

## FOUR CLASSROOMS—FOUR APPROACHES TO READING

Examples of disciplinary reading in social science subjects in years five and twelve

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### Abstract

In this paper, we aim to explore and exemplify what opportunities to develop disciplinary reading literacy students are given access to in particular types of classroom reading environments in social science subjects. The investigation focuses on how the teacher organizes activities around reading, on what content is approached in text-related discussions and on whose perspectives are allowed space in the classroom discourse. The empirical data consists of classroom observations from two classes in year five and two classes in the Swedish upper secondary school, using different approaches to teaching reading, one being Reading to Learn. With a theoretical base in systemic functional linguistics (SFL), dialogism and reception theory, the classroom discourse was analysed in terms of sequential reading stages, text movability and dialogicality. The findings reveal how differently organized reading environments provide different support structures for students' disciplinary reading. For example, the findings indicate that text activities that support the reading process in several stages bring about a larger potential for the development of reading literacy. However, the picture changes depending on to what extent students are given room to express their reception of the text, and thereby contribute to an active understanding of text in a dialogical classroom.

Keywords: reading approaches, disciplinary literacy, reading development, Reading to Learn, social science subjects

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## 1. INTRODUCTION

From around the age of 10-11, students are expected to read increasingly complex and specialized texts in different school subjects. This means that they have to master more specialized reading embedded in disciplinary uses of literacy (Shanahan & Shanahan, 2008). In Sweden, students' reading literacy has recently attracted a growing amount of attention, as international reading surveys such as PIRLS and PISA for several years showed a general decline in reading comprehension (The National Agency for Education/Skolverket, 2012a, 2013, 2016). More specifically, this decline among students in year four mainly concerned their ability to read informational texts (Skolverket, 2012a).<sup>1</sup> A possible explanation for the negative results may be that texts become more complex and subject-specific over the school years. This causes problems for some students who in the first school years have managed reading and writing well (cf. the fourth grade slump, Chall, 1983). In a Scandinavian context, previous research also indicates that very little explicit text work occurs when working with disciplinary texts in both social sciences and science subjects, i.e. disciplines where informational texts are commonly used (e.g. Danielsson, 2010; Edling, 2006; Ekvall & Berg, 2010; Halleson, 2015). In these subjects, there is a focus on general disciplinary content rather than on how this content is construed in specific texts (Løvland, 2010). The lack of literacy instruction for disciplinary reading has also been discussed outside of the Scandinavian context. Shanahan and Shanahan (2008) conclude that as the specialization of reading skills increases through the grades in the US, the amount of structural support and assistance declines.

Considering the demands of the increasingly complex disciplinary texts that students encounter throughout their schooling, it is important that students receive adequate support in order to develop disciplinary literacy. From an educational perspective, it is thus relevant to qualitatively investigate what opportunities to develop disciplinary reading literacy students are given access to in particular types of classroom reading environments, which is the main aim of this study. The study furthermore focuses on the social science subjects, one discipline where the use of informational disciplinary texts is abundant, but few classroom studies have been performed in a Swedish context (e.g. Sandahl, 2011).

The study can therefore be placed in the research field of *disciplinary literacy* (see for example Fang, 2014; Mojé, 2008; Shanahan & Shanahan, 2008; Shanahan, Shanahan & Misichia, 2011), where there is a focus on particular literacy demands within different disciplines. For example, science texts often contain nominalizations (processes expressed as nouns instead of verbs) and have a high degree of lexical density, whereas texts in history often co-opt technical vocabulary from fields such as political science, economics, and sociology, resulting in the level of difficulty of the

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<sup>1</sup> However, PIRLS 2016 showed that the Swedish fourth-graders now perform above the OECD average (Skolverket, 2017).

vocabulary possibly being quite high. Texts with such different traits require specific literacy skills (Shanahan & Shanahan, 2008, p. 52-53).

Although research has shown that structural support for reading in the disciplines is scarce, a number of approaches for working with texts and reading have been developed, for example dialogue-based approaches for text discussions such as *Questioning the Author* (e.g. McKeown & Beck, 2004), *Reciprocal teaching* (Palincsar & Brown, 1984), or *Instructional Conversations* (Tharp & Gallimore, 1988). These approaches may scaffold various aspects of reading (e.g. McKeown & Beck, 2004; Reichenberg, 2005; Halleson, 2015; Choo, Eng & Ahmad, 2011; Spörer, Brunstein & Kieschke, 2008; Saunders & Goldenberg, 1999). The positive effects of dialogue-based instruction were also confirmed by a large-scale American study among 64 classes in secondary education (Applebee, Langer, Nystrand & Gamoran, 2003). Findings from a dialogue-based Swedish intervention study, focusing on seventh graders' reading and interpreting of fiction, also indicated that the choice of teaching strategies are important for students' learning (Tengberg & Olin Scheller, 2013).

Yet another approach for working with texts is the reading pedagogy *Reading to Learn*, R2L, which builds on the Australian genre pedagogy (Rose & Martin, 2012). R2L is one of the approaches that have been applied to strengthen students' reading literacy, as a response to Swedish students' poor achievements on reading tests. The schools chosen for the present study are situated in a municipality where deliberate efforts have been made to increase students' reading literacy, and teachers have had the option to sign up for an R2L-programme, offered as professional teacher development. Thus, several teachers at various schools in the municipality have participated in the programme and implemented the pedagogy into their teaching practice. Two of the four teachers in this study state that they use methods inspired from R2L.

The R2L-pedagogy applies a functional perspective on reading and aims to integrate the teaching of reading across the curriculum at all levels of school and beyond (Rose & Martin, 2012). Initially, the pedagogy was developed to meet the needs of indigenous Australian students who were struggling in the educational system. Although the focus is on reading and reading development, the pedagogy includes several aspects of literacy such as reading, writing and talking. The pedagogy follows a cyclic model beginning with pre-reading, and identifies the five steps: prepare, focus, task, evaluate and elaborate. The idea is to set up students to succeed in their reading, by preparing them systematically in the reading task. Therefore, the teaching cycle moves from guided collective work towards individual performance. Methods ranging from paragraph-by-paragraph-reading to detailed reading of shorter excerpts are used in R2L-pedagogy (Rose & Martin, 2012).

As shown above, a number of approaches to support student reading have been developed. However, how effective these methods are is not always thoroughly investigated (Lawrence & Snow, 2011). Furthermore, investigations that are carried out are often performed by those who have developed the methods or their colleagues (see for example Murphy et al., 2009). This also applies to the method R2L, which is one of the reasons why the method is chosen for further investigation within

the present study. In addition, focus for the investigation is often on *how* teaching is organized rather than on *what* content is foregrounded by the method. This calls for a broader qualitative perspective on support for disciplinary reading and literacy development.

The overall aim of the present study is therefore to explore and give examples of what opportunities to develop disciplinary reading literacy students are given access to in particular types of classroom reading environments in different school years, using R2L pedagogy as one example. More specifically, the following aspects of the different reading environments are of interest for the study:

- 1) How are reading activities sequentially organized in the classroom?
- 2) What content is approached in text-related discussions?
- 3) Whose perspectives are allowed space in the classroom discourse?

