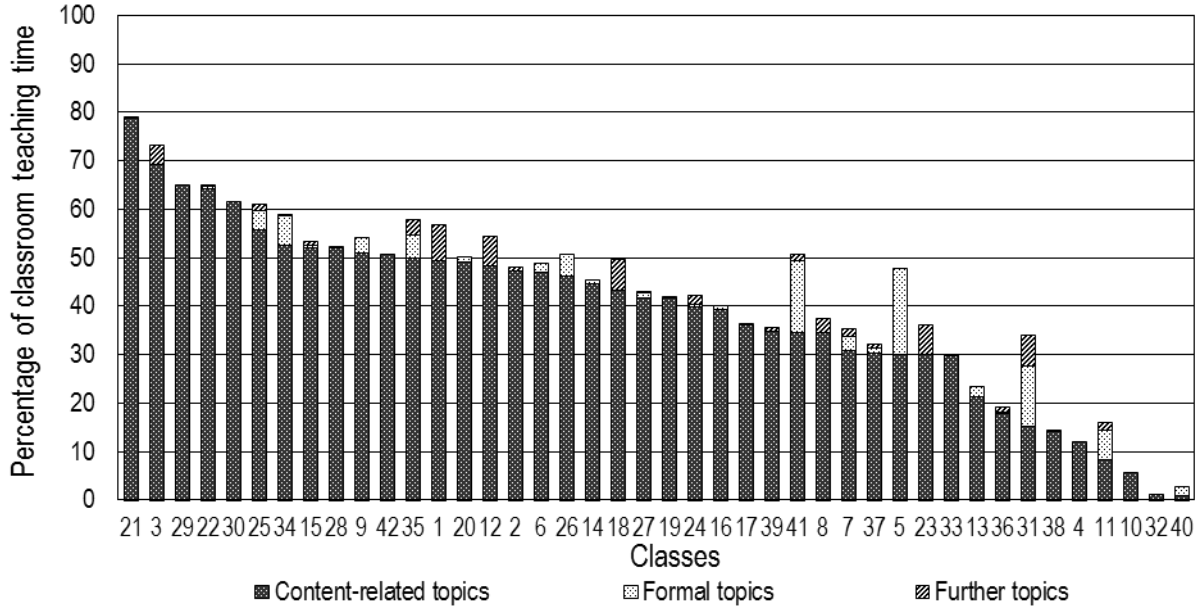

Figure 6. Percentage of classroom teaching time dedicated to different text-related topics across all classes.

As illustrated in Figure 6, classroom teaching time was dedicated to talking about different text-related topics (Facet 6) in all classes for at least a short amount of time. Whereas two kinds of topics were discussed ($N = 22$; e.g., ID 16) in more than 50% of the sample, other classes addressed three text-related subjects ($N = 14$), and six remaining classes addressed only content-related topics. As shown in Table 2 above, content-related topics (6.2) were the subject of the conversation in all individual classes for at least some of the time and consumed the largest average amount of time overall. The second largest amount of time, but far more rare, was dedicated to formal text topics (6.1; $N = 25$), but this topic was not observed in 17 classes. Class time was less often dedicated to discussing further topics, which appeared in 25 classes.

