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Children's discussions about texts: Integrating and evaluating practices

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ABSTRACT

This paper examines how primary school students discuss deeper comprehension and evaluation of text, while involved in dialogic reading in the context of inquiry learning. It takes a conversation analytic perspective on reading for understanding and critical reading. Analysis of the conversational details of peer talk, revealed how students collaboratively construct deeper meaning of text and take a more critical stance toward the text by means of integrating and evaluating actions. We found that how students understand and interpret the text, is reflected in different types of integrating practices they use: comparing text components with previous knowledge, giving additional information, applying information from the text to the present interactional situation. Evaluating practices, on the other hand, are also based on integrating actions, but they display an explicit critical stance to the text as well

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1. Introduction

This study takes a sociocultural perspective to collaborative reading, and adopts a conversation analytic perspective to explore how Dutch primary school students (aged 7–12) collaboratively discuss text content for answering their own research questions in the context of inquiry learning projects (Littleton and Kerawalla, 2012). During such projects, children work in small peer groups within the same educational level, on a shared research question, and their main sources of finding relevant information are written texts, both online and offline. In this process of using text for a purpose, children select relevant text (Pulles, Berenst, de Gloppe and Koole, 2020), discuss meaning and understanding of the text (Pulles, Berenst, Koole and de Gloppe, 2020; Pulles, Berenst, Koole, & De Gloppe, 2021), and use the information to formulate answers to their research question. This reading, thinking, and talking collectively is referred to as *dialogic reading* or *dialogic literacy* (Maine, 2015; Rojas-Drummond et al., 2017); this is in line with the sociocultural ideas about dialogic education (Alexander, 2008; Wegerif, 2013) and interthinking (Littleton and Mercer, 2013) that emphasizes the dialogue between learners in cognitive development (Howe, 2010; Mercer and Littleton, 2007). In cognitive theories on reading, dialogue is also considered to be important for students, to develop a more 'critical stance' toward a

text, comprehend it 'at a deeper level', and reflect and evaluate it (McLaughlin and DeVoogd, 2011).

According to the most recent ideas about reading in the field of education, which are reflected in the main international reading assessment frameworks, PISA (Program for International Student Assessment) and PIRLS (Progress in International Reading Literacy Study), reading, is considered a situated and purposeful activity at different levels of text processing (Mullis et al., 2015; OECD, 2019). In addition to the technical process of reading fluently, three processes associated with text comprehension are distinguished: locating information, understanding, and evaluating and reflecting. Although the importance of interaction to reading comprehension is widely acknowledged, only a few studies examined how such reading processes are established in interaction during collaborative reading (i.e. Maine, 2013; Maree and Van der Westhuizen, 2020). In two previous conversation analytic studies, we focused on how during dialogic reading, the process of locating (i.e., selecting relevant text) is accomplished in interaction (Pulles, Berenst, De Gloppe and Koole, 2020), and how students demonstrate their understanding of text during dialogic reading (Pulles, Berenst, Koole, & De Gloppe, 2021). In Pulles et al., (Pulles, Berenst, Koole, & De Gloppe, 2021), we demonstrated how students establish shared understanding of text, before they adopt a more critical stance toward the text and discuss how the information from the text contributes to answering their research question. In the current study, we focus on this peer discussion about the written text, by further examining how students go beyond the literal meaning of the text and collaboratively turn to the processes

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of 'deeper understanding' (Freebody and Freiberg, 2010), through actions of *integrating, evaluating, and reflecting*. An interesting point is that some of these actions, especially the latter mentioned two, are also characterized in different studies that have used the OECD framework. We will discuss that relationship in the Discussion section of this paper.

A detailed analysis of children's conversations during collaborative reading activities can provide insights into their process of meaning-making (Maybin and Moss, 1993) and critical practices that can be related to 'deeper understanding' (Freebody and Freiberg, 2010; McLaughlin and DeVogd, 2011). Although 'deeper understanding' is a concept that originates from cognitive oriented reading research, and refers to a kind of text comprehension that goes beyond the literal meaning of a text and is "linked to the reader's long-term memory and knowledge" (McNamara et al., 1996: p. 4), we will demonstrate that it may be observed in the dialogic reading interaction of children, and that the concept may be considered as useful in CA-analysis. In this study, we consider 'text' as a multi-modal phenomenon (Hasset, 2010; Maine, 2015), implying that it refers to both the written text and the accompanying pictures used by students in processing the information.

We begin in section 2 with an overview of relevant literature, concerning reading comprehension and critical reading in interaction, from both pedagogical and conversation analytic perspectives. In section 3, we introduce our data collection and method of research in more detail, followed by the findings in section 4, and finally our conclusions and discussion in section 5.

2. Background: research on reading in interaction

Research from a pedagogical perspective has established the benefits of interaction between readers for text comprehension and development of reading skills during both peer and teacher-led discussions (Applebee et al., 2003; Murphy et al. 2009; Nystrand, 2006). Several effect studies have shown that peer discussion around texts may improve individual text comprehension (e.g., Klingner et al., 1998; Van den Branden, 2000), but these positive effects were mainly found on text comprehension at a literal level and less at higher-level comprehension ('deeper understanding') and critical thinking (including *reasoning* and *argumentation*) (Murphy et al., 2009). Moreover, Murphy et al. (2009) concluded from their meta-study that it is not sufficient to simply increase the amount of talk between peers to improve text comprehension; rather, the kind of talk that matters to enhance 'deeper understanding' must be encouraged. To examine the characteristics of this particular kind of talk that does affect 'deeper understanding' of text, Soter et al. (2008) conducted a meta-analysis on effect studies to nine different educational approaches that involved small-group discussion about narrative texts (peer and teacher-led). They found that in the most productive discussions, students hold the floor for an extended period of time, are prompted to discuss texts through open-ended or authentic questions and demonstrate a high degree of "uptake," which they considered as an indication of elaboration and reasoning in the discussion. They defined *uptake* as a discourse move that provides space for students to construct knowledge, such as a follow up question after a students' response (Nystrand et al., 2003).

Other studies have adopted a dialogic perspective to investigate how children make meaning of (narrative) texts during collaborative reading activities (Eeds and Wells, 1989; Maine, 2013; Maine et al., 2020), sometimes in combination with pictures as part of the text (Maine, 2015). Maine's (2013) analysis of discussions between peers, while making meaning of a narrative text, showed that students' language use was hypothetical and questioning and invited different interpretations of the text, which enabled them to elaborate on and question each other's ideas and the

text itself about the meaning of the text. In a quantitative study, Maine et al. (2020) analyzed in more detail how children in peer-group reading jointly make meaning of the text they are reading. They coded the utterances that function as shifts between broader episodes of talk and analyzed to what extent certain functions were present in the peer-interaction. They found that the children used many utterances that may contribute to shared meaning-making, such as statements, reasonings, reflections and elaborations, and they concluded that the talk could be characterized as *co-constructive* (Rojas-Drummond et al., 2006). Such analyses of talk, previously conducted by Eeds and Wells (1989), suggests that children are adequately capable of making meaning and reflecting on text together, and show that elements of 'higher-level understanding' and 'critical reading' are reflected in the interaction.