The research questions provide different foci on the investigated teaching environments, and in contrast to previous studies, relate to all of the three cornerstones of curriculum studies, namely *the teacher (how)*, *the content (what)* and *the learner (who)* (e.g. Hopmann, 2007).

## 2. THEORETICAL FRAME

Theoretically, the study draws on systemic functional linguistics (SFL) as well as theories on dialogism and reception theory. There are many similarities between different approaches to dialogic teaching and systemic theory, for example the location of talk and text in social and cultural contexts; the priority given to language in education; and a shared emphasis on learning as a social and cultural construct (Hammond, 2016, p. 6). However, there are also differences as to what the different approaches prioritise. Studies within systemic theory tend to foreground curriculum-specific uses of literacy (Martin & Maton, 2013), whereas studies of dialogic approaches focus on classroom talk and the relationship between students' access to particular kinds of classroom talk and their educational outcomes (Hammond, 2016). For the purpose of the present article, these approaches serve as complementary perspectives for questions about *how* the teacher organizes activities around reading, and *whose* perspectives that are allowed space. In order to specifically address the question of *what* content is approached, reception theory serves as a foundation for discussions about the encounter between reader and text, not provided by systemic theory or dialogism. The operationalization of the theoretical frame is further developed below.

Within SFL, language is regarded as a social semiotic system that enables choices for expressing meaning (Halliday & Matthiessen, 2004). From SFL we use the notion of curriculum macrogenre (Christie, 1998), which refers to teaching sequences as staged, goal-oriented processes. Each stage or element in a process has functional significance through organizing and shaping meaning. *Curriculum macrogenres* describe the different stages of a teaching cycle, "[a] curriculum macrogenre is a cycle

of teaching-learning activity in which a teacher and students engage with some ‘content-area’, progressing from some introductory stage through a series of stages until a conclusion is reached” (Christie, 1998, p. 154). A macrogenre may be further divided into genres such as *curriculum initiation*, how the activity is started, *curriculum collaboration/negotiation*, how the task is carried out, and *curriculum closure*, how the work is finished (Christie, 1998). Curriculum macrogenres are in this study operationalized as sequential reading stages where the sequencing of activities are analysed to show *how* the teacher organizes activities around reading.

Reception theory focuses on the encounter between reader and text (Langer, 1995; Rosenblatt, 1982). In particular, we use Langer’s theory on *Envisionment building* (1995, 2011), which is the act of making sense while reading or working with a material. Envisionments represent the reader’s understanding and questions regarding the text at a particular point in time (Langer, 2011, p. 27). During envisionment-building, the reader takes different stances toward the material. When building literacy in the academic disciplines, the reader can move in and through five stances of envisioning knowledge (ibid., pp. 22-27). These stances involve “getting started with the material, developing understanding, learning from the material, thinking critically and going beyond” (ibid., p. 27). In each stance the reader is thus in a different position in relation to the material (ibid., p. 22). We use the analytical concept of text movability, which partly builds on Langer and reception theory, to analyse *what* content is approached in various ways in text-related discussions (Liberg, af Geijerstam, & Folkeryd, 2011). This concept captures how students talk about text content in text-based as well as associative and interactive ways.

In order to analyse and reflect upon *whose* perspectives are allowed space in text-related discussion, we use the concept of *dialogicality* in accordance with Nystrand (1997). This gives us a complementary perspective to pay attention to the structure of participation in interaction around texts. Nystrand builds on Bakhtin’s theory on dialogism, where dialogue is considered the base for all communication and necessary for an active understanding (Bakhtin, 1981, p. 282). Nystrand contrasts dialogically and monologically organized instruction, where the former involves for instance discussion, transformation of understandings, knowledge emerging from interaction of voices (dialogism) and acknowledging students’ contributions as sources of knowledge. The latter involves recitation, transmission of knowledge, objectivism and exclusion of students’ contributions (Nystrand, 1997, p. 19). The two contrasting structures are not complementary but should rather be seen as two ends of a continuum (Reznitskaya, 2012).

### 3. DATA AND ANALYTICAL METHODS

Material from four student groups (henceforth called groups A-D) in three schools was collected and analysed. Two classes in year five (11-year-old students) and two classes in upper secondary school (18-year-old students) were observed using observation protocols as well as audio- and video recordings. All data collection methods

were used simultaneously. These two age groups were selected in order to cover reading when students are at the beginning of encountering longer and more subject-specific informational texts, as well as when students are expected to master the reading of such texts to a larger degree. The study was conducted in accordance with research ethics (cf. Vetenskapsrådet/The Swedish Research Council, 2002). Thus, all participants received information that the observations would be video-filmed for research purposes, that confidentiality was guaranteed and that participation was voluntary. The teachers were approached after consulting school leaders. Informed, written consent was then collected from all participating teachers and students, as well as from parents of students under 18.

As mentioned, in two of the four classes, the teachers stated they used R2L pedagogy. The teacher in one of the year five classes (group A) used the pedagogy consistently, whereas one of the upper secondary school teachers used the pedagogy in some lessons (group C). The other two teachers (in groups B and D, respectively) did not explicitly subscribe to any particular pedagogy or methodology. Although two of the teachers were inspired by R2L pedagogy, it does not mean they had implemented it in the same way. It is worth stressing that our aim here is not to investigate how R2L has been implemented, but to investigate students' reading in differently organized teaching environments.

Data collection took place during a period of three months, and a sequence of lessons was observed in each group. The observed lessons make up approximately a quarter of one year's teaching in the specific subject. The data therefore gives ample exemplification of teaching in social science subjects in four different classrooms. More specifically, the data consists of 10 observed lessons in year five (11 hours 45 minutes) and 13 observed lessons in year 12 (17 hours). In the analyses, the video-recordings functioned as primary material, and audio-recordings and observation protocols functioned as complementary material. Texts read ranged from textbooks, brochures, to novels and student model texts. These texts were collected in order to conduct text movability analyses but are not further analysed or reported on in this article. For more detailed information, see Appendix 1.

To answer the first research question, the observations where reading took place were analysed in terms of the sequencing of activities surrounding reading (Christie, 1998). The analyses were carried out in accordance with Hedeboe (2002) and af Geijerstam (2006), where each curriculum genre is seen as built up by a sequence of reading stages. The observed reading activities are thus analysed as part of a specific reading stage as exemplified in Table 1.