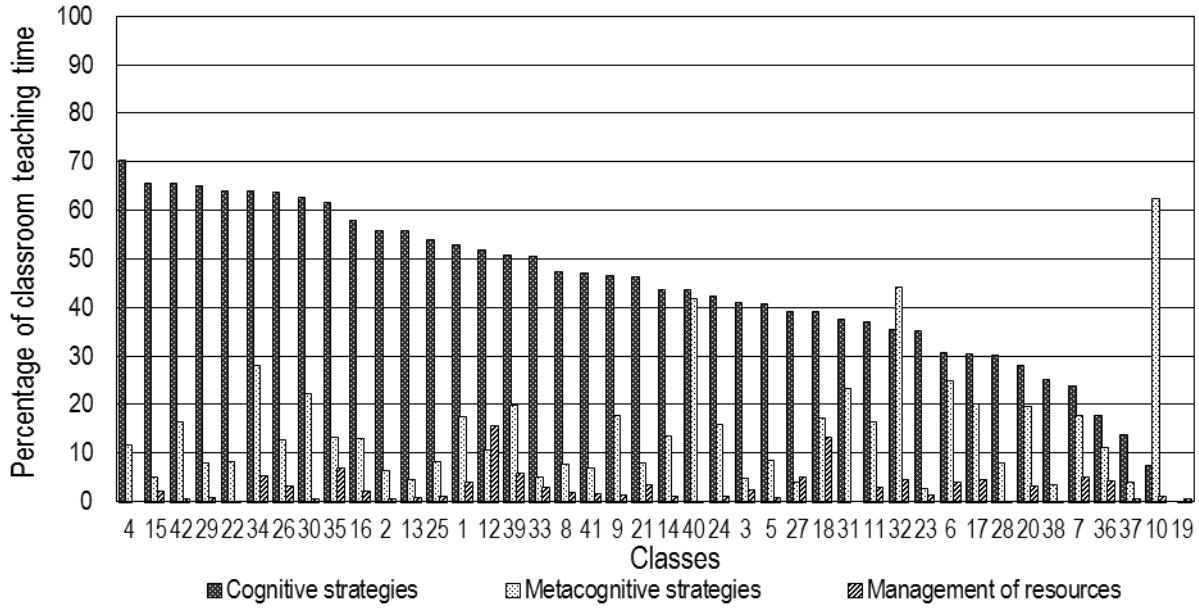

Figure 7. Percentage of classroom teaching time spent on reading and learning strategies across all classes.

As the parallel bars in Figure 7 illustrate – the amounts are presented as separate bars because the observed features can occur simultaneously – at least one, but in many cases, all of the distinguished reading and learning strategies (Facet 7) were observed in the classrooms (e.g., ID 16). The only exceptions were that two classes did not talk about managing resources (ID 4, 31) and one other class did not spend any time on cognitive strategies (ID 19). At first glance and according to the descriptive statistics in Table 2, the largest amount of time was devoted to cognitive strategies (7.1). The second largest amount of time was spent on metacognitive strategies (7.2), which were observed in all classrooms. More rarely did the classes focus on the management of resources (7.3) in order to organize internal and external learning conditions.

