

Reading Literacy Practices in Norwegian Lower-Secondary Classrooms: Examining the Patterns of Teacher Questions

Abstract

We know from previous research that teacher questions can influence reading comprehension development; however, we know less about the reading processes that are required of students through the use of questions. The present study examines teacher questions on texts reviewed during whole class reading comprehension instruction across 51 lessons in 26 Norwegian eighth-grade language arts classrooms. Through video observations, the study (a) identifies text-dependent vs. otherwise text-related teacher questions, (b) deductively examines frequency patterns of text-dependent questions based on three reading literacy processes: locating information, understanding, and reflecting/evaluating, and (c) examines the relative time allocated to various question-response literacy interactions arising from text-dependent teacher questions. Findings showed that teachers mostly asked questions that required students to interpret or reflect, while they hardly asked any questions that required students to assess the quality and credibility of texts. Implications for the development of reading literacy proficiency required in today's society are discussed.

Keywords: Teacher questions, reading literacy, reading processes, classroom observation

Introduction

As a teaching technique, questioning is regarded as an essential element in designing classroom instruction (Lee & Kinzie, 2011), and it is well known from classroom research that teachers ask students many questions during whole-class teaching (Dillon, 1990; Durkin, 1978–1979; Farrar, 1986; Myhill, 2006; Parker & Hurry, 2007; Wragg & Brown, 2001). When it comes to teaching reading, previous researchers have reported that teacher questions can influence reading comprehension development (National Institute of Child Health and Human Development, 2000) and may function as a form of text comprehension modelling (Parker & Hurry, 2007) by socializing students into text comprehension practices (Säljö, 2005).

By using various well-designed questions to demonstrate how to approach a text, teachers model a strategy that skilled readers can use (Pressley & Afflerbach, 1995). As Parker and Hurry (2007, p. 308) explained,

Questions which are initiated by the teacher represent the type of questions a skilled reader might ask him/herself. This style of questioning therefore models a type of reading behavior which may at some later stage be adopted by the children as they become more skilled readers.

This indicates that students' understanding of texts can be shaped by the types of questions to which they become familiarized (Duke & Pearson, 2002). And since it is known from previous observational research that in classroom instruction, questions are most of the time not explicitly taught as a strategy (Author & Colleagues, 2019; Parker & Hurry, 2007), the kinds of questions teachers ask are even more significant, as they model how students should engage with and think about texts.

While many studies have examined how teachers ask questions—focusing on the functions and hierarchical levels of questions—we know less about the reading processes that are required of students through the use of questions, and whether these are relevant and important for developing the reading skills that prepare students for comprehending texts in today's society.

In sum, the high incidence of questioning as a teaching method and its relevance for reading comprehension calls for more knowledge about what kinds of questions teachers ask students when promoting reading comprehension in contemporary classroom settings. Consequently, this study uses reading literacy process theories to explore patterns of teacher questions related to texts in 51 Norwegian language arts lessons at the lower secondary level. It is of particular importance to map teacher questions in contemporary classroom settings, in order to gain more knowledge of what teachers put emphasis on and prioritize in whole class instruction as a means to scaffold students' textual understanding in today's society. Additionally, the results can be valuable for practitioners seeking new perspectives on questions to guide classroom practices.

Categorizations of Teacher Questions

Many studies have focused on exploring the types of questions that teachers ask in classroom settings (e.g., Lee & Kinzie, 2011; Nystrand, Gamoran, Kachur, & Prendergast, 1997; Wu, 1993). A general and common categorization of questions is a two-level description that often reflects a dichotomy of question types: questions that test students' recall of facts and information versus questions that develop critical thinking processes (Farrar, 1986). Such a binary perspective has been described as open/closed (Long & Sato, 1983; Nystrand et al., 1997; Wu, 1993), authentic/non-authentic (Nystrand et al., 1997), referential/display (Nunan & Lamb, 1996; Wu, 1993), factual/speculative (Myhill, 2006), and thin/thick (McLaughlin & Allen,

2000). Based on this demarcation, researchers have shown that lower-order questions dominate in classrooms (Nystrand et al., 1997), as the predominant kind of question used is one that focuses on literal, factual information (Bintz & Williams, 2005; Burns & Myhill, 2004; Gall, 1970; Parker & Hurry, 2007).

Several scholars have criticized such a definite hierarchy of question types (Farrar, 1986; Ho, 2005), as they are difficult to identify within teacher–student interactions in instructional settings. Scholars have pointed out that questions deemed as higher-level do not necessarily receive higher-level answers from students (Cotton, 1988), and that open questions might not actually serve this function during interactions with students (Andersson-Bakken, 2015; Farrar, 1986). Taking these insights into account, the examination of questions in classrooms calls for a broader view of the characteristics of questions to reveal patterns that can illuminate aspects of other focal points of instruction—i.e., that go beyond the lower- versus higher-order demarcation.