Table 1. Examples of activities during reading stages

CURRICULUM GENRE	SEQUENTIAL READING STAGE	ACTIVITIES THAT FALL INTO THE SEQUENTIAL STAGE
<i>Curriculum Initiation</i>	<i>Contextualization (C)</i> —how the subject field is built up and explored by teacher and students before the text is read	Visual aids such as PowerPoints and artefacts Lectures with explanations and descriptions Class and peer discussions Writing exercises
	<i>Textualization (T)</i> — how the reading and understanding of the text is supported before the reading	Explanations and discussions with regard to: - content, language and structure of the text - function and purpose of the text - text type, genre, genre specific features - how the reading activity will be carried out
	<i>Function (Fu)</i> — how the function of the reading is made explicit	The function of the reading is explicitly stated or discussed: - as the source material for a writing assignment or any other school project - source material for a learning goal
<i>Curriculum Collaboration / Negotiation</i>	<i>The reading (R)</i> — how the reading per se is conducted	- reading aloud - individual reading - paragraph-by-paragraph reading - detailed close reading - highlighting - note-taking - continuous class and peer discussions
<i>Curriculum Closure</i>	<i>Evaluation/follow-up (Fo)</i> — how the reading is followed up after the reading	- oral classroom and peer group discussions on text content and text structure - joint and individual reconstruction of the text - joint and individual writing assignments on topic and genre

To answer the second research question, we analysed text-related classroom discussions with regard to text movability (Liberg et al., 2012; Halleson, 2015; Visén, 2015). The material for answering research question number two consists of observed lessons when texts were read and talked about in whole class discussions. Text movability includes three main ways of talking about a text. *Text-based movability* entails seven dimensions (D1-D7) and focuses on the content of the text, *associative movability* entails three dimensions (D8-D10) and concerns relating the content to prior knowledge and experiences, and *interactive text movability* entails four

dimensions (D11-D14) and means talking about the form, function and context of a text (see Table 2).

Table 2. Dimensions of text movability

Text movability	Dimensions
Text-based	1) locating and reproducing information in the text 2) using the text for word comprehension 3) summarizing the text or parts of the text 4) eliciting main points 5) making inferences 6) abstracting/generalizing from main points in the text 7) taking a critical position toward the content
Associative	8) relating the content to personal experience 9) relating the content to specialised knowledge 10) relating the content to other texts
Interactive	11) talking about what type of text it is 12) talking about text function 13) talking about sender roles 14) talking about receiver roles

Being able to talk about texts in all of these different ways is typical for skilled readers (af Geijerstam, 2014). These analyses reveal what content is approached in the classroom when teacher and students talk about texts. In the social sciences, students are supposed to create different kinds of meaning from texts. Using history in the middle years as an example, teaching should, according to the national syllabus, “give pupils the opportunities to develop their knowledge of historical conditions, historical concepts and methods [...]” (Skolverket, 2011b, s. 163), which calls mostly upon a text-based reading. Teaching in history should also give pupils the opportunities to “develop their ability to reflect over their own and other’s uses of history in different contexts and from different perspectives”, which points to a need of associative reading, and to “critically examine, interpret and evaluate sources as a basis for creating historical knowledge”, which shows a need for an interactive movability (ibid.). Similar kinds of reading are present in the other social science subjects and in the different grades. Analyses of text movability is a suitable way of capturing these disciplinary reading practices in social sciences.

Finally, to answer the third research question, we will discuss the classroom discourse in terms of *dialogicality*, building on Nystrand’s (1997) distinction between dialogically and monologically organized instruction as presented earlier (see section on theoretical framework). Following Nystrand, dialogicality in this study will be analysed based on a continuum between dialogically or monologically organized oral interaction in the classroom. Other aspects of dialogicality, such as dialogicality created in and between written texts, are not in focus for this study. Dialogically organized oral interaction is in this study analysed with inspiration from e.g. Nystrand (1997) and Reznitskaya (2012). For example, we have been looking at to what extent:

- teacher as well as students interchange knowledge retrieved from the text,
- teacher as well as students interchange experiences or ideas,
- students' contributions are included in the interaction, as seen e.g. in the teachers' feedback or other kinds of uptake.

In the section that follows, we present findings from each teaching environment in turn. Each part starts with a general description of what the material from each teaching environment shows. Then, we analyse and discuss an example of how text work is conducted. Finally, the findings from each teaching environment are compared.

#### 4. FINDINGS

The findings reveal different patterns in the four teaching environments with regard to overall sequential organization of reading activities, but also with regard to text movability and dialogicality.

Table 3 shows what sequential reading stages occurred while working with different topics. In the table, abbreviations of the sequential reading stages are used: Contextualization (C), Textualization (T), Function (FU), Reading (R) and Evaluation/Follow-up (FO). If a stage is only vaguely displayed, for instance by a context being briefly mentioned as a place or a time but not further explained, or when textualization consists of a brief mention of text-type (e.g. as a 'brochure'), lower-case letters are used. Stages may reappear during the sequence. The table also shows what types of text movability were evident. Here the following abbreviations are used: Text-based (Tb), D1-7, Associative (As), D 8-10, and Interactive (In) D11-14. Finally, dialogicality is presented in the last column.

Table 3. Overview of results

GROUP	TOPIC	READING STAGES (how)	TEXT MOVABILITY (what)	DIALOGICALITY (who)
Group A yr. 5 (R2L)				
	<i>Greenland (observation 1)</i>	C-T-FU-R-FO	Teacher & Students: Tb: D1-D5 As: D8-D9	Dialogical
	<i>The Convention on the rights of Children (observations 2-3)</i>	C-T-FU-R-FO	Teacher & Students: Tb: D1-D6 As: D8-D9 In: D11-D14	Dialogical
	<i>Family Economy; New coins and bills (observations 4-5)</i>	C-T-FU-R-FO	Teacher & Students: Tb: D1-D7 As: D8-D10 In: D11-D12	Dialogical

## Group B yr. 5

<i>Calendar</i> (observation 1)	c-FU-R	<i>Teacher &amp; Students:</i> Tb: D1, D3	Somewhat dialogical: few students took part
<i>Historical novel: Witch fever</i> (observation 2)	t-fu-R-fo	<i>Teacher &amp; Students:</i> Tb: D3-D5 As: D8	Somewhat dialogical: few students took part
<i>News quiz</i> (observation 3, 5)	fu-R	<i>Teacher:</i> Tb: D1	Monological
<i>Family Economy; New coins and bills</i> (observation 4)	c-R	<i>Teacher &amp; Students:</i> Tb: D1-D2 As: D8	Somewhat dialogical: few students took part

## Group C yr. 12 (partly R2L)

<i>Ancient Greece</i> – model text – textbook text (observation 1)	FU-R-FO t-FU-R-FO	<i>Teacher:</i> Tb: D1-4 In: D11	Monological
<i>Ancient Greece. Individual work</i> (observations 2-4)	R-FO	Non applicable (no documented whole class discussions)	Non applicable (no documented whole class discussions)
<i>The Middle Ages (R2L lessons)</i> (observations 5-6)	C-T-FU-R-FO	<i>Teacher:</i> Tb: D1-7 As: D9 In: D11-14 <i>Students:</i> Tb: D1	Mainly monological
<i>The Middle Ages. Individual work</i> (observations 7-9)	R-FO	Non applicable (no documented whole class discussions)	Non applicable (no documented whole class discussions)

## Group D yr. 12

<i>Pre-historic Age</i> (observation 1)	R-FO	<i>Teacher &amp; Students:</i> Tb: D1-4 As: D10	Somewhat dialogical: only a few students observed
<i>Ancient Greece, Introduction</i> (observation 2)	C-t-R	<i>Teacher &amp; Students:</i> Tb D1-6, As: D8-9	Somewhat dialogical: certain traits of dialogicality revealed
<i>Ancient Greece, Individual work</i> (observation 3)	R-FO	Non applicable (no documented whole class discussions)	Non applicable (no documented whole class discussions)
<i>The Middle Ages, Introduction</i> (observation 4)	C	Non applicable (no documented whole class discussions)	Non applicable (no documented whole class discussions)

The patterns differ between the four classrooms, but there is also variation within each teaching environment. The table shows topics organized in only two reading stages as well as topics organized in all five reading stages. However, what becomes apparent is that R2L practices include more sequential reading stages than the others do. In year 5, the text movability is extensive and the teaching is dialogical in group A (R2L). In group B, text movability is of limited text-based and associative types, and the teaching is somewhat dialogical in that students are free to introduce subjects. However, few students take part and therefore few of the voices in the group are included in the conversation. In upper secondary school, the teacher in group C (R2L) shows extensive text movability of different kinds in lessons containing whole class work, whereas the students' movability is restricted. The instruction is mainly monological. In group D, both teacher and students reveal extensive text-based and associative movability, and the instruction is more dialogical during whole class text work.