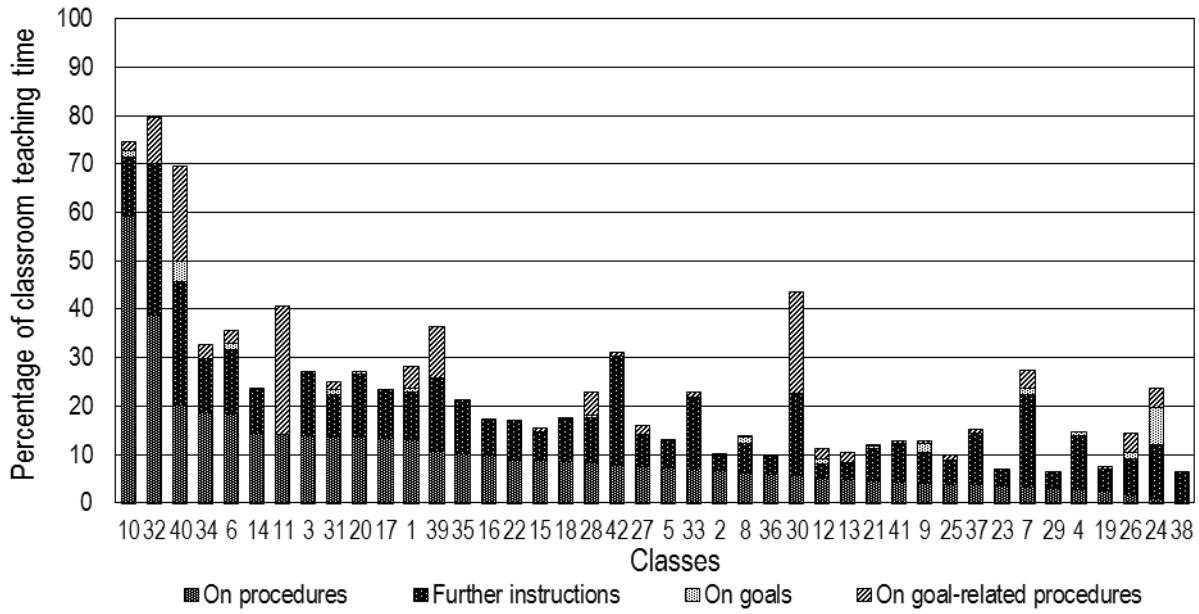

Figure 8. Percentage of classroom teaching time devoted to different instructions across all classes.

As the overview of the different kinds of instructions about how to work with texts (Facet 8) in reading classrooms in Figure 8 shows, instructions were provided in all classes. In 18 classes, all of the kinds of instructions occurred. In the remaining classes, at least two kinds of instructions were given (e.g., ID 16). With reference to Table 2, for approximately the same amount of time and in a similar number of classes ($N = 42$), instructions on procedures (8.1) and further undefined instructions ($N = 41$) were observed, whereas pupils received fewer instructions about goals (8.2) and goal-oriented procedures (8.3), respectively. Only in 30 classes were pupils given goal-oriented instructions, which can be useful for helping students to reach their learning goals. Nevertheless, these types of advice always occurred briefly. The smallest amount of time was addressed toward learning goals, which were observed in 20 classes.

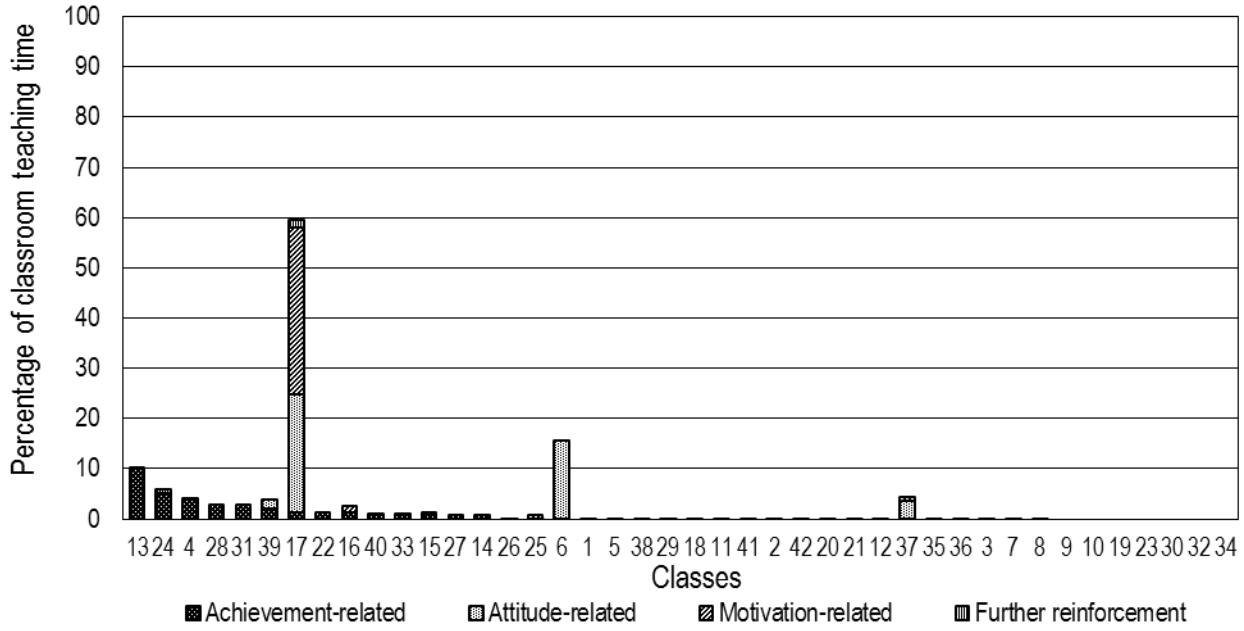

Figure 9. Percentage of classroom teaching time devoted to forms of reinforcement across all classes.