Teacher Questions in Reading Comprehension Instruction

Discussion of text is generally deemed as a key aspect of internalizing the cognitive skills of expert readers (Pearson & Cervetti, 2013). Prior research has shown that text talk in classrooms is a common feature in comprehension instruction (e.g. Author et al., 2019), but often dominated by teacher questioning. For example, Swanson and colleagues (2015) examined ELA instruction in Grades 7–12 with an emphasis on effective instructional practices in vocabulary and reading comprehension. They found that the most often observed type of comprehension instruction (in 50, 9% of classes) was comprehension monitoring in terms of teacher questioning focusing on student understanding.

Some attempts to categorize questions in reading instruction have been made; however, they primarily focus on elementary classrooms. One frequently cited empirical study by Guszak (1967) observed reading groups in 12 classrooms in grades two, four, and six and explored six categories that reflected a taxonomy of text-based questions. These categories were *recognition*, *recall*, *translation*, *conjecture*, *explanation*, and *evaluation*, of which the first three involved literal understanding, and the others required more inferential and reflective thinking. Guszak reported that teachers mostly asked recall questions. Degener and Berne (2017) investigated the types of questions teachers asked in grades 4–6 and devised six different questions levels, in what they called a “continuum of questioning complexity: *word-level decoding*, *word-level vocabulary*, *sentence-level comprehension*, *cumulative comprehension*, *critical consideration*, and *discerning greater meaning*. The results showed that teachers often asked questions that correspond with levels 1–3 on the continuum, which, they pointed out, do not cover the complexity of reading.

A theoretical categorization by Pearson and Johnson (1978) provided a taxonomy of three kinds of questions: *textually explicit questions*, or factual recall questions, where the answers can be found right on the page; *textually implicit questions*, where the answers can be found on the page but are not very obvious; and *scripturally implicit questions*, which require the reader to use his or her script (semantic maps/schemata) to answer the question.

Even though essential elements of reading comprehension are included in these categorizations, they do not fully cover the reading skills necessary to approach the complex textual landscape in today’s society, in which we have easy access to tremendous amounts of texts, and where we need to successfully navigate through and use texts in many different ways as part of the social and cultural community. Furthermore, these empirical studies are derived

from elementary classrooms, and they do not necessarily reflect the challenges of reading at the secondary level. Consequently, there is a need for a categorization that considers the processes and width of the text comprehension practices necessary at the secondary level and for further work and community life.

Reading Literacy Processes

To acquire 21st-century literacy skills, such as managing manifold and changing text types and approaching these critically, students need to be exposed to and challenged in using different reading processes for different reading purposes. In examining teacher questions, the reading literacy processes required of students are important factors, as these focus on a wide range of cognitive competencies. The present study identified text comprehension instruction reflecting three main reading processes: locating, understanding, and reflecting/evaluating.

The ability to locate information is an important skill in today's (digitized and digitalized) society, where readers often use texts for the purpose of finding specific information. The category of locating information draws on skimming as part of text comprehension (Duggan & Payne, 2009) as well as on the importance of relevance and goal-focusing when reading (McRadden & Schraw, 2007). The process of understanding is based on two processes of constructing a mental model of what the text is about (Kintsch, 2019; McNamara & Magliano, 2009). These comprise (a) literal understanding, which requires the identification of information that is explicitly stated in the text (Hillocks & Ludlow, 1984), and (b) the ability to generate various types of inferences (McNamara & Magliano, 2009), from simple connecting inferences to more complicated interrelationships, such as considering a story's plot, conflict, and ending to make plausible interpretations. This goes beyond restating textual content and requires students to convey their own construction of an underlying meaning. Such inference and integration skills

are crucial for successful comprehension (Oakhill, 2012). Additionally, an increasingly important matter in contemporary reading is the ability to construct a coherent meaning from multiple texts by building a global understanding of what the texts are about (Bråten, Braasch, & Salmeron, 2020).

The processes of reflecting and evaluating involve reasoning beyond the literal or inferential meaning of the text and often require a critical reading approach. This dimension encompasses several abilities. It entails reflecting on textual content, in which students are challenged to reason about specific textual details or the global meaning of the text. It also entails reflecting on textual forms such as linguistic devices and prose styles, or zooming out and considering the macrostructures of texts. The dimension of reflecting and evaluating also involves making judgments about the quality of texts (Wyatt et al., 1993), which requires students to use their personal values and opinions to construct their own reflections, and making assessments of the credibility and trustworthiness of texts. The ability to critically evaluate texts is key to navigating an increasingly complex and sophisticated text-based world (O'Brien, Stewart, & Beach, 2009); thus, how teachers challenge students on the cognitive processes involved in reflecting and evaluating is of particular importance. Moreover, scholars have emphasized that constructing meaning “involves much more than relying on the text as the sole object of understanding” (Boelé, 2017, p. 217). Thus, asking questions that go beyond literal and inferential processes is important in order to engage students in rich critical thinking and the overall process of meaning-making.

The processes of locating, understanding, and reflecting/evaluating are deemed to be important aspects of reading comprehension within and across national educational systems. They are used globally, as they correspond to the processes described in the program for

international student assessment (PISA) reading literacy framework (OECD, 2018), the American national assessment of educational progress (NAEP; National Center for Education Statistics, 2015), and the Norwegian national tests in reading (Roe, Ryen, & Weyergang, 2018). Similarly, the Norwegian curriculum emphasizes student competencies in understanding, interpreting, reflecting, and evaluating increasingly complex texts in different genres (Norwegian Directorate for Education and Training, 2013).