Below, one case from each teaching environment will be described and analysed in more depth. In order to be able to describe and compare activities surrounding reading as well as text reception and dialogicality in the classroom interaction, the cases chosen are all examples of whole class text work with informational texts. From groups A and B, cases were chosen which show classroom text work on the same topic, Family Economy. From group C, an introduction on The Middle Ages was chosen since the observation shows R2L work and whole class reading of a history text. In group D, only one observation revealed whole class text work, an introduction on Ancient Greece, and hence it was chosen for closer scrutiny.

#### *Group A Year 5 (R2L)—Structured reading in a dialogic classroom*

In group A, the reading stages that appear are as shown in Table 3: C-T-FU-R-FO. Below, the reading stages will be further described and exemplified, and analyses of text movability and dialogicality will be added.

The *contextualization* of the text introduces the topic by an activity where the students summon previous knowledge about the subject. The teacher says, "You have a paper in front of you and there I want you to write 'Family Economy' as a title. This is a pre-text and you know the purpose of that; you write what you already know." When the students finish writing the pre-texts, the teacher and students read together from the syllabus in civics, "Follow in the [syllabus] text so we can see what we need to learn..." They discuss how the new topic (Family Economy) will connect to the syllabus and how it links to the topic that was just finished (The Convention on the Rights of the Child). The reading that will take place is thereby further *contextualized* by being associated with previous knowledge and experiences.

The *function* of the reading is explained by the teacher as a means to reach the knowledge requirements, as well as functioning as source material for writing an individual text.

Then the *contextualization* continues by the teacher presenting a PowerPoint about old bills and coins as well as the new bills and coins that have been introduced in Sweden, and also about different types of families and their activities. All students are included in the conversation by taking turns and passing the word to each other, so that all students' perspectives on the topic are heard. In the discussion, students are drawing both from personal experience and from previous school knowledge.

Next, *textualization* of the text and reading takes place when the teacher says, "We will read about 'jobs and money' and start by reading a few pages about money". She introduces the text by stating its genre and summarizing the content, "This is a recount of the history of the use of bills and coins and the modern use of credit cards ...". She gives a closer account of the text content and what the illustrations show.

The *reading* per se is initiated by the teacher reading aloud and the students following in their texts. After that, the students work in pairs, filling out a table describing pros and cons for cash and bank cards, respectively. Then all the pairs present their thoughts to the class, which leads to class discussions that are both text-based, "It says here that money was first used in Mesopotamia", and associative, "A card is easy, you don't need to remember to get cash, but with bills and coins you know easier how much you have and when you have run out of it." All students take part in the discussion in a structured discussion circle. Another PowerPoint is presented, and what a family needs to pay for is discussed in a new discussion circle where all students contribute. The teacher reads the following two pages in the textbook aloud. After each paragraph, the reading is paused, and both terms and different aspects of the text content are discussed, for example the differing opportunities that different economic conditions can give children. On one of the pages, there is a circle diagram, and the teacher says, "In the text we here have a circle diagram that we will read like this [points]." The teacher explains how a circle diagram is a common feature in a text on economy since it shows distribution, and she discusses terms in and around the diagram with the students, adding things for the diagram.

The *reading* then continues by a joint re-reading of the text. The teacher says, "Now, turn back to the first page and get out your highlighters, and we will read again and highlight important content." The class then reads the text again, and the teacher gives cues to the students explaining words or phrases she wants them to find and highlight in the text. They respond by reading words from the text:

1. Teacher: There is a phrase on the next line in the text that tells us what we have to pay for where we live. Can you see that?
2. Student 1: Rent for the flat.
3. Teacher: Right. Underline 'rent'.

The students take turns reading from the text, and all students highlight the words. Thereby the reading continues by focusing on subject specific terms, such as *income*, *expenses* and *taxes*.

The *follow-up* of the reading is structured in three activities. First, the students write the highlighted words on the whiteboard, and they also write them down in their notebooks. After that, a joint text is constructed on the whiteboard, based on those notes. All students take turns writing and supporting each other in spelling and choosing words, and by discussing how to construct sentences. Finally, the students write individual texts on the topic of Family Economy, which was the stated function of the reading.

In this case, the sequencing of reading stages allows structured activities to take place in all five stages. The analyses reveal that the teacher and the students show extensive text movability, thus exploring several aspects of disciplinary literacy in the subject of civics; *text-based* in several dimensions, for example when content is summarised and terms are discussed and added; *associative* when students are reflecting on economic choices in their own family as well as economic conditions in other types of families; *interactive* for example when the class discusses a circle diagram as a typical feature in a text on economy and what its function is. The analyses thus reveal a classroom environment that may provide good opportunities for students to develop knowledge on traits of disciplinary texts, including terminology, and economic societal aspects while working with core content on “Society’s resources and their distribution”, which should cover for example “Personal finances and the relationships between work, income and consumption” (Skolverket, 2011b, p. 192). Furthermore, dialogicality is extensive since all students take part, and their voices and perspectives are included, sometimes in open-ended conversation and other times in Initiation-Response-Follow-up (IRF) structures (cf. Sinclair & Coulthard, 1975). In addition, on several occasions, both students and teacher further elaborate the IRF-conversations in dialogue. One example of an IRF-sequence being further elaborated is when the teacher asks the students about a certain fact, and a short dialogue develops in the interaction:

1. Teacher: The text tells us that the two largest expenses in a family are taxes and living expenses. According to the text, what is the third largest expense?
2. Student 1: Food.
3. Teacher: Food. Yes. 13 %. And then?
4. Student 2: Day-care.
5. Teacher: Yes. Childcare. That is a large cost for parents that have young children.
6. Student 3: Maybe one shouldn’t have that [childcare]!
7. Student 4: No.
8. Teacher: Or if the children grow up and you don’t need it, there might be more money to spend?
9. Student 3: On travel.
10. Teacher: Travel?
11. Student 4: We want to spend on that, a lot.
12. Teacher: And others might not spend anything on travel... I walk back and forth to work.
13. Student 4: So, you don’t spend on travel?
14. Teacher: Well, we don’t have daily travel costs. And it is different in different families.

The example shows how an initiation-question checking a fact (1) first gets a response (2) that is followed-up by a specification, “13%” (3). The next initiation question (3) encourages the students to find another answer from the text. Student 2’s answer (4) is evaluated with a “yes” from the teacher and followed up in a specification and explanation (5). The IRF-sequence then develops into a short dialogue about choices (6–14).