However, how students exactly organize and construct these activities in the turn-by-turn sequential ordering of their talk, is not known yet. Maybin and Moss (1993) already stressed the importance of a close analysis of children's talk about texts, because it "provides primary data about the actual process of meaning-making which we call reading" (Maybin and Moss, 1993, p.140). Therefore, a thorough analysis of the interactive details of talk about text between peers may help us better understand the actual process of collaborative reading activities and its potential benefits for both reading development and knowledge building by use of texts.

Studies with detailed analysis of interaction, such as those conducting conversation analysis (CA) (Sacks, 1995; Sacks et al., 1974, Sidnell and Stivers, 2013), are needed to fill this knowledge gap. Such studies are based on observations of talk, describing in terms of actions and practices how participants collaboratively accomplish interactional goals, turn-by-turn (Ten Have, 2007). To date, a few CA- studies have examined aspects of text understanding or critical reading during literacy activities in classrooms. Two studies have a particular focus on reading comprehension or critical reading, both of them have addressed teacher-student interaction (Tanner et al., 2017; Van der Westhuizen, 2012). Van der Westhuizen (2012) analyzed teacher-student interaction during a traditional reading comprehension lesson during which the student had to answer comprehension questions. He demonstrated how a teacher guides a student to understanding a word or phrase and scaffolds text comprehension on a literal level. Tanner et al. (2017) examined the role of the text in discussions during a reading instruction specifically aimed at enhancing critical reading of argumentative texts. They focused on the organizational function of text as a material object during teacher-student discussions about text. They showed how students make verbal and non-verbal references (such as pointing and holding up the paper) to the text as an object, to demonstrate that their arguments in the discussion are based on the text. However, their focus was not on how understanding, evaluating, and reflecting actions function in these shared critical reading discussions.

An exploration of how students collaboratively accomplish aspects of reading comprehension and critical reading has been recently conducted by Pulles, Berenst, Koole, and De Glopper (2020; Pulles, Berenst, Koole, & De Glopper, 2021) in their applied CA-studies on dialogic reading activities during inquiry learning in primary school. They demonstrated how students collaboratively address difficulties with word meaning and how they establish shared understanding of text fragments. This shared understanding of text is accomplished by use of *text formulations* to which other students are invited to agree before a more critical discussion about the text content may commence. Text formulations are a specific type of formulations (Garfinkel and Sacks, 1970) used to formulate the gist or upshot of a text that has just been read. Text formulations may help students take a critical stance toward the text, because they facilitate the step to the more advanced read-

ing skills. However, little is known yet about how children collaboratively accomplish the more complex reading actions that go beyond literal understanding, such as integrating, reflecting, and evaluating the text. We believe the only study that reveals an aspect of integrating, namely *comparing*, is the CA-analysis by Melander and Sahlström (2009) that determined how children learn while reading a book about animals who talk about a picture of a blue whale. They demonstrated how children collaboratively construct new knowledge (about the size of a whale) by comparing information from different pictures in the book (of other animals and a ship) with their knowledge about the world (such as size of the school building). In their study, the textbook functions as an artifact for (spontaneous) learning; they demonstrated how children construct new ideas by using text and pictures in that book.

Although comparing information from different sources is one way of gaining a 'deeper understanding' of a text, other actions of integrating, evaluating and reflective reading, may also contribute to the process of collaborative purposeful and critical reading. In our dialogic reading data, students demonstrate such purposeful 'deeper understanding' and critical stance in their collaborative search for answers to their own research questions. Certain characteristics of interaction between peers contribute to 'deeper understanding' of text (Soter et al., 2008); however, we need a detailed analysis of those actual interactions to gain insight into how this exactly works: how do students collaboratively, turn-by-turn, construct 'deeper understanding' and critical stance, when they are involved in dialogic reading? This will provide us with a better understanding of the benefits of collaborative reading, not only for literal understanding but also the more complex reading processes. This study contributes to this knowledge gap by conducting a conversation analytic study of students' critical discussions about texts. The main question is as follows: How do students collaboratively construct the actions of integrating, evaluating and reflecting, while involved in dialogic reading activities?

3. Data and method

To reveal how children collaboratively organize and construct understanding, reflection, and evaluation of texts, turn-by-turn in their interaction, we used the methodology of applied CA (Antaki, 2011; Sidnell and Stivers, 2013). CA is a qualitative method of talk examination that has recently been widely applied to institutional talk as well, including classroom interaction (Gardner, 2019; Gosen and Koole, 2017; Sahlström, 2009; Vine, 2008). CA was first developed in the 1960s and 1970s by Harvey Sacks, Emanuel Schegloff, Gail Jefferson and colleagues (Sacks, 1995; Schegloff et al., 1974) as a method to closely examine what participants in interaction make observable to each other, by analyzing the turn-by-turn sequences in talk. CA considers social interactions as collectively organized by the participants and tries to unravel the patterns in the organization of talk (Ten Have, 2007). It adopts "an 'emic' perspective on how participants make sense of their interaction with others" (Gosen and Koole, 2017, p.792), which means that the analyst takes the participants perspective to gain insights into how students construct their interactional project. In our study, the students' project was to use information from text to answer research questions. The analysis of the interaction was based on detailed transcripts of video-recordings of interactions, that comprise talk, but also non-verbal aspects such as gazing and embodied moves (Sidnell and Stivers, 2013), especially when they were part of the interaction around texts (i.e., pointing at text).

Data for this study were collected in a larger research project on *Cooperation and Language Proficiency* (Berenst, 2011), that involved inquiry learning projects that were conducted at six Dutch primary schools between 2012 and 2014. During those inquiry

learning projects of 2-3 weeks each, students (aged 7–12) worked together in small groups to answer their shared research questions within a given sociocultural theme, such as local history, traffic, feasts, and celebrations. The aim of the overall research project was to acquire better understanding of how interactions between peers contribute to both knowledge building (Bereiter, 2002) and language proficiency. Additional data were collected in two smaller, but similar research projects in which students were involved in dialogic reading during inquiry learning, conducted at four different primary schools Braam, Pulles, and Berenst, 2015; Van der Weijde, 2017). During these projects, students often used texts (online and offline) as a source; they were searching for information and selecting relevant text, reading and talking about the texts, processing and using the information for the purpose of answering their shared research question. This demonstrates that children consider this collaborative involvement with text as their preferred way of reading, as Sterponi (2007) found in her study about students' reading practices during "clandestine reading" in the classroom.