The Present Study

A large number of empirical studies have analyzed reading comprehension instruction in elementary classrooms. As the complexity of texts increases at the secondary level, there is a need to investigate these classrooms to better understand how teachers at this level challenge students and model how to think about the texts they read. Therefore, the present study aims to contribute to the knowledge base by examining what teacher questions exhibit concerning reading comprehension processes in whole class language arts instruction at the lower secondary level.

In the current study, a distinction is made between text-dependent questions that reflect the text—and where an understanding of the text is necessary to answer the question—and other text-related questions that go beyond the literal, inferential, and reflective meaning of a particular text. In these questions, the answers are not dependent on understanding a particular text and can be found outside the text, such as in students' own life experiences or world knowledge. Since analyzing questions not directly dependent on the text is outside the scope of this paper, the aim of the current study is to map all text-related questions and analyze the text-dependent questions based on reading literacy processes, with an emphasis on how these question patterns reflect

important reading skills for nowadays text-based society. Thus, the study investigates teacher question patterns by exploring the following research questions:

- i) What are the overall patterns of teacher questions when texts are at the center of instruction?
- ii) What are the frequency patterns of reading literacy processes within text-dependent teacher questions?
- iii) What are the relations between frequency of question type and the length of teacher-student interactions for text-dependent teacher questions?

Methods

Data Collection

This study is part of a large-scale video study (xxx at the University of xxx. For study details, see xxx). The research team collected video data from an average of four consecutive Norwegian language arts lessons in Grade 8 (students aged 13–14 years) in 47 different classrooms across 45 schools in Norway, which amounted to a total of 178 videotaped lessons. The Norwegian language arts subject is equivalent to what is often referred to as the mother tongue subject and is compulsory for students of all levels, including Norwegian language learners (resided in Norway for at least one year), and students with special needs. Most of the lessons lasted 45 minutes, and the observations occurred either during the same week or over a two-week period, depending on the school timetable.

The videotaped classrooms had between 18 and 28 students. Teachers were asked to do what they normally would have done and what they had planned to do, allowing researchers to capture naturally occurring instruction to the greatest extent possible (Hassan, Macaro, Mason,

Nye, Smith, & Vanderplan, 2005). Two small cameras were placed in the classrooms, one in the back of the room, and one in the front. The teachers wore microphones, capturing teacher talk and teacher one-on-one talk with students. Another microphone was placed in the middle of the classroom to capture whole-class talk.

Several measures were used to ensure a diverse sample reflecting typical instructional practices in Norwegian language arts classrooms. The 45 schools sampled reflected overall variations in socioeconomic status and comprised urban and rural schools from eight different regions in Norway. All of the participating teachers, students, and students' parents provided written and informed consent to participate in the study.

Lesson Sampling

Of the 178 videotaped lessons, those relevant for this study were selected based on the following criteria: 1a) lessons that involved reading fiction and/or non-fiction texts, and 1b) lessons that involved text-based discussions. In total, 101 lessons met criterion 1a, and 116 lessons met criterion 1b. Most of these lessons overlapped, except for 20 lessons, resulting in a total of 121 lessons that were further analyzed. The following criteria for inclusion were applied to identify lessons that involved text-related questions during whole-class instruction: 2a) teacher questioning was part of whole-class instruction, 2b) the presented text contained some portion of written text (including music videos with lyrics, advertisements, and comic strips), and 2c) pre-reading questions were included when they were related to the texts presented in that specific lesson. A criterion for exclusion was 2d): text-related questions focused on developing writing rather than reading skills. This also applied to questions that evaluated student texts, such as when students read their own texts out loud and then the teacher asked evaluative questions to the class about those texts to improve the students' writing skills.

This sampling process resulted in a total of 51 lessons (from 26 classrooms) that were further analyzed for teacher question patterns. Here, a *question* is defined as an utterance that encourages student response (Myhill, 2006) and is expressed by different linguistic means (Wu, 1993), such as interrogative sentences (e.g., “What do you think this text is about?”), imperative sentences (e.g., “Tell me why.”), or declarative sentences (e.g., “That means you agree with your neighbor.”).

Data Sources

The data for this study consisted of videotapes from the 51 sampled language arts lessons and the texts read during these lessons. As videos permit a fine-grained analysis (Jewitt, 2012) and are useful for decomposing complex phenomena (Blikstad-Balas, 2017), the video observations allowed teacher utterances to be analyzed in combination with body language and gestures, which were useful in determining whether an utterance encouraged student response, and hence, would be defined as a question. Videotapes were subsequently transcribed and entered into the NVivo software program for later analysis. The texts were important artefacts in understanding the functions of the questions posed, especially the difference between questions that required literal or inferential comprehension.