*Group B Year 5—Focus on word meaning and dialogic freedom for a few*

The sequencing of reading stages is as shown in Table 3: c-R. Below, the reading stages will be further described and exemplified, and analyses of text movability and dialogicality will be added.

*Contextualization* is vaguely displayed as a brochure from the national bank is handed out to all students, while the teacher tells the students that she picked the brochures up at the bank and then asks them if they have seen the new coins and bills. One student claims to have seen them, but most students are quiet. The teacher also comments on the pros and cons with cash vs bank cards, and another student comments:

15. Student 1: My mom only uses credit cards, never bank notes.
16. Teacher: No, maybe it is not so common to use ordinary money.

The *reading* is done out loud, first by the teacher and then by some of the students who volunteer to read. In the text, there are pictures of the new coins and bills, which are illustrated with Swedish celebrities and symbols for their professions. Details in the pictures are discussed, for example by commenting on who the people on the different bills are and what symbols they are given, for example that the character Pippi Longstocking symbolizes the author Astrid Lindgren. But only a few students take part. The meanings of some words are discussed, for example the meaning of the word poet. There are also personal comments to the text, for example when student 1 says:

1. Student 1: My uncle met him, the poet, once. He had his hat on.
2. Teacher: Do you mean Evert Taube? Who is on the picture here.
3. Student 1: Yes, I think so.

There are quite a few discussions in this classroom, and the teacher listens to and includes the students’ comments and thoughts in the discussion. This results in the discussions changing directions depending on what the students say. In addition, only a few student voices are heard. The discussion is not structured but free, and only two, sometimes three of the students enter the discussions and express opinions and thoughts on several subjects. The rest of the students are quiet. The teacher finishes the reading sequence by saying, “You can take the brochures home if you want”, which means there is no *follow-up* of the reading that can be observed. Neither is there any *textualization*, nor explicit mention of the *function* of the reading.

In group B, the analyses reveal activities in two sequential reading stages, *contextualization* and *reading per se*. The text movability in this case is narrow and expressed in few dimensions: *text-based* when some main content is summarized, certain word meanings, as for example the word poet, and features are discussed; to some extent *associative* when personal experiences are compared with the text content, as for example the student whose uncle had met the poet. As it is limited to word definitions and personal experiences, the text movability in group B might give limited opportunities to develop the students' understanding of the text content as well as their disciplinary literacy. The open-ended discussions where all contributions are included is one aspect of a dialogical classroom. However, it also means that the focus on the text content and learning objectives is weak, as the discussions only vaguely relate to aspects of "Personal finances and the relationships between work, income and consumption" (Skolverket, 2011b, p. 192), and the discussions on word meaning concerns general terms rather than subject-specific terminology. The analysis also reveals that student participation is limited, and therefore few perspectives are heard, which limits dialogicality in the classroom.

*Group C Year 12 (R2L)—Structured reading focusing on text content, form and context*

In group C, the reading stages that appear in lesson 5 are as shown in Table 3: C-T-FU-R-FO. Below, the stages will be further described and exemplified, and analyses of text movability and dialogicality will be added.

In lesson 5, where collaborative text work occurs as the new epoch the Middle Ages is introduced, many activities surround the reading of the text. Initially, the reading is *contextualized* when the teacher gives a lecture on the Middle Ages, providing background information on the field in general. Then he explains the two perspectives described in the text they will read, 'historical materialism' and 'idealism', which represent two contrasting methodological approaches for studying the development of societies. The teacher clarifies that the topic for the assignment will be to describe the emergence of feudalism from these two perspectives. Thus, in the introductory part of the lesson, the teacher *contextualizes* the reading by presenting both the subject field in general, the particular topic for the assignment and the text that they will work with more specifically. Here he also explicitly states that the reading will be *followed-up* by a writing assignment. During the contextualization, only the teacher talks.

Furthermore, the reading of the text, a section from a university textbook describing historical materialism and idealism (Harrison, 2002), is also *textualized*. The teacher talks about both who the author is, a famous researcher and historian known from TV, and about characteristics of the text, e.g. that it is written for university students, is complicated, and that it provides examples on the topic that the students will write about themselves, that is, comparing feudalism using the two views. The teacher then reads the introduction of the text aloud to give the students "a sense

of how he [the author] begins”, before they go deeper into the text and underline and explain words, write them down, and “think about how one can express oneself while using them”. Next, the teacher explicitly comments on how the reading will be conducted. The students follow and listen while the teacher comments on and elaborates the contents during the reading. The teacher states that the introduction of the text has the function of an “an introductory explanation”, thus clarifying its genre (cf. Rose & Martin, 2012). The teacher *textualizes* the next part of the reading by going through the structure of the text in more detail, while referring to the fact that the students are to write texts in a similar manner, “The text starts with a question (...) then we see one of the sides, the historical materialists...” He explains concepts, for instance ‘a feudal revolution’ which means “a change occurs from the top down. The ones at the top of the pyramid control those at the bottom”. Analyses of the sequencing of reading activities thus reveal that plenty of support is provided before the actual reading takes place, with regard to the content of the text, its context, structure and language, and furthermore how the reading will be conducted. Up until this point, only the teacher talks.

The *reading* is conducted as a ‘joint reading’ where the teacher reads one paragraph at the time aloud, while clarifying content and pointing to the function of the paragraphs in the text, “here he wants to show that there are different sides”. The teacher stops to ask questions about key words and phrases in the text, and the students answer the questions and underline the words. The following example illustrates how the conversation goes:

1. Teacher: To answer this, there are two groups one could say, who are the important ones. Who are they? Student 1?
2. Student 1: The church and the overlords.
3. Teacher: Good. Underline ‘the church’ and underline ‘the overlords’. It is those who govern the development. Another way of saying that they ‘govern’, what could that be? That comes right after “the overlords”, Student 2?”
4. Student 2: Lead the way.
5. Teacher: Good. Underline ‘lead the way’.

Now also the students are included in the conversation, but still there is no room for discussion or for different perspectives on the content. The conversation concerns meaning at a word level. Then the students take turns writing the keywords and phrases they have underlined on the whiteboard, based on suggestions from their peers. The next step is paraphrasing the keywords. The students give some suggestions, for example ‘influence’ instead of ‘driving’ in the phrase ‘what forces were driving the development’. Thus, the students pick up single items from the text, by either repeating or paraphrasing them. However, the teacher provides most of the synonyms himself.

The *follow-up* and the *function* of the reading are made explicit to the students on several occasions during the lesson. As mentioned earlier, the reading is to be followed-up by a writing assignment on the emergence of feudalism. The teacher

often refers to the students' writing assignment while commenting on Harrison's text:

1. Teacher: This is the first side in this discussion, and to introduce such a description, you too have to be able to introduce the text in a good way when you present different perspectives, and well, you can do that in different ways. How does Harrison begin his text here?

This comment shows how the teacher directs the students' attention to how Harrison's text is written, and illustrates that the text functions not only as a source material for the assignment but also as a kind of model text for the students' own writing.