As Figure 9 illustrates, forms of reinforcement (Facet 9) were seldom observed in the classrooms: They appeared in only a few classes and mostly for short periods of time. None of the mentioned forms were taken into account in seven classes. Whereas feedback on achievements (9.3) was observed in 33 classes, comments on attitudes (9.2) or the motivation to read (9.1) were only rarely observed. Conversations about attitudes and reading experiences took place in six classes, whereas motivational features occurred in only five classes. One class (ID 17) obtained outlying values that occurred because pupils reported their reading experiences and introduced their favorite books to each other. Furthermore, this same class also showed feedback on achievement and further forms of reinforcement, which also appeared in two other classes (e.g., ID 16).

DISCUSSION

As the results indicate, most of the features that are expected to impact pupils' reading competences and hence can be recommended as important when teaching reading from a theoretical point of view were observed in the classes that we investigated. With reference to the outlined state of scientific knowledge and the statements by Helmke (2010) and others, it was assumed that these features of reading instruction would be more effective when realized regularly. Furthermore, it was expected that efficacy would increase if a variety of these instructional features were used. From that point of view, the observed classrooms were described and evaluated with a focus on the frequency and variability of use with regard to these features.

An overview of the results is given in Table 3. In this table, the single features – with regard to their occurrence – and the facets of reading instruction – with respect to the observed variation within – have been assigned to three degrees of fit with the theory-based expectations of the study, represented in the three rows in the table: (a) fit in all observed classes and hence no need for change, indicated by the symbol "➲"; (b) fit with the theory-based expectations in some classes and a need for change in some others with no fit, indicated as "(☊)"; and (c) less fit with the theory-based expectations in the majority of classes and a need for change in those from a theoretical point of view, indicated as "☊."

Table 3

Overview of the Results and Preliminary Consequences on Reading Instruction with Respect to the Observed Classrooms

	Exercises on features of reading instruction	Variation of instruction within facets of reading classrooms
a) ➲ Full fit with theory-based expectations	<u>Exercises in all classes:</u> • Reading and learning (Feature 1.1) • Conversations about text contents (6.2) • Metacognitive strategies (7.2) • Instructions on procedures (8.1)	<u>Variation in all classes:</u> • Reading-specific subjects (Facet 1) • Presentation of text-related information (5) • Reading strategies (7) • Instructions about how to work with texts (8)
b) (🙁) Partial fit with theory-based expectations	<u>No exercises in some classes (up to 10):</u> • Reading materials (1.2) • Facilitation of reading (1.3) • Working with literary texts (2.2) • Reflection of texts (4.3) • Visual-auditory presentations (5.4) • Cognitive strategies (7.1) • Management of resources (7.3) • Achievement-related reinforcement (9.3)	<u>No variation in some classes (up to 6):</u> • Activating cognitive text processing (4) • Conversations about texts (6)
c) 🙁 Less fit with theory-based expectations	<u>No exercises in many classes (12 up to 37):</u> • Working with informative texts (2.1) • Reading alone (3.1) • Partner reading (3.2) • Classroom reading (3.3) • Activation of pre-knowledge (4.1) • Acquisition of concepts (4.2) • Sensomotoric presentations (5.3) • Multimodal presentations (5.5) • Conversations about formal features of texts (6.1) • Instructions on goals (8.2) • Instructions on goal-related procedures (8.3) • Motivation-related reinforcement (9.1) • Attitude-related reinforcement (9.2)	<u>No variation in many classes (15 up to 38):</u> • Working with texts (2) • Reading exercises (3) • Reinforcement (9)