The texts were categorized as narration, argumentation, exposition, or description, reflecting four of the five text types in Werlich’s typology of texts (1976) (the last one being instruction). The narrative texts in this study comprised short stories (n=14), a novel excerpt (n=1), a fairytale (n=1), a comic strip (n=1), and poems/song lyrics (n=9). While most poems and song lyrics would not be regarded as narrative texts, in the sampled lessons these kinds of texts predominantly had a narrative style, thus functioning as narratives in the classroom dialogues. The argumentative texts were mainly readers’ letters (n=11) except for one advertisement, and

the expository texts were informative texts about authors or animals (n=4). All texts were printed and had a traditional text format; thus, no digital texts were present. Three of the texts used in the classroom instruction, including an advertisement, a screenshot from a website, and one reader's letter, could not be retrieved by the research team, so the corresponding questions were labelled "non-analyzable."

Data Analysis Process

Phase 1: Identifying and sorting questions. The data analysis process was conducted in three phases. In the first phase, questions were identified and categorized on two levels: text-dependent or otherwise text-related (general questions addressing vocabulary, out-of-text reflections, student experiences, general world and disciplinary knowledge, pre-reading predictions, reading strategies, and meta-questions).

Phase 2: Deductive coding of text-dependent questions. In the second phase, latent pattern content within the text-dependent questions was coded (Potter & Levine-Donnerstein, 1999) by deductive category application (Mayring, 2000) based on three reading literacy processes: locating, understanding, and reflecting/evaluating. The categories were operationalized using extant literature in the field (e.g., Kintsch, 2019; McNamara & Magliano, 2009; Roe, Ryen, & Weyergang, 2018; PISA reading literacy framework, OECD, 2018). The category of understanding was broken into two subcategories: 1) achieving a literal understanding, and 2) making interpretations/inferences. The category of reflecting/evaluating was operationalized using three subcategories: 3a) reflecting on text content and form, 3b) assessing quality and/or credibility, 3c) and comparing/contrasting multiple texts.

During the coding process, a reliability test was conducted using a second coder, and boundaries between codes were discussed and established. At this point, inter-coder reliability

was 89%. After the entire coding process, the reliability of the coding was evaluated for 15% of the questions to check inter-rater reliability between two coders, resulting in 91.3% (Cohen's $\kappa = 0.81$). This selection of questions included six questions that were not analyzable within the reading process categories (i.e., not text-dependent) to check for agreement on which questions could be considered text-dependent versus otherwise text-related. The agreement for this distinction was 100%.

In the coding process, questions were analyzed as constituents of the classroom dialogue, taking into account student responses as well as the focal text. Often, teacher questions were part of a follow-up to student responses or questions; hence, the context had to be considered in order to adequately categorize questions.

Phase 3: Analysis of question–response length. In phase three, question–response length for text-dependent questions was calculated in an analysis of manifest content (Potter & Levine-Donnerstein, 1999). Frequency may not always provide the most accurate picture of the concepts on which teachers focus during their instruction, and time spent on different question types may possibly differ from the frequencies of the same questions; therefore, focusing exclusively on frequency may provide a skewed picture of classroom discourse. It was thus important to include an analysis of question–response length to investigate the coherence—or lack thereof—between frequency and time spent on teacher questions. InterAct software (version 15.2) was used to time label each question–response unit. This was the amount of time between the end of the teacher's question and the completion of the last student/teacher comment concerning that question, which included teacher uptake, feedback, and/or further explanations if these occurred. Across 51 lessons, a total of 596 minutes was analyzed, ranging from three to 50 minutes per whole class discourse, with an average of 12 minutes per lesson.

Results

Overall Patterns of Teacher Questions When Texts Are at the Center of Instruction

A total of 870 teacher questions were identified in the 51 language arts lessons examined. The teachers predominantly asked text-dependent questions; out of 870 questions, 544 questions (62.5%) were categorized as text-dependent, and the remaining 326 (37.5%) were otherwise text-related. In the classroom dialogues focusing on text comprehension, teachers often switched back and forth between text-dependent and otherwise text-related questions to keep students' attention and help them in developing a deep textual understanding. As such, the dialogues took many "detours," such as building world and disciplinary knowledge, improving vocabulary, and learning strategies. The answers to such questions were to be found outside the text—for instance, in students' own life experiences or general world knowledge. They were still related to the text, as they had relevance for understanding the content and/or form of the lesson text. This is important in reflecting a broader picture of teacher questions. However, due to the constraints of this paper, the subsequent section will only provide analyses of text-dependent questions.

Frequency Patterns of Reading Literacy Processes Within Text-Dependent Questions

In the initial coding process, 544 questions were categorized as text-dependent questions. As illustrated in Figure 1, questions that required students to "locate information" accounted for a very small amount of the questions (6%). Questions in this category were typically "Who is the author of this text?" and "What year was mentioned in this poem?" These questions demanded scanning the text to render the relevant information and often required only a one-word answer.

The most frequently observed question type within the text-dependent categories was "understanding," which made up 57% of the questions. Referring to this category, questions that required a literal meaning representation accounted for 16% of all questions, such as "What did

[the main character] see in the house?” and “What did [the main character] do during the summer?” These questions required understanding the literal meaning of short paragraphs. Even though answering might have involved assembling information from different sentences, the answers were specifically stated in the text.

The following example show these types of teacher questions in a during-reading phase. The class was reading a short horror story called “The Landlady” (“Vertinnen” in Norwegian) by the British writer Roald Dahl. In this story, a young man in need of a room meets a landlady who runs a bed and breakfast, in which she kills and stuffs animals and people. In the passages that the class has been reading in this lesson, the main character has just arrived in Bath, where he is trying to find a place to stay.