Altogether, lesson 5 contains many activities aimed at supporting the students in the different reading stages. The text movability revealed is mainly expressed by the teacher, who shows extensive interactive movability by commenting on text function (discussing two perspectives), receiver roles (university students) and sender roles (historian) in the text, but also text-based movability in dimensions involving eliciting main content. Thus, the text movability analysis reveals a reading environment where the focus is on text content and concepts—concerning two contrasting methodological perspectives on feudalism—as well as on who the author is and in what context the text belongs. This is important in History where the course syllabus states that students should be given opportunities to develop knowledge on time periods as well as for instance the ability “to use different historical theories and concepts to formulate, investigate, explain and draw conclusions about historical issues from different perspectives” (Skolverket, 2012b, “Aim of the subject”). However, the students show rather narrow text-based movability confined to movability in the dimension involving locating and reproducing information in the text. No associative movability is revealed, which means that at no point is the text content related to prior knowledge or experiences. The instruction is categorized as being mainly monological, as teacher recitation dominates and there is not much room for discussion about for instance different interpretations etc. (cf. Nystrand, 1997).

#### *Group D Year 12—Focus on text content and student contributions*

In group D, the reading stages that appear in lesson 2 are as shown in Table 3: C-t-R. Below, the stages will be further described and exemplified, and analyses of text movability and dialogicality will be added.

Lesson 2 includes some activities surrounding the reading of the text, a textbook section on Ancient Greece (Almgren, Bergström, & Löwgren, 2007). At the beginning of the lesson, the teacher briefly mentions that there will be “some kind of end product on all of it”. What the end product will entail is not explained. In other words, the teacher does not explicitly state *the function* of the reading, or exactly how the reading will be *followed up*. These aspects are not clarified later during the lesson either but could possibly be implied from earlier similar work.

The lesson starts by the teacher distributing handouts with copies of the text. He then gives a lecture containing background information on the Indo-Europeans and their spreading to Europe, after which he hands out atlases and asks the students to look at a map of the Mediterranean area in Ancient time. First, the reading is *contextualized*. The teacher provides background information on the topic while he and the students look at the atlases showing the Mediterranean area. He uses the atlas to show the students where certain events took place, such as where Crete is, and how the Greeks spread in the Mediterranean area. Although teacher recitation dominates the contextualization of the reading, the teacher often tries to invite the students into the conversation and make them relate to what is brought up. When introducing the myth of Europa and the bull, he asks, “Have you watched Ferdinand the bull at Christmas?”, “Yes.”, “Then you understand how wild the bulls were”. Inviting students to use prior knowledge, both everyday knowledge and more specialized knowledge, to relate to text content is a strategy that the teacher uses throughout the lesson. However, initially the students’ comments are brief, as in the example above, but they become somewhat more elaborate and the students grow more active as the lesson proceeds.

In contrast to the contextualization, the *textualization* of the reading is rather vague. The teacher does not comment on the specific content of the text, the structure or the language before the reading starts, and the purpose of the reading is expressed in rather vague terms: “we’re going to start to sort things out”. However, at the very beginning of the lesson the teacher mentions how they will work with the text, namely that they will “read together” and “underline important parts”.

*The reading* is conducted as a ‘joint reading’ where the teacher reads the text aloud, stops to comment on and elaborate on the content, and to ask questions. For instance, when they read the first text section on how the Indo-Europeans came to Europe, the teacher provides additional information and he asks the students to think of reasons why people had to leave their original settings. Students suggest lack of food, starvation and overpopulation. Thus again, the teacher encourages the students to relate the contents to prior knowledge. The students draw on knowledge of a personal kind as well as specialized knowledge. Below, there is an example of how students are invited into the discourse around the text. After having read a paragraph on how felling and grazing led to deforestation, the teacher asks if there are similar situations today and what the Greeks should have done to prevent this:

1. Student 1: Create forest plantation.
2. Teacher: Yes, forest plantation. But they didn’t. Do we do that today?
3. *Three students at the same time*: Yes!
4. Teacher: And what are the consequences... when the rain came?
5. Student 2: Well, there must have been floods if there wasn’t anything that could soak up the water. People in the valleys must have had a rough time.
6. Teacher: There were massive floods. And what happened to the soil, the fertile soil, in these rocky valleys?
7. Student 3: Well it won’t have disappeared upwards.
8. Teacher: Where did it go?
9. Student 2: Into the valleys.

10. Teacher: And what do we find there? [*Students suggest housing, mountains, farms, and finally rivers.*] Yes, so the rivers brought the soil out into the sea.
11. Student (?): And there it was lost.
12. Teacher: And so was the opportunity to survive.

This sequence shows how the teacher makes efforts to invite the students into the discussion on the text content and make them relate to it. The students comment on the main content, make inferences and generalize from the text (cf. comments 5-9). Furthermore, they contribute with specialized knowledge on for example forestry (cf. comment 1).

In sum, as regards the activities surrounding teaching, the teacher's organization centres on contextualizing the reading and on the act of reading per se. Other scaffolding elements during the reading process are vague or non-existent: the reading is only vaguely textualized, and neither the function of the reading nor how the reading will be followed-up is made explicit to the students. Both the teacher and the students show fairly extensive text-based and associative movability (cf. for example the discussion on consequences of deforestation in the example above). The text movability analysis reveals a reading environment where the text-based focus on text content along with the associative influences for instance may help students develop their historical and conceptual knowledge, and also their ability to use history as a frame of reference "to understand the present and to provide perspective on the future" (Skolverket, 2012b, "Aim of the subject"). However, no interactive movability is revealed, that is, there is no discussion of what type of text it is, its function or why it is read. The work on the text during the actual reading is thorough and shows examples of dialogical instruction in the sense that students' knowledge and contributions are encouraged, clearly acknowledged and responded to by the teacher. However, the conversation is always teacher-led with an IRF-structure (Sinclair & Coulthard, 1975), which may limit the possibility for students' views to challenge each other (cf. Nystrand 1997 on knowledge emerging from interaction of voices). Therefore, we have considered this classroom to be dialogical "to some extent".

*Summary and overview of the four cases: reading activities, text content and perspectives*

The four cases described and analysed above show different ways of working with disciplinary texts in social science subjects. The findings are summarised in Table 4.

Table 4. Overview of the results regarding the four cases

	Structured reading in a dialogic classroom (Group A yr. 5; R2L)	Focus on word meaning and dialogic freedom for a few (Group B yr. 5)	Structured reading focusing on text content, form and context (Group C yr. 12; R2L)	Focus on text content and student contributions (Group D yr. 12)
<i>How the teacher organizes activities around reading (sequencing of reading stages)</i>	Many activities in all reading stages. A scaffolding structure is created for all parts of the reading process, before, during, after reading.	Limited activities in few reading stages. Reading per se is focused.	Many activities in all reading stages. A scaffolding structure is created for all parts of the reading process, before, during, after reading.	Activities in some reading stages. A scaffolding structure is created for certain steps of the reading process.
<i>What content is approached (text movability)</i>	Teacher and students: text-based, associative and interactive in several dimensions	Teacher and students: narrow text-based and narrow associative	Teacher: text-based in several dimensions, extensive interactive Students: narrow text-based	Teacher and students: text-based and associative in several dimensions
<i>Whose perspectives are allowed space (dialogicality)</i>	Dialogical	Somewhat dialogical: limited to a few students	Mainly monological	Somewhat dialogical: certain traits of dialogicality revealed