Video recordings were made of group work at least three times during each project. In each class (ranging from Dutch grades 4–8), two or three small groups (3–4 students per group) were followed with a camera during a project. For this study, we selected all the excerpts in which texts were involved, which resulted in a total of 38 dialogic reading interactions (each lasting 5–30 minutes), 33 from the main research project and 5 from the two smaller projects. These dialogic reading interactions consisted of different kinds of reading activities, such as selecting relevant text (Pulles, Berenst, De Glopper and Koole, 2020), solving meaning problems (Pulles, Berenst, Koole and De Glopper, 2020) and discussing text content. The interactions were transcribed according to Jefferson (2004); see Appendix for the transcription conventions. Students were anonymized in the transcriptions.

We were mainly interested in the moments in which the participants demonstrated a reaction to the text content by means of making a connection between the text content and their own prior knowledge or values, because these moments provide more insight into the extent to which children demonstrate to be critical readers and go beyond the literal understanding of the text. From the database of 38 dialogic reading interactions, we searched for all the interactions in which we observed such *connecting actions*, resulting in 22 excerpts that were made object of detailed interactional analysis. The first analysis of these 22 excerpts resulted in a collection of 123 occurrences in these excerpts, in which a connection between text and other information was made. These were further analyzed for sequential details to reveal how these connecting actions are collaboratively constructed between peers, and how these actions are related to each other.

4. Findings

Our collection shows that students who are in a collaborative reading context use various interactional practices to connect the information from a text with information from "outside the text." This "outside-text-information" may regard the reader's prior knowledge about the text content and aspects concerning the reading goal (such as answering a research question). The practices we found in our data corroborate the distinction presented in the literature between integrating text with prior knowledge in the process of gaining 'deeper understanding' and evaluating the text in the light of its usability for the reading goal.

In this first analysis we distinguished the types of reference to prior knowledge that was used to make the connection with. Three types were found: references to (shared) experience (18 occurrences), references to an explicit external source, such as TV, radio, history class (8 occurrences), and references to unspecified

Table 1
Data collection 'connecting actions'(123 occurrences).

Type of connection	Source of connection (shared) experience	with prior knowledge external source	'unspecified'
Comparing	11		23
Adding	5	8	34
Applying	1		18
Assessment	1		22
Total	18	8	97

prior knowledge (97 occurrences). By 'unspecified prior knowledge' we mean that there is no explicit reference to a specific source. For example, after reading aloud a text about communication between a sluice keeper and skippers, a student responds with the following utterance: "Yes! A miraphone or something like that," which is a reference to her prior knowledge, without mentioning where she got that knowledge from. The high number of references to 'unspecified prior knowledge' compared to references to experience and external sources is noteworthy, but we did not observe any differences in interactional function. The explanation may be that in several occurrences there is a sequence of references to the same source, and these are often references to unspecified previous knowledge.

Next, we examined the type of connection the students made between the text information and outside -text information. Two main types of connecting information were found in the data: practices of integrating and of evaluating. *Integrating* information is accomplished in interaction with actions such as *comparing* with prior knowledge or with information from another source, *adding* supplementary information, and *applying* information from the text to another interactionally accomplished activity. *Evaluating* the information is accomplished by making some sort of assessment of the text in relation to the reading goal. Those are utterances in which the participant, for example, refers to the reading goal to make a statement about usability, to ask a critical question, or to comment on the provided information in the text. In Table 1 we present an overview of the utterances in our data collection of 'connecting actions'.

In the next subsections, we demonstrate, by the use of exemplary excerpts from our data collection, how students integrate and evaluate text fragments during dialogic reading in inquiry learning settings and how these two actions may be related to each other, in which they read for the purpose of answering research questions. We demonstrate how these practices are used to construct a discussion on text content between peers.

4.1. Integrating with prior knowledge

Integrating information that is provided by a text means that readers make connections to their prior knowledge. When doing this in interaction, participants' individual prior knowledge becomes available to the others and the process of understanding a text becomes a shared process. We found different practices that reflect this action in interaction: *comparing* information (with prior knowledge), *adding information* (from prior knowledge), and *applying information* to a real-life situation. In some cases of integrating, students explicitly refer to the (external) source that provided their prior knowledge, but in most cases the prior knowledge is from an undefined source, then it is something "they just know." In the following section, we demonstrate, in four excerpts, how students accomplish these actions and how they are used to construct a discussion on understanding and using text.

4.1.1. Comparing

A common practice of integrating is to *compare* information from the text with previous knowledge. In Excerpt 1, we observe

how two students discussing a text are using comparisons. Thijs and Bert-Jan are investigating the history of Halloween and they are reading and discussing a book about this topic. They just read about Halloween fires. The Excerpt begins in lines 69–71 with a *text formulation-decision pair* (Pulles, Berenst, Koole, & De Glopper, 2021) that is used to share understanding of the text that both read just before:

After the *gist text formulation* (lines 69–70), used to demonstrate the understanding of the relevant information from the text, and an agreement (line 71), Thijs checks with a yes/no-question in the first pair part whether Bert-Jan understands it (line 73). In stead of a type-conforming yes/no- response (Schegloff, 2007), Bert-Jan demonstrates his understanding (Koole, 2010) of the first part of the information (about the fire), by making an explicit comparison (line 74). By making this comparison, Bert-Jan relates the information from the text to his own knowledge, and demonstrates that he not just understands the literal meaning of the text (as he expressed in line 71), but that he can "use" the information. The following "yes but" (line 75) from Thijs marks a positive politeness strategy (Brown and Levinson, 1978): he agrees partly with this comparison but also adds a modification to the comparison ("but then for the ghosts") and checks in a tag question whether Bert-Jan understands this elaboration (line 76). Thijs' modification is also based on a comparison, namely the difference between the purpose of a Halloween fire and a barbecue ("but then for"). In response to this, Bert-Jan adds a critical remark whether these ghosts really exist (line 77), again introduced with "yes but" based on a comparison with his own knowledge about the existence of ghosts. A next tag question with the particle "toch?" (Eng. "do they?") with a strongly rising intonation, however, indicates some uncertainty about his assertion, and invites Thijs' opinion on this matter (cf. Kimps, 2018: 136 -139). Thijs' response (line 78) first confirms Bert-Jan's claim that ghosts do not exist ("no") and then provides an explanation why the information from the text might be plausible ("well they believe in it"), and that this is how they should understand the text. The "but, yes" that follows may be an evaluation to wrap up this discussion; it indicates that Thijs does not believe in ghosts either (like Bert-Jan), and although Thijs adds that those people believe in ghosts, he suggests also to end the discussion on this subtopic and to continue the (reading) activity ("we continue," line 78). In sum, in this excerpt, the students discuss their interpretation of the text through the use of practices of comparing information from the text to their own knowledge about fires and the existence of ghosts (consecutively in lines 74, 75, 77). Each comparison in this discussion builds on the previous one and by doing this, students construct a shared understanding of the information from the text that transcends the literal information in the sense that they integrate it with their knowledge of the world.