After reading several passages, the teacher asked questions that required students to make a literal meaning construction, which can be answered by paraphrasing the text: “Where’s he walking now?”, “How is that street?”, and “What about the houses?” Having read almost half way through the short story, the teacher required students to locate specific information from the text—namely, two exact names that are of significance to the story: “He has just signed the guestbook, and on the first page, there are two names. Which names?” The teacher made several stops throughout the reading of the text and asked these types of questions, which potentially enabled the students to follow the most important elements of the story line.

Questions that required making textual interpretations, within the category of “understanding,” accounted for 41% of the total amount of questions. Answering these questions required making inferences and integrating several parts of the text, as illustrated by the following example: The teacher and the students read and talked about a short story as part of whole-class instruction, focusing on unfamiliar words. The teacher then prompted the students to

make a mind map, emphasizing that they should reflect on what could be the secret of the story. One of the main themes of the text was homosexuality. The main character was struggling with when to be open about his sexuality, and he was feeling stressed about it. The teacher tried to elicit these inferences from the students by posing the following questions: (1) “He is cooling himself down with the cold water from the tap. Why is he doing that?” and (2) “[The text says], ‘He is finally able to push those thoughts aside. He’s not ready, not yet.’ What is it that he is not ready for, do you think?” Such inferences were also required to answer the following question, posed by a teacher in another classroom, when reading a short story about a teenage girl who has been given too much responsibility at an early age: (3) “What makes you say that the mother is an alcoholic? Because it doesn’t say so in the text.”

Questions in this category can be based on a specific quote, as in example (1) and (2); even though the questions included specific sentences from the text, they required consideration of previous parts of the text. Alternatively, the questions might require a broader understanding of several components of the text, as in example (3). The answers to the questions in this category are not explicitly stated in the text; instead, students need to look for implied meanings based on textual evidence and their prior knowledge.

Many of the teacher questions concerned “reflection and/or evaluation,” which accounted for 37% of the questions. The most frequently asked questions were targeted toward reflection on content and form, which made up 33% of all questions. A typical question in this category challenges students to zoom out, consider the whole text, and apply their prior knowledge. For example, “What kind of genre is this text” requires disciplinary knowledge about different genres; hence, it demands reflection on the form of the text. Other questions in this category might involve other components of the text, such as in the following example, where a class is

reading song lyrics of which the gender of the narrator is not stated in the text: “That’s interesting. Why do you say that the person is a she? Some of you say he. What makes you think that it is a she or a he?” This question requires interpretation but also the ability to reflect on what elements might be considered gender-specific; as such, reflection on the textual content is required.

In the following examples, the teacher has just finished reading the horror story “The Landlady” for the class. At the end of the story, the landlady serves the newly arrived young boy a cup of tea. The tea has a taste of almond, which could indicate the use of cyanide; the boy is most likely being poisoned and will probably be the next person that the landlady kills and stuffs. In the subsequent whole class instruction, the teacher asks questions requiring both interpretation and/or reflection:

Hmmmm. Yes, that was it. That was the end. This is what I'm talking about—so when you tell a good story, then you actually create a kind of calculation where you have several components, which the author lays out, then it is your job as a reader to find the answer and do the math. What is the math here? What information bits are we dealing with? Because we have to think for ourselves how this ended, it is our job as readers.

What contributes to the solution?

In this question, students need to consider the text as a whole and interpret and reflect on the elements that could be considered in the interpretation task in order to “do the math.” In the following question, students are required to make an interpretation by making inferences about the significance of the tea for the main plot:

Teacher: Mhm. At the very beginning we get to know that there is a dog sleeping. So he [the author] manages to trick us. We were fooled. We thought there was a dog sleeping, we didn't know that it was stuffed in the beginning. So it was a piece of information he kept hidden from us. . . . And the last information is the tea then. What's with the tea?

The teacher also challenged the students to reflect upon the textual content by asking them to make up a continuation of the story: "She's a bit crazy, he gets that impression pretty quickly, that this is a crazy lady. But think about this scenario; how shall it not be discovered?" In this question, students are asked to make a prediction about how the landlady can carry on killing and stuffing people without being caught. Answering this question included imagining plausible scenarios for a continuation based on the comprehension of the story's narrative.

Some questions required students to assess the quality or credibility of texts. However, these questions made up only 3% of the text-dependent questions. The evaluative questions used in the present study typically focused on whether students liked the text, often only requiring a yes or no answer.

None of the text-dependent questions in the present study were targeted at comparing or contrasting multiple texts. Although students did read more than one text in several of the classrooms, reading multiple texts for handling possible conflicts of information did not seem to be a prevalent practice in the observed classrooms. When several texts were present, they read them as separate documents rather than comparing and contrasting them or engaging in selecting them for different purposes. Moreover, there were no instances of teacher questions requiring students to consider other previously read texts.