As is shown in Table 4, activity in reading stages, text movability, and dialogicality differ between the four cases. In groups A and C, where R2L is used, a plethora of activities scaffolds the reading in all the reading stages. In groups B and D, there are fewer activities and focus is on the reading per se. As regards text movability, which shows what in the text the students and teacher talk about, each classroom has its own pattern. In group A, both teacher and students reveal extensive text movability of all types, which means talking about content dimensions, relating content to prior knowledge and experience, and talking about the text and its context, whereas in group B teacher and students reveal narrow text-based and associative movability. In the upper secondary groups, the teacher in group C shows extensive text-based and interactive text movability, but the students only narrow text-based movability. In group D, on the other hand, both teacher and students reveal extensive text-based and associative movability. It may be noted that interactive movability, which includes talking about form, function and context of disciplinary texts, is only revealed in the R2L classrooms (A and C). However, as regards dialogicality, which shows whose perspectives are allowed space in the classroom, there is a clear difference between the two R2L classrooms, as there are dialogical features in group A but not

in group C, where teacher recitation dominates the discourse. In groups B and D, there are dialogical features to some extent.

The findings from these cases, which exemplify how text work is carried out in the different teaching environments and show overall patterns from the investigated classrooms (cf. Table 3), will be further discussed in the final section of the paper.

## 5. DISCUSSION

In this paper, we have explored how different reading environments create different opportunities for developing students' reading literacy in social science subjects. A fair amount of research into the construction of knowledge in different disciplines has shown differences in texts used in different subject areas. Knowledge is constructed using varying language resources within the different disciplines (Wignell, 1998). For instance, the school subject of History relies on abstraction, as historical concepts often are context independent and based on interpretation of several specific events. The difference between knowledge construction and texts within the subject areas calls for different approaches to learning, and more specifically different approaches to reading instruction within the disciplines.

When considerations were taken to the three cornerstones of curriculum studies in terms of *how* the teacher organizes activities around reading, on *what* content is approached in various ways in text-related discussions, and on *whose* perspectives are allowed space in the classroom discourse, varying reading environments for developing student disciplinary reading literacy appeared. However, there was also variation within each environment as to how texts were worked with, apart from group A where R2L was used consistently. In the two classrooms in year twelve, groups C and D, explicit text work occurred in only a few of the observed lessons, which aligns with what previous research has shown, namely that explicit text work in secondary schooling is uncommon (cf. Danielsson, 2010; Edling, 2006; Ekvall & Berg, 2010; Hallesson, 2015; Shanahan & Shanahan, 2008). In group C, explicit text work occurred in the two lessons when R2L was used.

When considering *how* the teacher organized activities around reading, both differences and similarities were found in terms of how disciplinary reading was supported in the four classrooms. The findings showed that when the Reading to Learn pedagogy was used, in classrooms A and C, a number of activities aimed at supporting the students' reading and their learning from the texts occurred during the whole reading process (before, during and after the act of reading). This supportive structure has the potential to create an inclusive reading environment for students to develop reading literacy, and also develop and show text movability in their meeting with the text. Classrooms B and D with their more limited sequencing of activities seem looser and less restricted, which is not altogether a negative aspect since it gives students more freedom in encountering the text. However, in the more limited reading sequence students might be given less of an opportunity to work actively with the text and their understanding of it.

When also taking into account *what* content was approached and explored in various ways in text-related discussions, a more nuanced picture of the work with disciplinary literacy in the four classrooms appeared. To be literate and to read successfully within the different areas of social science implies moving within the text in a text-based fashion as well as out from the text in associative and interactive ways. For example, when reading history texts, students must get the opportunity to move within the text to extract main historical points from it, associate from the text to other historical sources and interactively reflect on who the author of the text is. An important task for the teacher is thus to create reading environments that support students' development of disciplinary reading literacy. In the different reading environments, such opportunities were presented to the students in different ways and to different extent.

In classroom A, the teacher and the students show extensive text movability of all three types. As was revealed in the case exemplifying text work in civics, these aspects include for example using terms to reflect on conditions in society, relating prior knowledge and experiences to the new text content, and talking about texts' particular structure and function in civics (cf. Skolverket, 2011a). Here, the many different activities in and around the reading seem to give the students opportunities to talk about the text in many ways, and thereby both express and develop their understandings of the text and their disciplinary literacy. In classroom B, the teacher and students move in two of the text movability types when they talk about aspects of the main content in the text and relate it to personal experiences. The limited focus on word definitions and personal experiences might curb the opportunities for the students to develop both their understanding of the text and its context, as well as their disciplinary literacy. In classroom C, the teacher shows text-based and interactive text movability when commenting on several content dimensions of a text discussing two contrasting methodological perspectives, and describing the text in objectifying ways, clarifying who the author is and in what context the text belongs. This might serve to model ways of talking about the text, and thus important aspects of disciplinary literacy in the subject of history, such as comparing different methodological perspectives in a text (cf. Skolverket, 2012b). In addition, the work with language and text structure in classroom C, modelling more specialized ways of reading embedded in disciplinary uses of literacy (cf. Shanahan & Shanahan, 2008), might potentially contribute to students developing disciplinary literacy. In classroom D, when explicit text work occurred, both the teacher and the students are active in exploring the text content by eliciting main content, making inferences and abstracting from the text. They also use both personal experiences and specialized knowledge when discussing contents. This movability could therefore support students in developing disciplinary reading literacy as regards appropriating textually mediated subject knowledge.

One interesting finding is that interactive text movability is only revealed in the R2L classrooms, that is in A and C. Knowledge of disciplinary text types, their textual

features and function is important in developing disciplinary literacy. The lack of interactive movability in classrooms B and D means that there is little potential for developing knowledge on form, function and textual features of disciplinary texts. If we for example compare groups C and D, we can see that the looser dialogue in group D might have given students opportunity to elicit facts and reflect on those facts, while the teacher monologue in group C might also have given students opportunity to discover how facts were organized in the text to achieve certain goals. Thereby an opportunity is created for students to develop an understanding for the text, learn from it and also look at it critically and more objectifyingly (cf. Langer, 2011). All those aspects are part of the subject specific disciplinary literacy.

In order to explain and shed further light on the disciplinary literacy practices in the four classrooms, a discussion of *whose* perspectives were allowed space in the classroom discourse is also needed. Text movability can be related to whose voices are heard and what content those voices introduce in the classrooms, and thereby the classroom dialogue can be discussed in terms of dialogicality. Dialogicality that allows students to build knowledge in interplay of perspectives and voices is necessary for active understanding (cf. Bakhtin, 1981). Several previous studies have also pointed to the positive effects of dialogue-based instruction (Applebee et al., 2003; McKeown & Beck, 2004; Reichenberg, 2005; Halleson, 2015; Choo, Eng & Ahmad, 2011; Spörer, Brunstein & Kieschke, 2008; Saunders & Goldenberg, 1999). In relation to the results shown above, with a varying degree of potentials for dialogically oriented interaction, it is also important to stress that dialogic teaching is not necessarily relevant for all teaching at all times. Depending on content and situation, it can be relevant to construe different kinds of learning interactions (cf. Reznitskaya, 2012). It is thus important to reflect upon the relationship between organization (*how*), content (*what*) and dialogicality as developed below.