The column in the middle of the table presents preliminary conclusions with regard to the occurrence of single instructional features (Question 1). In accordance with my expectations, some of the important features were observed in all classes. Hence, teachers should continue to teach reading in their classes according to these features (line a). This includes activities of reading and learning (1.1), conversations about text contents (6.2), meta-cognitive strategies (7.2), and instructions on procedures (8.1). Other features did not appear as expected and were therefore not sufficiently implemented in reading instruction in up to 10 classes. Taking these classes into consideration, it is recommended that teachers increase their use of these features (line b); in particular, conversations about reading materials (1.2), facilitation of reading (1.3), working with literary texts (2.2), reflecting on texts (4.3), visual-auditory presentations (5.4), conversations about cognitive strategies (7.1), the management of resources (7.3), and achievement-related comments (4.3). Additional recommended features were often ignored and did not occur in twelve up to 38 classes. With regard to these classes, one has to agree with Helmke's (2010) argument that not enough exercises are required by teachers. With reference to the observed reading classrooms as well as to the literature, exercises should be implemented more often in reading instruction (line c). In the observed classrooms, this applies to working with informative texts (2.1), reading alone (3.1), with a partner (3.2), and classroom reading (3.3), the activation of pre-knowledge (4.1), the acquisition of concepts (4.2), sensomotoric (5.3), as well as multimodal presentations (5.5), talking about formal text features (6.1), giving instructions about setting goals (8.2) and goal-related procedures (8.3), and motivation- (9.1) and attitude-related reinforcement (9.2).

The column on the right side of Table 3 shows an overview and some preliminary conclusions of the analyses of the variability of the features that comprise the facets (Question 2). With respect to reading-specific subjects (Facet 1), presentations of text-related knowledge (Facet 5), reading strategies (Facet 7), and instructions on working with texts

(Facet 8), at least two or more methods or features were implemented in all classes and hence the instruction fit with the introduced recommendations for variation (line a). Features assigned to activating cognitive text processing (Facet 4) and conversations about different text-related topics (Facet 6) were not varied in up to six classes and should therefore be more often applied with more variety (line b). With regard to further facets of reading instruction, no or just one form of the assigned features was realized in 15 up to 38 classes. In particular, no single form of reinforcement (Facet 9) was observed in 34 classes. Furthermore, various forms of working with texts (Facet 2) and reading exercises (Facet 3) did not occur as expected. Hence, paying more attention to the variation of these facets can be seen as one way to optimize future reading instruction (line c).

To summarize, the most salient results with respect to variation were detected for working with texts of different kinds (Facet 2) and forms of reinforcement (Facet 9). Therefore, it is advisable to realize the assigned features with more changes. Regarding the occurrence of the observed features of reading instruction, it was striking that features of reading materials (1.2), talks about formal features of texts (6.2), reading with partners (3.2), multimodal (5.5) and sensomotoric presentations (5.3), instructions on goals (8.2), as well as motivation- (9.1) and attitude-related comments (9.2) did not occur in 50% or more of the classes. With regard to the results of the observed sample and the recent scientific state of knowledge, it seems to be important that teachers more often implement these features. Nevertheless, the results also indicated that reading instruction met my expectations to a large extent in some classes. For example, in Class ID 16, most of the pertinent features were implemented with much variety within all of the facets.

OUTLOOK

This chapter provided some detailed insights into fourth-grade reading classrooms in Germany. It contained an exploration of descriptive results of the presented study with regard to the occurrence as well as the variation of features in reading instruction. Hence, in particular, with regard to the investigated classes, these findings provide information about features that can be applied to optimize reading instruction. Nevertheless, in order to generalize these results, further research is needed, at least to provide empirical evidence to support the assumptions made about the effects of the classroom features that were introduced herein. For that purpose, as well as to optimize reading instruction in schools, the presented results and their discussion might help to point researchers in the right direction and provide a first signpost to help teachers improve the reading competences of their pupils.