[Insert Figure 1 here]

In the text-dependent question types within groupings of fiction and non-fiction texts, the largest difference was in the frequency of questions that required interpretations, which occurred in 43% of the fiction text questions and 33% of the non-fiction text questions (see Figure 2). It is noteworthy that questions requiring inferential thinking were mostly observed in connection to fiction texts. This might reflect the views of different didactical traditions, where fiction texts should mainly be *interpreted* to create meaning, whereas non-fiction texts should be *analyzed* (cf. Norwegian Directorate for Education and Training, 2013) based on the linguistic or formal features of the text. The smallest difference was in the frequency of questions requiring reflection/evaluation, which displayed very similar results for fiction (35%) and non-fiction (34%) texts.

[Insert Figure 2 here]

Relationships Between Question Frequency and Length of Teacher-Student Interactions

The main difference in time and frequency was found within questions that required students to perform a literal meaning representation, where the time spent on these questions represented a smaller part of the entire discourse time (9%) than the frequency of these questions (16%), as illustrated in Figure 3. This may be expected since these question types typically require very short answers from students. Categories that require interpretation and reflection showed similar patterns in both frequency (44% and 40%, respectively) and time (41% and 34%, respectively). That the time spent on questions that required assessing quality and credibility was equal to their frequency (3% and 3%, respectively) demonstrates that these questions are not a priority in text comprehension instruction in these classrooms.

[Insert Figure 3 here]

Discussion

What Question Types Do Language Arts Teachers Focus on During Text Instruction?

Analysis in the present study revealed that 62.5 percent of the questions that teachers asked were text-dependent, meaning that 37.5 percent of the questions focused on text-related issues going beyond the form and content of texts. Even though a primary goal is to support students to understand and reflect on texts by engaging them in the textual form and content—by asking text-dependent questions—it is also important to enable students to connect the texts to relevant knowledge and their own experiences for the overall process of meaning-making (Boelé, 2016). Both of these aspects were included in the questions related to constructing textual meaning in the participating classrooms, providing the students with opportunities to engage in texts from several entryways in the endeavor of developing their overall textual comprehension skills.

The analysis of the text-dependent questions revealed that going beyond a literal understanding of the text and focusing on inferential skills was a common practice in Grade 8 comprehension instruction, regardless of text type. The majority of the time and focus spent on text-dependent questions required interpretation, which yielded promising results, as this indicated that the main focus of the participating teachers was not recall or literal meaning acquisition. And as the results on the Norwegian national test in reading have shown that Grade 8 students struggle with making advanced inferences from texts (Roe, Ryen, & Weyergang, 2018), paying attention to these sorts of questions is important.

A Lack of Critical Approach in Text-Dependent Questions

The findings also revealed that only 3% of the questions and of the allocated time to teacher-student dialogues required students to evaluate text quality and credibility. This corroborates the findings of Parker and Hurry (2007), who reported that only 2% of teacher questions were evaluative. In the present study, the evaluative questions typically focused on whether students liked the text. As Day and Park (2005) asserted, “evaluative . . . answers not only depend primarily on students’ reactions to what they have read, but they need to reflect a global understanding of the text” (p. 51); questions that focus on student likes and dislikes do not bring forth these reflections. The low frequency of evaluative questions is somewhat surprising since evaluation is mentioned both in the framework for basic skills and in the competence objectives in the Norwegian language arts curriculum. This suggests that students are not being sufficiently challenged to think critically when approaching and interpreting texts. If teachers do not ask students for their critical judgments, students are at risk of taking only a passive approach to texts. A greater focus on this issue is especially critical when engaging non-fiction texts in today’s digital environment, as students encounter a diverse and complex textual landscape on a daily basis. They thus need strategies for discerning the accuracy of the author’s message (Boelé, 2016). Moreover, the way of reading displayed in this study seems to socialize students into what Macken-Horarik (1998) called mainstream literacy: developing reading skills to be able to actively take part in a text culture, and focusing less on developing critical literacy by highlighting resistance toward the author’s viewpoint, which may enable students to challenge the way a textual content is presented (Blikstad-Balas, 2016; Macken-Horarik, 1998).

A Greater Potential for Instruction in Reading Multiple and Digital texts

None of the questions required the students to compare and contrast when reading multiple non-fiction texts. The importance of the ability to detect and handle conflict in multiple texts has been underscored (e.g., OECD, 2018; Rogne & Strømsø, 2013); it is also connected to the importance of critical reading in terms of evaluating sources when selecting texts (Breakstone et al., 2018). The lack of these question types might also be due to the nature of these reading processes, which might necessitate more comprehensive tasks rather than oral questions eliciting spontaneous answers. Still, it is noteworthy that no questions related to reading multiple texts were captured in the whole-class dialogues, even though texts focusing on related topics were present in some of the lessons. It might be expected that teachers at this level would focus more on the ability to relate textual content from different sources.

The absence of digital texts was somewhat unexpected. In the large-scale study from which the sampled lessons were drawn, the researchers videotaped lessons with naturally occurring instruction, meaning that teachers were not told to provide any particular instruction and could thereby choose to involve any kinds of texts in these lessons. As screen use continues to grow, students should be taught how to deal with complex digital reading tasks (Delgado, Vargas, Ackerman, & Salmeron, 2018; Educational Cooperation in Science and Technology, 2018). Reading digital texts necessitates that readers have a number of specific skills and competencies; it requires an additional set of reading practices than the traditional left-to-right, linear processing of text (Afflerbach & Cho, 2010). Especially when evaluating the credibility of such digital texts, students need to be able to integrate and assess elements such as design, writing style, pictures, references etc., in order to make informed judgments (Bråten, Braasch & Salmeron, 2020). As such, an obvious prerequisite for enabling students to acquire these

additional skills, is that digital texts need to be a part of classrooms' text-based practices, and from there on, be subject to a critical approach.

