

Information Research - Vol. 28 No. 4 (2023)

Librarians' and teachers' conceptions of multiliteracies in the context of Finnish curriculum reform

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Abstract

Introduction. The aim of this study is to describe how the concept of multiliteracies is interpreted by teachers and librarians.

Method. Two qualitative research projects involving teachers' and librarians' interviews are combined in this study. Individual and group interviews are analysed to explore the conceptions of teachers and librarians on multiliteracies.

Analysis. Interviews are analysed using an inductive approach. Data categorisation is discussed and decided by both authors together.

Results. The results indicate that there are differences in conceptualising multiliteracies and in the confidence in defining the concept between teachers and librarians. In addition, the concept of multiliteracies is seen as both a skills set and a pedagogical tool.

Conclusions. There is a need for conceptual clarification of multiliteracies both in grassroots-level work and in the curriculum context to avoid multiple interpretations of the concept and to guide how multiliteracies could be pedagogically implemented.

Introduction

In Finland, the national core curriculum determines a framework for schools, which have great autonomy in applying the principles of the core curriculum to local curricula and organising education. The learning philosophy and methods in the national core curriculum, such as multiliteracies, present a vast collaborative area for schools and libraries in the latest core curriculum of 2016 for comprehensive schools. In the national core curriculum, the library has been included as a learning environment and as a collaborative partner. The current Public Libraries Act, which came into effect in 2017, states that fulfilling the duties of the Act can be done in collaboration with schools. The duties where libraries and schools could collaborate include. among others, providing information services quidance and support in the acquisition and use of information and in versatile literacy skills (Public Libraries Act. 2016).

The term multiliteracies was developed as a pedagogical concept and, thus, it may be more familiar to teachers than librarians whose educational background is in information science. Since the term was first introduced by a group called the New London Group in 1996 (see New London Group, 1996), it has been further developed and defined by researchers and teaching professionals. The term was included in the latest Finnish national core curriculum in 2016 as 'the skills to interpret, to produce and to evaluate different kinds of texts. These skills help students to understand diverse cultural forms of communication and to build their identity' (Finnish National Board of Education, 2014, p. 22). The Finnish national curriculum core defines the term multiliteracies as an umbrella concept including many different literacies such as media literacy, visual literacy and digital literacy. This perception differs from how most of the research literature defines multiliteracies as a pedagogical approach (Palsa, 2021; Palsa and Ruokamo, 2015).

Since there exists no consensus on the definition of the term multiliteracies, one could assume that a mutual understanding of the concept is hard to establish. There is little

research concerning teachers' and librarians' understanding of multiliteracies. In Finland, several studies have investigated professionals' conceptions of multiliteracies. Finnish teachers have been shown to have difficulties conceptualising multiliteracies comprehending what is expected from them in teaching multiliteracies (see Ojaranta, 2019; Hankala et al., 2018; Kulju et al., 2020; Rasi et al., 2019). Ojaranta (2019) evidenced problems with understanding the relevant terminology (multiliteracies and information literacy) in cooperation between teachers and school librarians. She studied above all the understanding of the term information literacy and found that both teachers and school librarians had challenges understanding the term.

Several studies have found that collaboration between teachers and librarians may be problematic, even though a number of international studies have shown that the involvement of librarians in literacy instruction could promote student learning (see Chu et al., 2011; Gildersleeves, 2012; Kuhlthau et al., 2007; Lance et al., 2002; Loertscher and Woolls, 2017). Researchers in Finland. as well internationally, have concluded that the level of partnership between teachers and both school and public librarians has not been very strong. The two partners did not seem to truly work together in promoting students' literacy skills (Tikkinen et al., 2020; Latham et al., 2016; Lindberg, 2014; Lo et al., 2014; Merga, 2019; Mokhtar and Majid, 2006; Smith and Hepworth, 2007; Williams and Wavell, 2006).

Based on the requirements of the latest national core curriculum, schools in Finland are expected to implement multiliteracies in their teaching. In the national core curriculum, libraries are mentioned in connection with learning environments. On the one hand, libraries should allow access to facilities, tools and materials, and on the other hand, they should offer opportunities for independent study. In doing so, libraries offer diverse learning environments (Finnish National Board of Education, 2014, p. 31). Furthermore, libraries are mentioned in cooperation with other partners who 'support the schools' educational

tasks' (ibid., p. 38) and 'library ... activities closely related to education may be arranged in conjunction with basic education' (ibid., p. 44). The Public Libraries Act (2016, section 11) states that 'public libraries may, for the purpose of performing the duties referred to in this Act, cooperate with authorities, actors in the library field, child daycare centres, schools, and other educational institutions, and other corporations'.

The national core curriculum and The Public Libraries Act urge schools and libraries to collaborate, but the two documents have different views of the tasks of the two institutions. The national core curriculum highlights the role of the library as a collaborator in instruction, whereas the role of the library is more that of a supporter or advisor (i.e. a provider) in the Public Libraries Act. Teachers and librarians share a mutual educational aim in literacy instruction and have to adjust their working methods to correspond with the national core curriculum. To promote a deeper understanding of the library's role as an active companion in teaching literacies, the clarification of relevant terminology concerning mutual efforts in teaching is Librarians' needed. and teachers' understanding of concepts related to working together can vary because of differences in their training and because they work in different types of organisations. This study investigates teachers' and librarians' conceptions of multiliteracies in the 2016 curriculum reform. when the term multiliteracies was introduced to promote literacy instruction that meets the standards of 21st-century learning.

The study involved interviewing teachers and librarians, asking the following research question: (1) How do teachers and librarians conceptualise multiliteracies?