REFERENCES

Artelt, C., Stanat, P., Schneider, W. & Schiefele, U. (2001). Lesekompetenz: Testkonzeption und Ergebnisse. In Deutsches PISA-Konsortium (Hrsg.), *PISA 2000 - Basiskompetenzen von Schülerinnen und Schülern im internationalen Vergleich* (S. 69-137). Opladen: Leske + Budrich.

Bos, W., Lankes, E. M., Prenzel, M., Schwippert, K., Walther, G. & Valtin, R. (Hrsg.). (2003). *Erste Ergebnisse aus IGLU – Schülerleistungen am Ende der vierten Jahrgangsstufe im internationalen Vergleich*. Münster: Waxmann.

Bundesministerium für Bildung und Forschung (BMBF) (Hrsg.). (2005). *Expertise – Förderung der Lesekompetenz* (Bildungsreform Band 17). Bonn: BMBF.

Helmke, A. (2006). Unterrichtsqualität. In D. H. Rost (Hrsg.), *Handwörterbuch Pädagogische Psychologie, 3. überarb. u. erw. Aufl.* (S. 812-820). Weinheim: Beltz Psychologie Verlags Union.

Helmke, A. (2010). *Unterrichtsqualität und Lehrerprofessionalität. Diagnose, Evaluation und Verbesserung des Unterrichts.* Seelze: Klett-Kallmeyer.

Helmke, A., Helmke, T., Heyne, N., Hosenfeld, A., Kleinbub, I., Schrader, F.-W. & Wagner, W. (2007). Erfassung, Bewertung und Verbesserung des Grundschulunterrichts: Forschungsstand, Probleme und Perspektiven. In K. Möller, P. Hanke, C. Beinbrech, A.K. Hein, T. Kleickmann & R. Schages (Hrsg.), *Qualität von Grundschulunterricht entwickeln, erfassen und bewerten, Jahrbuch Grundschulforschung, Bd. 11* (S. 17-34). Bonn: Verlag für Sozialwissenschaften.

Heyne, N. (in press). *Merkmale des Leseunterrichts im vierten Schuljahr im Fokus videobasierter Analysen.* Münster: Waxmann.

Kultusministerkonferenz (KMK) (Hrsg.). (2005). *Bildungsstandards im Fach Deutsch für den Primarbereich*. München: Wolters Kluwer.

Meyer, H. (2004). *Was ist guter Unterricht?.* Berlin: Cornelsen Verlag Scriptor.

Ministerium für Bildung, Frauen und Jugend (Hrsg.). (2005). *Rheinland-Pfalz – Weiterentwicklung der Grundschule: Rahmenplan Grundschule – Teilrahmenplan Deutsch.* Grünstadt: Sommer.

Rheinberg, F. (2006). *Motivation*. Stuttgart: Kohlhammer.

Rimmele, R. (2007). *Videograph. Multimedia-Player zur Kodierung von Videos*. Kiel: IPN.

Schnotz, W. (2006). *Pädagogische Psychologie.* Weinheim: Beltz PVU.

Spinner, K. H. (2006). Grundlagen. In K. H. Spinner (Hrsg.), *Lesekompetenz erwerben, Literatur erfahren* (S. 7-34). Berlin: Cornelsen Scriptor.

Streblow, L. (2004). Zur Förderung der Lesekompetenz. In U. Schiefele, C. Artelt, W. Schneider & P. Stanat (Hrsg.), *Struktur, Entwicklung und Förderung von Lesekompetenz:Vertiefende Analysen im Rahmen von PISA 2000* (S. 275-306). Wiesbaden: VS Verlag für Sozialwissenschaften.

Van Dijk, T. A. & Kintsch, W. (1983). *Strategies of discourse comprehension.* New York: Academic Press.