Generally, it is not just the written text that triggers discussions between readers, pictures in the texts may lead to integrating discussions as we demonstrate in the next Excerpt (2). Bas and Fien are sitting next to each other and they are collaboratively reading a book about different types of sluices, during their research on how sluices work. In their negotiation of the meaning of the picture that goes along with the text, they both do integrating actions in which they compare prior knowledge with what they read and see in their book. (Note that reading aloud is marked with bold print in all transcripts.)

After the reading-aloud by both Bas and Fien (lines 178–180) about a type of sluice that "has nothing to do with ships," Fien reads aloud the caption of a picture of a sluice that is next to the text (line 182). She uses an *upshot text formulation* (Pulles, Berenst, Koole, & De Glopper, 2021) to demonstrate her understanding of the text (line 183), followed by a confirmation by Bas (line 185). Such a formulation-decision adjacency pair (Heritage and Wat-

- 69 Thijs: en dan maken ze een groot vuur en dan jagen ze
and then they make a big fire and then they scare
- 70 die geesten weg
those ghosts away
- 71 BertJ: ja
yes
- 72 (1.0)
- 73 Thijs: snap je,
do you understand,
- 74 BertJ: hetzelfde als barbecueën!
 → *the same as barbecuing!*
- 75 Thijs: ja maar dan voor de geesten dan gaan hun die geesten
 → *yes but then for the ghosts then those ghosts*
- 76 weer weg snap je,
go away again do you understand,
- 77 BertJ: ja maar die geesten bestaan niet echt toch?=
 → *yes but those ghosts don't really exist do they?=
 =nee nou hun geloven d'r in. maar ja we gaan weer verder.
 =no well they believe in it. but yes we continue.*

Excerpt 1. “fire”, grade 4-5 (age 7-8).

son, 1979) functions in this context as a bridge between the reading activity (lines 178–182) and a discussion (lines 185–203). After his confirmation, Bas skip-connects (Broe, 2003; Sacks, 1995) to the topic of the text they were reading just before (lines 178–180), by stating that “there are different kinds” (line 190), followed by a claim of knowledge (line 191). To account for his assertion, he demonstrates his knowledge by showing a picture and describing it, also relating to his prior knowledge (indicated by “such”) (line 193). Fien’s response (line 196) indicates that she is integrating with her own knowledge, notice the use of “such” again, but still describing what this specific sluice looks like. Then, in line 199, Bas tries to name the object they are talking about (“bridge or lift”), after confirming Fien’s description (“yes”). Fien seems to be satisfied and continues the reading activity by re-opening the book (line 200) and an encouragement (line 201). Finally, Bas demonstrates his understanding of how the sluice works by mentioning “a big, gigantic weighbridge” (line 202), which is confirmed by Fien in line 203. This implicit comparison with the sluice in the picture is based on his prior knowledge about the up-and-down-moving of both the sluice and a weighbridge.

Both examples demonstrate how students use comparisons to integrate information from written text, visuals, and prior knowledge. This observation reflects their orientation to getting a shared and better understanding of the text in relation to their reading goal. Comparisons may concern a similarity with prior knowledge or a difference. The use of “yes but” to introduce a difference between the information from the text and prior knowledge of the student is noteworthy. In the context of making meaning together from texts, it is not only a polite way of disagreeing (Brown and Levinson (1978) called it a positive politeness strategy), but above all a way to build upon each others’ contributions to a better understanding. Comparing with examples from prior knowledge (such as barbecuing and a weighbridge) functions as both a way of demonstrating that you understand the text, and, at the same time, it may help to make an individual interpretation a shared under-

standing, even more when the comparison is accepted by the other participant.

4.1.2. Adding information

We found another practice of integrating in our data: when students *add* information from their prior knowledge to the information in the (multi-modal) text. Although in comparing practices there always is some kind of indication of doing comparing, by use of words like “the same as”, “but then for”, “such” and “a kind of,” in adding practices the participant just presents supplementary information from his/her previous knowledge. This is demonstrated with the next Excerpt (3) in which two girls are doing research on the origin of gymnastics. They are sitting next to each other in front of a computer; both looking at the screen and Elisa controls the mouse and keyboard. At this moment, they are searching the internet and now they are looking at a website with photos of gymnasts and they are discussing two of them:

In a knowledge display in line 79, Nora shares her knowledge about the gymnast in the picture by adding some information, namely that his name is Epke¹ and that he became world champion. Elisa confirms with a minimal response (line 80). After a pause (line 81), Elisa makes a reference to an external source (the morning news on TV) that may function as a support of her confirmation (line 82-83), and also of the assertion of Nora. Then Nora mentions her source of information, which is the radio (line 84), and she explicitly says that she heard “it” on the radio, which probably refers to the news about Epke becoming world champion (that happened just the day before this conversation). Both the news and the radio may be seen as objective sources, and therefore reliable support to the assertion about Epke being world champion. Referring to these sources makes the assertion verifiable.

¹ Epke Zonderland is a famous Dutch gymnast, who became world champion at the horizontal bar in 2013.

- 178 Bas: **maar er zijn ook sluizen die niets (.)**
but there are also sluices that have nothing (.)
- 179 Fien: **met schepen te (.) ma[ken hebben**
to (.) do w[ith ships
- 180 Bas: **[maken hebben**
[to do
- 181 (.)
- 182 Fien: †he kijk! **een voorbeeld van oude sluishoofden**
†hey look! *an example of old sluice heads*
- 183 (.) oh! en dat is dus zo'n eh: sluis ((wijst))
→ (.) *oh! and so that is such a: sluice ((points))*
- 184 (0.5)
- 185 Bas: ja. dat is zo'n #blokding
→ *yes. that is such a #block thing*
- 186 #((points at picture))
- 187 (.)
- 188 Fien: †heu een blokding
†heu *a block thing*
- 189 (.)
- 190 Bas: maar er zijn verschillende soorten (.)
→ *but there are different kinds (.)*
- 191 #ik weet er ook een
#*I also know one*
- 192 #((closes book, points at cover picture))
- 193 zo'n soort (.) deze is met zo'n deur
→ *such a kind (.) this one is with such a door*
- 194 ((points at cover picture))
- 195 (0.5)
- 196 Fien: oh dat is met zo'n #omhoog en omlaag
→ *oh that is with such a #up and down*
- 197 #((hands up and down))
- 198 (.)
- 199 Bas: ja! dat is een soort brug of lift,
→ *yes! that is a kind of bridge or lift,*
- 200 (2.0) ((both laugh, Fien opens book again))
- 201 Fien: >toe maar<
>*go on*<
- 202 Bas: een grote gigantische weegbrug
→ *a big gigantic weighbridge*
- 203 Fien: ((lacht)) ja.
((laughs)) *yes.*

Excerpt 2. "block thing", grade 4-5 (age 7-8).