In sum, these results call for a stronger focus on how to navigate large amounts of both traditional and digital texts and how to make critical judgments about texts—both of which are important skills in today's ever-more textually mediated society.

Limitations and Future Research

There are several limitations in the present study. First, the analysis only accounted for questions reflecting reading literacy processes; thus, it did not consider the characteristics of the remaining teacher questions related to text comprehension in these classrooms (37.5% of the total amount of observed questions), which could further illuminate current question patterns. Second, it was outside the scope of this article to include a thorough analysis of student responses. Thus, future research should pursue studies that can further illuminate the interactional patterns of questioning. Furthermore, this study's descriptive approach leaves room for greater attention to the relationships between question types via more advanced statistical analyses. Third, given that the need for developing critical thinking skills is crucial in nowadays digital society, this study should be replicated in digitally rich classrooms, and future research should focus on seeking information about how teachers are designing lessons in a diversity of classroom contexts to develop such critical approaches to texts, and how they evaluate student learning outcomes concerning this matter.

Conclusion and Significance of the Study

This study contributes to an understanding of language arts teachers' focal point of instruction when using questions in a whole class teaching format to develop student reading comprehension. The findings demonstrate that teachers mostly ask text-dependent questions,

although they also include questions that are otherwise text-related in terms of students' prior knowledge and experiences. Furthermore, unlike the findings in previous studies, the participating teachers do not primarily focus on literal meaning comprehension but spend both time and focus on questions that are important for developing inferential and reflective skills. Additionally, and perhaps most imperatively, the teachers studied here did not spend much time or focus on developing evaluative skills, which is surprising, considering the number of texts that students encounter on a daily basis and that require an ability to uncover different ideas and intentions. As such, the findings in this study can also inform educators and practitioners of the lack of attention to this crucial skill.

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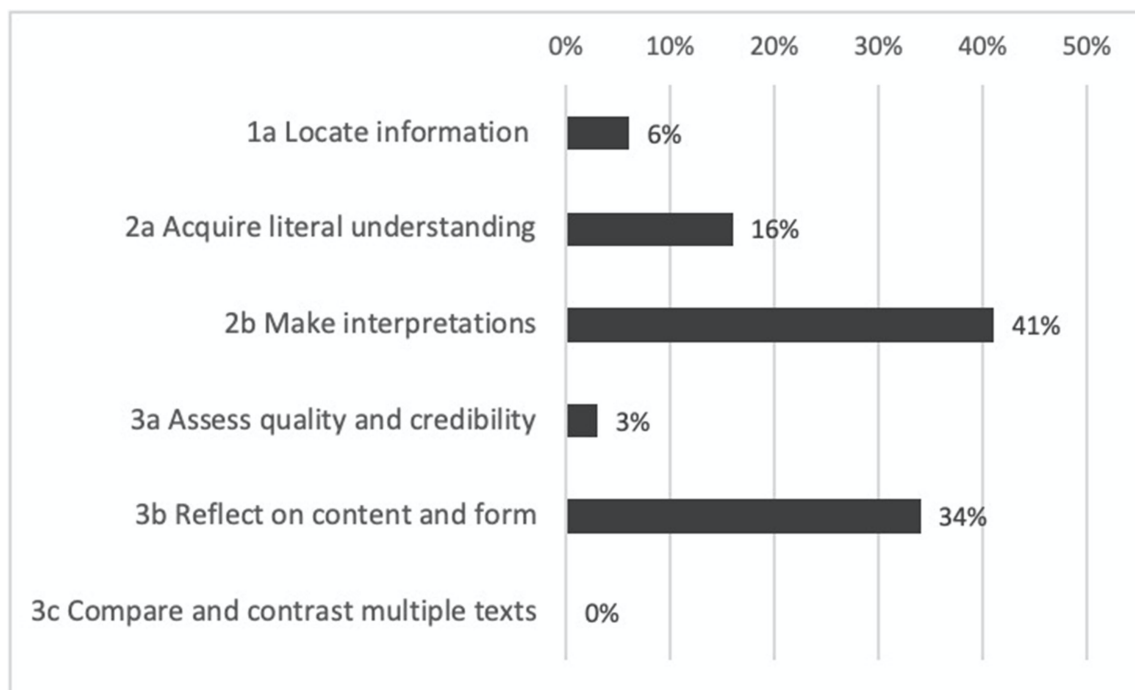


Figure 1. Percentages of text-dependent questions distributed between reading literacy processes of locating (1), understanding (2a, 2b), and reflecting /evaluating (3a, 3b, 3c)