In groups A and C, the structure of the R2L pedagogy potentially presented an opportunity for all types of text movability due to the suggested sequential reading stages of the pedagogy. However, it was only in group A such a text movability pattern could be detected among the students. In group C, however, the students showed text-based movability limited to finding words in the text and providing synonyms, which might not give students opportunity to contribute to an active understanding. It might also limit their opportunities to reflection by discussing the historical facts from varying perspectives, which in turn may curb their opportunities to develop the prescribed reflective disciplinary literacy practices (cf. Skolverket, 2011a). Thus, it seems in our study as if the structure of the R2L-pedagogy in the case of group C hampered dialogicality, since the teacher's voice dominated the strictly organized discussion, which might be a consequence of similarly strictly structured methods. This suggests that R2L can possibly invoke an instrumentalization of the teaching process as we might see in group C, whereas the teacher in group A seems to use the pedagogy to work with activities in a way that includes student responses, experiences and perspectives as well as critical perspectives, thereby creating more

extensive dialogicality. In groups B and D, student initiatives were largely encouraged. However, in group B this seemed to entail a risk that the conversation took a direction from the text and towards other topics chosen by the students, which resulted in a weak focus on the central aspects in the material used, and which therefore to some extent can be seen as problematic in a school setting. In group D, when opportunity for text movability was presented to the students, they too expressed text movability.

The dialogical potential thus differs between the classrooms. In group A, there are dialogical features in that all students' voices are heard, and student initiatives are valued contributions in discussions around the text contents. The teacher in group A structures the discussions and explicitly tells the students what question is to be discussed, and also what the order of turn taking will be. This seems to facilitate dialogicality, since the conversation structure allows for preparation time (e.g. by students noting down their opinions), and also for all students to voice their ideas and opinions, as well as facts from the text. This strictly controlled conversational structure limits conversational freedom, but at the same time it enables students to partake. In group B, on the other hand, the students are allowed to discuss anything they want and all student initiatives are welcomed. However, there is no explicitly stated structure for how the conversations are to take place, which results in only the teacher and two or sometimes three of the students talking, while the rest of the class is quiet. In group C, when whole class text work occurred, dialogicality is very restricted as only the teacher talks and students only give short answers. In the observed lessons, the students' own perspectives and voices are not included, which means the teaching mainly consists of a teacher monologue explaining the text and modelling the disciplinary literacy. The observed conversations in group D reveal how the teacher is inviting students to use their own previous knowledge in exploring a factual content. Group D therefore displays discussions that are dialogical to some extent about central aspects of the text, in that student initiatives are valued contributions in eliciting facts and building knowledge from the text.

## 6. CONCLUSION

In sum, findings have exemplified how differently organized reading environments provide different support structures for students' disciplinary reading, and their opportunities to enter into disciplinary texts and express their reception of them. The four reading environments thus appear to provide different opportunities for students to build literacy and envision knowledge in the observed social science subjects (cf. Langer, 2011). The findings indicate that a reading environment that contains several and elaborated sequential reading stages might bring about a larger potential for reading comprehension and development of reading literacy (Christie, 1998; Martin & Maton, 2013). However, the picture changes depending on to what extent students are given room to express their reception of different dimensions of the text (Rosenblatt, 1982; Langer, 1995; Liberg, af Geijerstam, & Folkeryd, 2011)

and thereby contributing to an active understanding of text in a dialogical classroom (cf. Bakhtin, 1981; Nystrand, 1997).

A methodological conclusion is that combining tools for analysing reading sequence, text movability and dialogicality proved useful for revealing the complexity of each teaching environment. Thereby, the study has contributed to a broader qualitative perspective on disciplinary reading and literacy development, taking into account not only *how* the teacher organizes activities around reading, but also *what* content is approached in various ways in text-related discussions and *whose* perspectives are allowed space in the classroom discourse. Still, there are other elements that may also contribute to the classroom complexity, which have not fully been captured in the prevalent study, and which need to be further explored, for instance aspects such as text choice. However, findings from this investigation can serve as a foundation for further investigations and discussions of how to work with disciplinary literacy in various school subjects.

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## APPENDIX 1

### *Material overview*

GROUP number of students, subject and total time observed	OBSERVATION amount of observed lesson time and method in the lesson	TEXTS that were read and talked about
YEAR 5: Group A (R2L) 19 students Social sciences 5 observed lessons A total of 7 hours and 15 mins	Lesson 1: Finland, Greenland 75 min R2L, Whole class text work Lesson 2: Convention on the Rights of the Child. 90 min R2L, Whole class text work Lesson 3: Convention on the Rights of the Child. 90 min R2L, Whole class text work. Lesson 4: Family Economy 90 min R2L, Whole class text work Lesson 5: Family Economy 90 min R2L, Whole class text work	Textbook text (Åsgård & Olsson, 2012)  Extract from UNICEF. Conven- tion on the Rights of the Child  Extract from UNICEF. Conven- tion on the Rights of the Child.  Textbook text (Stålnacke, 2012)  Textbook text (Stålnacke, 2012)
YEAR 5: Group B 21 students Social sciences 5 observed lessons A total of 4 hours and 30 mins	Lesson 1: The Calendar 60 min Individual work Lesson 2: Historical novel 60 min Whole class text work Lesson 3: News quiz 60 min Individual work Lesson 4: Family Economy, the new money 60 min Whole class text work  Lesson 5: News quiz 60 min	Children's novel "Witch fever" (Andersen, 1980)      Brochure from the Swedish national bank <i>Sverige får nya sedlar och mynt</i> . [New coins and bank notes in Sweden] Sveriges Riksbank

YEAR 12: Group C (R2L) 13 students History 9 observed lessons A total of 9 hours	Lesson 1: Ancient Greece 60 min Whole class text work	Student model text (unknown); Textbook texts (Almgren, Bergström, & Löwgren, 2007; Sandberg, 2003)
	Lesson 2: Ancient Greece 60 min Individual work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007; Sand- berg, 2003)
	Lesson 3: Ancient Greece 60 min Individual work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007; Sand- berg, 2003)
	Lesson 4: Ancient Greece 60 min Individual work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007; Sand- berg, 2003)
	Lesson 5: The Middle Ages. 60 min R2L, Whole class text work	University textbook chapter (Harrison, 2002)
	Lesson 6: The Middle Ages. 60 min R2L, Whole class text work	University textbook chapter (Harrison, 2002)
	Lesson 7: The Middle Ages. 60 min Individual work	University textbook chapter (Harrison, 2002)
	Lesson 8: The Middle Ages. 60 min Individual work	University textbook chapter (Harrison, 2002)
	Lesson 9: The Middle Ages. 60 min Individual work	University textbook chapter (Harrison, 2002)
YEAR 12: Group D 7 students History 4 observed lessons A total of 8 hours	Lesson 1: The Pre-historic Age. 120 min Individual work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007)
	Lesson 2: Ancient Greece. 120 min Whole class text work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007)
	Lesson 3: Ancient Greece. 120 min Individual work	Textbook texts (Almgren, Berg- ström, & Löwgren, 2007).
	Lesson 4: The Middle Ages. 120 min Teacher-led introduction	