- 78 (*Elisa clicks on link with pictures*)
- 79 Nora: Ep ke:: (1.0) hh! hij is wereldkampioen geworden hè?
→ Ep ke:: (1.0) hh! he became world champion didn't he?
- 80 Elisa: hm ↓hm:
 hm ↓hm:
- 81 (2.0)
- 82 Elisa: vanochtend zag ik hem (0.5)
 this morning I watched him (0.5)
- 83 vanochtend zag ik hem op het nieu:ws
 this morning I watched him on the ne:ws
- 84 Nora: ja ik hoorde het op de (.) eh radio. ·hHh ((wijst op scherm))
 yes I heard it on the (.) eh radio ·hHh ((points at screen))
- 85 Elisa: koekoe
 coocoo
- 86 Nora: die
 that
- 87 Elisa: (hou gewoon erbij) hij was tweede bij eh (.)
→ *(just keep) he was second at eh (.)*
- 88 Holland's Got Talent
 Holland's Got Talent
- 89 (6.0) ((students continue watching pictures))
- 90 Elisa: weet je dat ik bijna eerste was bij turnen?
 do you know that I was almost first at gymnastics?
- 91 Nora: ja hoo:r
 yeah su:re
- 92 Elisa: wedstrijd,
 competition
- 93 (2.0)
- 94 Nora: ((wijst)) koekoe (1.0) kan jij dat ook?
 ((points)) coocoo (1.0) can you do that?
- 95 Elisa: d d dat is de schapensprong
 th th that is the sheep jump
- 96 Nora: ja? kan jij dat?
 yes? can you do that?
- 97 Elisa: nee:. ((scrollt verder))
 no:. ((scrolls))
- 98 Nora: ga eens iets omhoog? (1.0) stop perfect
 can you go up? (1.0) stop perfect
- 99 *((points at picture on screen))*

Excerpt 3. "Epke", grade 5-6 (age 8-9)

The second assertion (line 87-88) is another knowledge display about a picture of a different gymnast, apparently someone who won the second prize at the TV-show *Holland's Got Talent*. This assertion is based on her own knowledge, but this knowledge is verifiable, because she refers to a TV-source (HGT). Nora does not respond to this assertion and both students continue to look at

the pictures. Then, after a long pause, Elisa shares new information (line 90), which is based on her own experience, namely that she "became almost first at gymnastics" (so, also second, like the man on the picture?). Elisa uses a "do you know" formulation, as a pre-announcement of the extra news. Nora's response "Ja hoor" with a marked stretched vowel in *hoo:r* (line 91) is treated by

Elisa as a challenge of her epistemic authority on this matter. This use of the phrase “ja hoo:r” is marked: the unmarked use of this phrase in Dutch is providing confirmation after a yes/no question. Although there are three specific types of this phrase in that position (Mazeland and Plug, 2010), they are all different from the marked use of “ja hoo:r” following an assertion of a co-participant. The preferred second pair-part of an assertion is an acknowledgment. Using “ja hoor” in this position (in Dutch) is interpreted as an ironic, even sarcastic response, indicating disbelief. That interpretation is still enforced by the marked prosody of hoo:r. Elisa counters Nora’s challenge with “competition” (line 92), referring to the context of her claimed achievement and taking away a little of the subjectivity and at the same time increasing her epistemic authority: emphasizing that she did not made up the fact of being “almost first at gymnastics,” but that it happened at a gymnastics competition. After a longer pause, Nora asks Elisa “if she can also do that?” while pointing at another picture on screen (line 94), which may suggest that now Nora accepts the assertion. Elisa does not answer immediately, but she demonstrates her epistemic authority by naming the type of jump that is on the picture (“sheep jump,” line 95). The rising intonation of “ja?” (line 96) in Nora’s response, indicates that this information is new to her and that she is still not completely sure about Elisa’s epistemic authority; but she repeats her question, indicating that Elisa missed the point. Taken together, in this example, students demonstrate that reference to an external source may enforce the value of prior knowledge in the integration action, but only if it is accepted by both participants as a reliable source. Students seem to differentiate between different kind of sources; TV news and the radio are immediately accepted as reliable sources, but a student’s personal knowledge needs to be accounted for. Thus, the student’s orientation is not merely directed to the added information itself, but also to the plausibility and trustworthiness. These evaluating actions indicate the student’s epistemic stance (Heritage, 2012) toward the previous contribution: she is critical toward the information. So we might say that she demonstrates here a critical stance in the discussion.

4.1.3. Applying

Another type of integrating practices found in our data is *applying* information provided by the text to the present interactional situation. Such “doing something” with information from the text in interaction again makes the individual interpretation of text content available to the other and may contribute to the interpretation of the text. This is demonstrated with the next example (4). Jelte and Lars are doing their research on Chinese New Year’s celebration and they are reading at the Dutch Wikipedia about the Chinese Zodiac signs:

In this excerpt, the reading-out-loud (lines 1–3, 5) of a listing of the twelve Chinese Zodiac signs by Jelte, is (after some unintelligible talk) followed by an assertion by Abel. In this assertion he applies the information from the text to himself by saying that he is an ape (line 9). Then Eva responds with a similar assertion for herself (line 11), followed by Abel who repeats his assertion (line 12). These applications imply that they are interpreting the list of Zodiac signs as representatives of the twelve months of the year, instead of each representing a Chinese year. This misunderstanding of the text is caused by the projection of the students’ prior knowledge about the system of Western Zodiac signs to the Chinese Zodiac system. While the twelve Western Zodiac signs each represent a month, each Chinese Zodiac sign represents almost one (Western) year. The misunderstanding is observable in Lars’ consecutive TCU’s (Sacks et al., 1974): he first asks himself, “which one am I actually?” (line 13), then refers to his own birthday (“I am October”) and starts listing the months while counting on his fingers. He seems to think-aloud and demonstrates the

steps that he is taking to apply the information from the text to the present interactional situation in which the students are making conclusions based on the text. Those steps are: determine their own month of birth, counting which number this month has in the list of months, comparing it with the list of animals in the text. Unfortunately, Lars’ conclusion (“I am a...,” line 16) is unintelligible, but considering his change-of-state token “oh” (Heritage 1984; Seuren 2019) and the contrastive exclamation of “rooster” in line 22, he signals that he had reasons to revise this conclusion. Thus, this example suggests that students may use information from the text (the twelve Chinese Zodiac signs), integrate this with prior knowledge (twelve Western Zodiac signs representing the months and their own month of birth) to draw a conclusion, which results in new knowledge (which Chinese Zodiac sign they are). However, this new constructed knowledge is based on a misunderstanding of the information in the text, that the students themselves are not aware of.