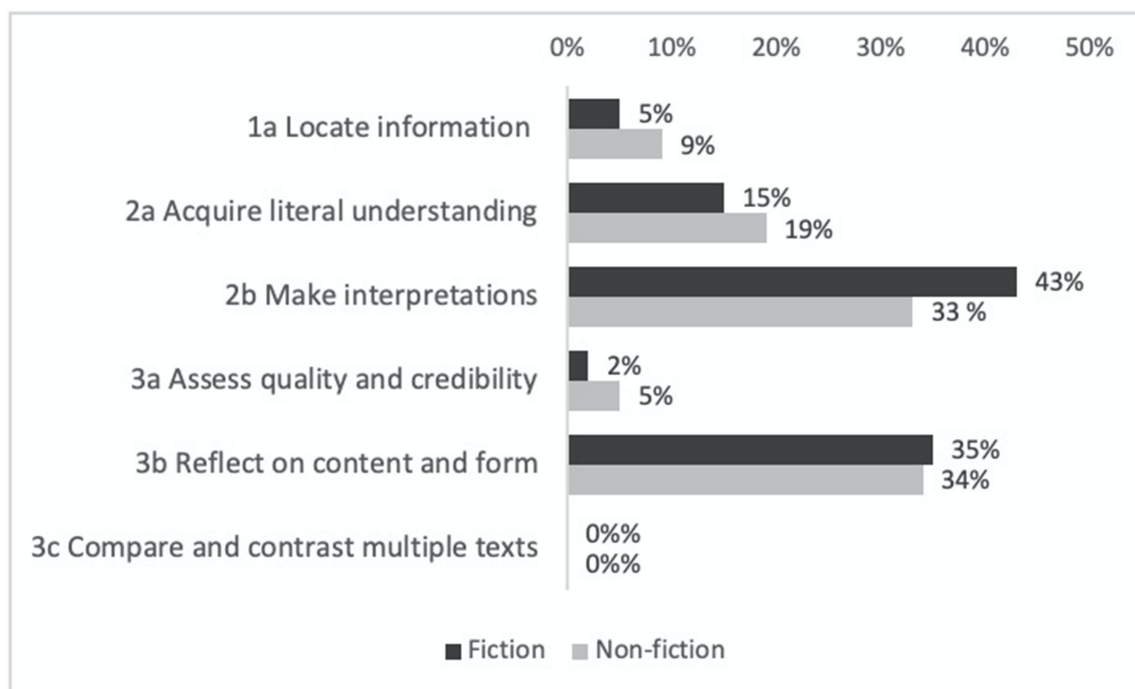


Figure 2. Percentages of text-dependent questions distributed between various reading literacy processes in fiction and non-fiction texts

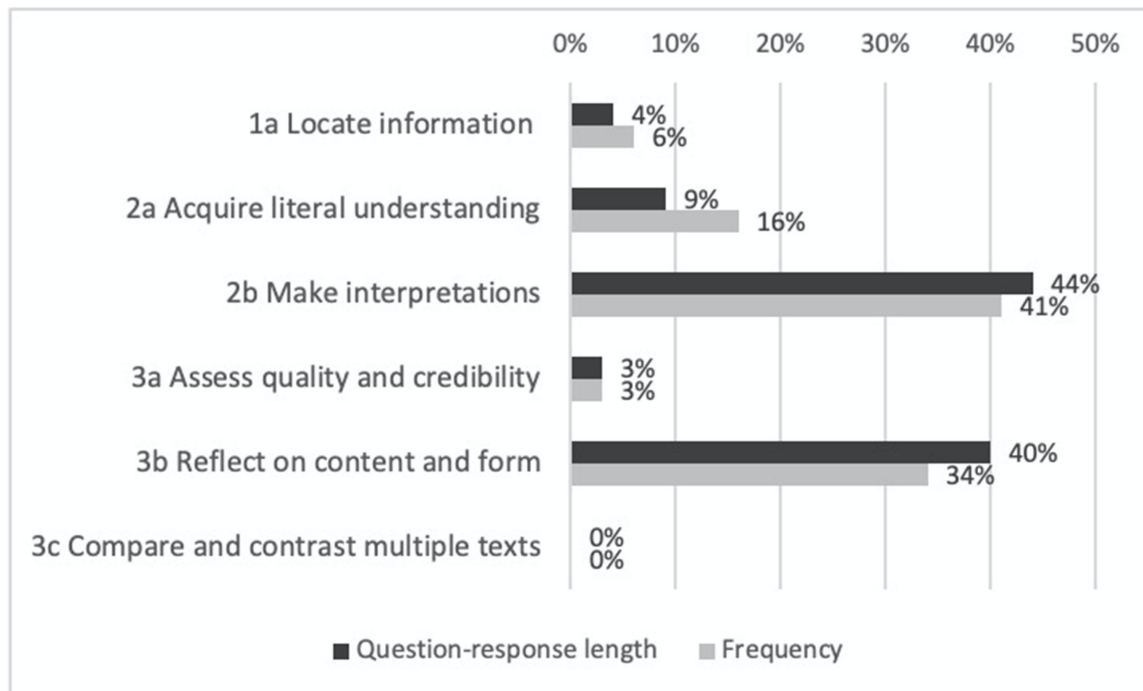


Figure 3. Percentages of frequency and question-response length of text-dependent questions