Overall, in dialogic reading, students use integrating actions to make sense of (new) information provided by text and/ or pictures, in relation to their prior knowledge. Integrating actions, such as comparing, adding, or applying information may also function in the shared process of a ‘deeper understanding’ and use of text in the context of inquiry learning. Such practices demonstrate that students do not always settle with literal understanding of a text, but that they orient to a more far-reaching understanding. Moreover, they may function as a step in taking a critical stance toward the text, especially when the information from the text is compared to the prior knowledge of the reader. However, in the context of inquiry learning, a ‘deeper understanding’ of the text is not sufficient: to use the text to answer research questions, students need to relate their understanding of the text to the reading goal and evaluate its usability. In the next section, we demonstrate how students take a more critical stance by evaluating the text information in relation to their reading goal.

4.2. Evaluating text

In the previous section, the actions were oriented to a better understanding of the information from the text; in this section, we present cases wherein the participants demonstrate a more reflective stance toward the text, asking themselves whether the information “is good enough” for their reading goal. Doing such an evaluation is an action of integrating as well, but now the integration regards a value, according to which the information is evaluated (Koole, 2012); in our data, this value is defined by the reader’s assessment of the information in the text or by the reading goal. In the context of inquiry learning, this reading goal is finding answers to a shared research question, and the evaluation may concern the appropriateness, usability, or correctness of the information in the text to fulfill this goal, from the students’ perspective. In the next example (Excerpt 5), the *appropriateness* of the information from a text is questioned. Three girls are searching the internet for information about the origin of gymnastics, and at this point, they have just read a fragment on the Dutch version of Wikipedia on this subject. In the text it is written that gymnastics was already practiced more than three thousand years ago by the ancient Egyptians, Romans, and Greeks. The reading is followed by a short discussion whether it was *three hundred* or *three thousand* years ago, and the excerpt starts when Elisa proposes to “write down three thousand years ago” as a conclusion to this discussion:

As a reaction to Elisa’s proposal (line 63), there is a short discussion on whether the reading goal (knowing how gymnastics originated) is reached sufficiently. The discussion begins with an utterance of critical stance by Nora (line 65), in which she explicitly mentions their shared reading goal. She states, “but we do need to know how it is originated,” indicating that writing down

1 Jelte: **in totaal hebben ze twaalf sterrenbeelden**
in total they have twelve Zodiac signs

2 **de rat de os de tijger het konijn de draak**
the rat the ox the tiger the rabbit the dragon

3 **de slang het paard en de geit de aap**
the snake the horse and the goat the ape

4 Lars: [haha] ((lacht))
 [hahah] ((laughs))

5 Jelte: **[de haan] de hond (0.8) ((kijkt naar camera)) °de varken°**
[the rooster] the dog (0.8) ((looks at camera)) °the pig°

6 (1.5)

7 Jelte: dat is () ((kijkt op van papier))
that is () ((looks up from paper))

8 Eva: ()

9 Abel: ik ben de (aap)
 → *I am the (ape)*

11 Eva: ik ben (de) varken
 → *I am (the) pig*

12 Abel: ik ben de aap
 → *I am the ape*

13 Lars: welke ben ik eigenlijk, (.) ik ben oktober #één- januari
 → *which one am I actually, (.) I am October #one- January*

14 #((counts with fingers))

15 februari maart april °mei juni juli° augustus september
February March April °May June July° August September

16 oktober. ik ben een ()
October. I am a ()

17 ((starts reading in the text))

18 Jelte: ik ben een tijger! (.) #tsh: tsh: tsh:
 → *I am a tiger! (.) #tsh: tsh: tsh:*

19 #((stands up and grabs with both hands))

20 Jelte: **vijftien dagen (.) de Chinese-**
fifteen days (.) the Chinese-

21 **het Chinese [nieuwjaar wordt vijftien]**
the Chinese [New Year is fifteen]

22 Lars: [oh. ik ben de haa:n!] ((kijkt op))
 → [oh. I am the roo:ster!] ((looks up))

Excerpt 4. “zodiac signs”, grade 4-5 (age 7-8)

“three thousand years” is not sufficient to answer their research question. Elisa then adds, “by the Egyptians” (line 67), but this answer is still not appropriate according to Nora because she responds with “yes but how exactly” (line 69), indicating in a polite way (Brown and Levinson 1978) that she that she is not content with Elisa’s answer: she is still missing the details of the origin (how exactly). Her reference to their shared research question may be considered an evaluation in the sense that Nora assesses the completeness of the answer given thus far with what she expects

to be essential elements of the answer: information about “when” and “who” is not sufficient, information on “how it was originated” is necessary. Then, Elisa returns to the text by rereading aloud the specific text fragment (lines 71–76), maybe because she expects to find the missing information within this fragment. After the reading-aloud and a short pause, Elisa seems to process the text in a kind of think-aloud activity (lines 78–83), marked by the pauses (lines 77, 80, 82), and the hesitating way of formulating (lines 78, 81). In line 83, Elisa begins to formulate a conclusion, probably

- 63 Elisa: zullen we dan drieduizend jaar geleden gaan opschrijven?
shall we then write down three thousand years ago?
- 64 Merel: ()
- 65 Nora: () maar (.) wij moeten ook wel weten hoe het ontstaan is
→ () *but (.) we do need to know how it originated*
- 66 (1.5)
- 67 Elisa: door de Egyptenaren
by the Egyptians
- 68 (1.0)
- 69 Nora: ja maar hoe precies
→ *yes but how exactly*
- 70 (1.0)
- 71 Elisa: **drieduizend jaar geleden werd er in het oude Egypte**
three thousand years ago in ancient Egypt
- 72 **maar ook bij de Grieken en de Romeinen een soort**
but also at the Greek and the Romans a kind of
- 73 **gymnastiek beoefend toen het Romeinse Rijk verdween**
gymnastics was practiced when the Roman Empire disappeared
- 74 **verd (.) verdween- verdween ook de gymnastiek en werd het**
diapp (.) disappeared- also gymnastics disappeared and it was
- 75 **nog maar door acrobaten beoefend. (1.0)**
only practiced by acrobats. (1.0)
- 76 **in de negentiende eeuw maakte**
and in the nineteenth century made
- 77 (1.0)
- 78 kan het zijn driehonderd jaar geleden nee
could it be three hundred years ago no
- 79 drieduizend jaar geleden dat uhm
three thousand years ago that uhm
- 80 (2.0)
- 81 toen weet ik (dacht)
then i know (thought)

Excerpt 5. "how exactly", grade 6-7 (age 9-10)

based on what she reads on screen, interrupted by Nora (line 84). "Fee Lahn" refers to Friedrich Ludwig Jahn, the founder of modern gymnastics, who invented several apparatuses. Then, after some organizational talk, Elisa mentions again the era when gymnastics was firstly practiced (line 97), and Nora again responds with her critical question (line 98), initiated again with "yes but," as being an evaluation of the answer formulated by Elisa. Merel, the third girl, then contributes to the discussion with a what seems to be a critical comment (notice her use of "but" in line 101), which is unfortunately mostly unintelligible. Nora accounts again by repeating the question that, according to her, still remains (line 102), again initiated with "yes but" and now a very explicit reference to this question ("the question is"). In response, Elisa refers to the text as the source of information and encourages both Nora and Merel to read (for themselves) (line 103). However, instead of giving the op-

portunity to Nora and Merel to actually read for themselves, Elisa expresses that she has read it well (line 104), followed by a rereading of a text fragment, which may function both as an answer to the question how gymnastics originated (lines 104–107) and an argument for her assertion that she did read the text well. Finally, it is Merel who accepts this as an answer (line 110), just before the teacher ends the inquiry learning activity, because it is time to finish the lesson. Thus, the collaborative reading context may help children scrutinize a text, when one of the participants demonstrates a more critical attitude than the others. In this example, the persistent reference to their shared reading goal by Nora as response to Elisa's repeating reference back to the text as the source of information, finally leads to a more finetuned answer to this question, given by Lisa reading aloud a relevant part of the text. Such evaluating practices function in peer discussion as reasoning

82 (1.0)
 83 Fee Lahn het heeft gem=
 Fee Lahn has it ma=
 84 Nora: =weet ik niet
 =i don't know
 ((lines omitted: organizational talk about writing down))
 97 Elisa: al meer dan drieduizend jaar
 already more than three thousand years
 98 Nora: ja maar hoe precies is het dan ontstaan? (0.5)
 → yes but how exactly did it originate? (0.5)
 99 Merel: (Elisa)
 100 Elisa: ja
 yes
 101 Merel: eh: (.) maar (als het niet) ()
 eh: (.) but (if it not) ()
 102 Nora: ja de vraag is wel hoe is turnen ontstaan
 → yes but the question is though how did gymnastic originate
 103 Elisa: ja↑ (0.5) gaan jullie maar eens lezen ik heb- (.)
 104 yes↑ (0.5) you go reading now I have- (.)
 105 ik heb het goed gelezen want kijk (.) het is #↑eerst
 i have read it well because look (.) it is #↑first
 106 #((points))
 107 **nog maar door acrobaten beoefend en in de negentiende**
only practiced by acrobats and in the nineteenth
 108 **eeuw maakte Frede Jahn eh (.) Peeling het turnen**
century Frede Jahn eh (.) Peeling made gymnastics
 109 **weer bekend**
well known again
 110 (2.0)
 111 Merel: °oké.
 °okay.
 112 ((teacher ends the activity))

Excerpt 5. Continued

practices (Coulter, 1990; Mazeland, 1994). This is also an example in which a student explicitly demonstrates her orientation to 'deeper understanding' of the text.

In the previous example, the discussion concerned evaluating, whether the shared goal of finding an answer to the research question (by use of the text) was reached, and whether the information was appropriate. In the next example, the evaluation and subsequent discussion concerns the *correctness* of the information that is provided by the text, based on a comparison with prior knowledge from a shared experience. Moreover, we observe a difference between more explicit evaluations (Excerpt 5) and an implicit practice of evaluating (Excerpt 6). In Excerpt 6, Bas and Fien (see also Excerpt 2) are still working on their inquiry project about sluices. In the weeks between these two moments, they have visited a sluice and spoken to the sluice keeper. Back at school, they are reading again in a book about sluices:

The text speaks of two types of sluices: hand driven (smaller sluices) versus motor driven sluices (including both big sluices and modern sluices). Bas deduces from the text (lines 14–22) that the two types of sluices are slightly different, namely: small ones that are conducted by hand (lines 16–20), versus large modern sluices that are conducted by a motor (lines 20–22). After reading this text aloud, Bas reacts with a *counter* to the text (lines 26–27), referring to their visit to a sluice, suggesting that there is a third type of sluice, namely small modern sluices, and his evidence is the type of sluice they visited (according to Bas). The fact that Fien had been to this sluice too and is, therefore, able to check the argument, makes it more powerful. In this example, the reader is using prior knowledge (in this case based on a shared experience) to evaluate the information from the text. The implicit evaluation is based on a conclusion about the mismatch between what is written in the text and what the reader knows. Notice again the use of

- 30 één [twee en dan hier ook nog
one [two and then here also
- 31 Bas: [ja maar die kleine ja maar die kleine ook eigenlijk
→ [yes but the small yes but the small one also actually
- 32 Fien: ja bijna ((tegen lln buiten beeld))
yes almost ((to other pupil))
- 33 Bas: ja maar daar zat dus nog een deur ingeklapt
→ yes but there was also another door inserted
- 34 (0.5)
- 35 Fien: ja hier zat nog een deur tussen
yes here was a door in between
- 36 want bij die kleine was het zo
→ because at the small one it was like this
- 37 (.)
- 38 Bas: ja en dan zat hier nog ergens #deur ofzo
yes and somewhere here there was #door like that
- 39 #((points at Fien's drawing))
- 40 Fien: #neenee
#no no
- 41 Bas: we:l
there wa:s
- 42 Fien ((schudt hoofd)) da dat [maar
((shakes head)) tha that [but
- 43 Bas: [jawel weet je nog
[yes you remember
- 44 Fien: OH wacht kijk ik teken het wel even
OH wait look I'll draw it
- 45 ((turns page of notebook)
- 46 kijk #zo werkt eigenlijk een sluis
look #a sluice works like this
- 47 #((draws))
- 48 Bas: eigenlijk ##ook nog een deur ingeklapt eigenlijk
actually ##also a door inserted actually
- 49 ##((points at notebook))

Excerpt 6. Continued

levels of understanding and critical reading. By analyzing the discursive details of dialogic reading between primary school peers, we identified, first, three main types of *integrating practices* that were observed in the interaction and that reflect how students interpret the text, namely (1) comparing information from the text with information from another source, (2) giving additional information to the information from the text, and (3) applying information from the text to the present interactional situation. These integrating actions make observable how students interpret a text, and how they are oriented to a deeper level of understanding of the text, which goes beyond the literal text comprehension, by making connections to the reader's prior knowledge (McNamara et al. 1996).

Second, a more critical stance toward the text content is accomplished in interaction by *evaluating practices*, based on the reader's assessment of the correctness of the information from the text or its contribution to reach the reading goal (i.e., answering a shared research question). We found that students make use of argumentative practices (Coulter, 1990; Mazeland, 1994) to collaboratively make sense of the text and its usability to their shared reading goal. They often initiate their evaluating actions with the use of "yes but." as a positive politeness strategy (Brown and Levinson, 1978) when their evaluative action regards a (partial) disagreement with the previous speaker. This phrase is also observed in *comparing* actions, but only when the comparison concerns a difference between the information from the text and the stu-

dent's previous knowledge. This may also stimulate the other participants to perform more reflective and evaluative actions, leading to a more elaborate discussion between peers during which they collaboratively construct 'deeper understanding'. We also observed a "double duty" of both the comparing and evaluating utterances in this context (Mazeland and Plug, 2010; Schegloff, 2007). A comparison may also function as an evaluation of the information for its correctness; it reflects how the speaker assesses the text for its usability to the reading goal. Evaluating, on the other hand, has elements of comparing the information in the text, since evaluating involves an assessment based on a comparison with a *value* (Koole, 2012). In the context of inquiry learning, this value regards the reliability and usability of the text.

Our findings showed that collaborative meaning-making of text is an ongoing process of sharing interpretations of a text and with argumentative practices building on each other's contributions. Evaluating actions may support this, because the more critical reactions to a text enhance the discussion about the text between participants. Such insights into how children construct deeper meaning and interpretation of text together, helps us better understand the interactional processes behind the established findings that collaborative reading benefits reading comprehension (Murphy et al., 2009).

Our findings made observable what is known from cognitive reading research. Based on Kintsch's (1998) situation model of reading, in the PISA Reading Framework, *understanding* text means both comprehending the literal meaning of the text and integrating it with one's prior knowledge through inferencing (McNamara, 2021). *Evaluating and reflecting* processes imply that a reader takes a critical stance toward a text and evaluates and reflects on its plausibility, trustworthiness, and usability for the reading goal (OECD, 2019; Pearson et al., 2020; Richter and Rapp, 2014). It is even the central aspect of what is characterized in the reading literature as "critical literacy." This *critical literacy* concept has been explored since the 1970s (Freire and Ramos, 1972), and was initially related to issues of power and manipulation by text, to comprehend text beyond the literal representation and think critically about the author's purpose. Nowadays, this origin of critical literacy is still reflected in the idea that critical readers make connections between the text, the world, and themselves and understand that a text has always been authored from a particular perspective and purpose (McLaughlin and DeVoogd, 2011). Examining interactions between peers in which they work together and perform reading activities collaboratively, in the context of inquiry learning, enhances our understanding of how children collaboratively use text in a knowledge building environment (Bereiter, 2002).

These ideas about reading are also reflected in both PIRLS and PISA international reading assessments among 10- and 15-year-old students, respectively (Mullis et al., 2015; OECD, 2019). These recent assessment frameworks are based on the idea that reading skills have different levels: starting from "lower-level reading skills," such as "retrieve explicitly stated information" and "make straightforward inferences," to more advanced reading skills (Pearson et al., 2020), such as "interpret and integrate ideas and information" and "evaluate and critique content and textual elements." Pulles, Berenst, Koole, & De Glopper, 2021 found in a previous study how students share understanding of text in interaction, which is then an interactional reflection of the lower reading skills. In the current study, we found that students use the more advanced reading skills in their reactions to text content, which leads to more extended discussions of text content and its use for the reading goal. However, it seems that the different integrating actions accomplish different levels of integrating information from text and previous knowledge. The information adding actions tend to be based more on associations with the topic of the text, without being oriented to deeper text comprehension or the read-

ing goal (from the students' perspective); they rather "move away" from the text content. Comparing actions, however, seem to be oriented to this 'deeper understanding', by referring to information from outside the text to get better grip on the text meaning (comparing), which is reflected by the use of phrases such as: "the same as," "yes but," and "such." Applying actions, then, seem to be oriented to the construction of conclusions based on far-reaching integration of text and previous knowledge, which may lead to the construction of new knowledge. The evaluating actions and critical reflections we found in our data show how students take a critical stance toward the text in the process of using text to answer their research questions.

An interesting issue that emerged from our analysis is that sometimes students' integrating and evaluating actions are based on a misunderstanding of the text (excerpt 6) or a lack of prior knowledge (excerpt 4). This, of course, is due to the situation of students working together, without a teacher constantly guiding them. Although we have observed this in only a few cases, this is a risk of this type of education in which students are agents of their own learning process. However, the question is if these types of misunderstanding are really problematic for the students' knowledge construction or that they could be part of the learning process to become a critical reader.

This study has demonstrated that the context of inquiry learning provides room for shared knowledge building by the use of texts in a dialogic reading situation. Students are driven to working together on their shared knowledge gaps and discussing text to reach this goal. The examples in our study showed that shared inquiry learning is a learning environment that is focused on maximizing meaning from texts for students which is considered an important educational goal (Guthrie, 2016; Van Rijk et al., 2017). According to Guthrie (2016) these types of reading contexts, in which students read with genuine reading goals and are able to choose themselves what they read, are very motivating. Moreover, we have shown that these collaborative reading activities provide students with a relevant context to use, and potentially develop, their critical reading skills. Becoming critical readers is emphasized more and more in modern curricula and is also reflected in the latest PISA Reading Framework, with its focus on how students acquire and use information in a variety of contexts (OECD, 2019). When placed in a functional learning environment such as collaborative inquiry learning, students are challenged to develop or to apply their reading skills and may construct new knowledge by the use of text, learning from and with each other.

Appendix

Transcription key, based on Jefferson (2004)

text	printed text that is read aloud
[text	overlapping speech
# / ##	overlapping embodied action with an ongoing silence or utterance
=	break and subsequent continuation of contiguous utterances
(0.4)	pause (seconds)
(.)	micro pause (< 0.2 seconds)
.	falling intonation, , continuing intonation
?	rising intonation
!	animated tone
↑	marked rising shift in intonation
°	softer than surrounding talk
<u>text</u>	emphasis
:	extension of the sound (0.2 seconds for every colon)
>text<	faster than surrounding talk
()	inaudible talk
((text))	description of non-verbal actions

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