Theoretical framework

This research is grounded in the sociocultural perspective of multiliteracies because it stresses social action and the pedagogical approach to literacy teaching and learning. The pedagogy of multiliteracies recognises how meanings are embedded in an active and

transformative process effected by students' affective and sociocultural needs and identities (Cope and Kalantzis, 2009; New London Group, 1996).

Multiliteracies

The origins of the term multiliteracies can be traced back to 1996, when a group of eleven scientists and researchers from the fields of education, language, literacy and technology presented a manifesto for the pedagogy of multiliteracies. The group was called the New London Group. In the manifesto, the group referred to the changing environment in the educational field and the challenges presented by the new communication channels. The manifesto was called 'A pedagogy multiliteracies: Designing social futures', which urged the consideration of pedagogical issues and contexts students encounter in new ways. The New London Group introduced the use of multiple modes: text accompanied with elements of visual, auditive, spatial and behavioural modes (The New London Group, 1996, p. 64). Two of the group members, Cope and Kalantzis (2009), concluded that because of the continuous changes in the communication environment, the pedagogy of multiliteracies was still relevant thirteen years after the New London Group's original manifesto. It took eighteen years to introduce the concept into the Finnish national core curriculum. Schools and curricula have been observed to react slowly to changes (Pearlman, 2009).

Finnish national core curriculum introduced the concept of multiliteracies in 2014, and the core curriculum, with its local adjustments, was implemented gradually, starting in 2016. The idea of multiliteracies was already partly included in the national core curriculum of 2004; however, the concept used was a 'broad understanding of text' (Kupiainen et al., 2015, p. 14). The concept of multiliteracies was integrated into the national curriculum because policymakers noticed the need 'to find new means to teach literacy and emphasise the importance of literacy in school' (Halinen et al., 2015, p. 142). Furthermore, the decreasing reading motivation and the growing gap in literacy levels, leading to exclusion from society, led to the introduction of the concept into the national core curriculum (ibid.). The Finnish national core curriculum's definition of multiliteracies includes the production, interpretation and evaluation of texts. The meaning of text includes words, pictures, audio, or numeric or kinesthetic material and symbols. Multiliteracies mean the necessary skills to combine multimodal materials for learning: it is a skill for acquiring, processing, producing. presenting and evaluating information with different tools (Luukka, 2013).

interpretation of the concept of multiliteracies in the Finnish national core curriculum is somewhat different from the idea of the pedagogy of multiliteracies presented by the New London Group and, moreover, is different from the approach that most commonly appears in contemporary research (Kulju et al., 2018). Furthermore, Finnish literacy scholars have not found a consensus in defining the concept: some consider it to be an umbrella concept (Harmanen, 2016), whereas others describe different multiliteracies, such as 'visual multiliteracy' (Räsänen, 2013) and (Kauppinen 'digital multiliteracy' Kinnunen, 2016). The Finnish researchers Palsa and Mertala (2019, p. 3) define multiliteracies in accordance with the international research literature on the concept 'as a pedagogical approach that is required to meet the needs of ever-diversifying textual and cultural landscapes of contemporary societies'. They write that the Finnish national core curriculum emphasises the understanding multiliteracies as a text-related competency and as a set of communication abilities instead of a pedagogical approach. Additionally, the issue of cultural diversity is mentioned only briefly in the national core curriculum (Finnish National Board of Education, 2014, p. 22). The need for librarians' and teachers' collaboration in promoting multiliteracies in teaching urges us to ground this study on the definition of multiliteracies appearing in the international research literature and originally introduced by the New London Group (1996).

Kupiainen and his colleagues (2015, p. 16) concluded that multiliteracies, as defined in the national core curriculum, are:

- Related to interpreting, producing and evaluating different **texts**.
- The ability to acquire, modify, produce, present and evaluate **information**.
- **Building identity**, critical thinking and learning.
- **Enabling ethical reflection** in a diverse, multicultural world.
- Connected to a broad definition of text.

The complete definition of multiliteracies in the national core curriculum is given in Appendix 1.

The national core curriculum provides only general descriptions of how the pedagogy of multiliteracies should be implemented in practice. It is stated that multiliteracies require a rich text environment, various teaching contexts, collaboration between disciplines and actors other than those from the field of education. The teaching materials should be authentic and meaningful for students, and the materials should be chosen with consideration for students' strengths and interests. Students should be offered learning situations in which they use, interpret and produce different kinds of text alone and in collaboration with others (Finnish National Board of Education, 2014, pp. 22-23). Palsa and Mertala (2019) point out that the national core curriculum does not provide any practical models of how multiliteracies should be contextualised in local curricula. This is in line with the overall situation with the curriculum-making and implementation process in Finland, as teachers are trusted to interpret the curriculum by building their instruction from general descriptions of the learning concepts and learning environment.

Understanding the concept of multiliteracies

The broad description of multiliteracies in the national core curriculum leaves many aspects of the concept undefined. As the boundaries of multiliteracies are loosely specified, this can lead to unsatisfactory interpretations (Kansanen, 2004; Palsa and Mertala, 2019). A study into language and literacy instruction and its relationship with the earlier national core curriculum of 2004 concluded that teaching did not correspond fully with the

requirements of the national core curriculum (Korkeamäki and Dreher, 2011). This result (2004)supports Kansanen's point unsatisfactory interpretations when curriculum does not provide firm guidelines. If the literacy instruction did not correspond to the requirements of the national core curriculum in 2004, one could think that it is so when the less concept multiliteracies is introduced in the latest version of the national core curriculum, which gives no descriptions of how multiliteracies should be implemented in practice. In addition, the detachment of the concept from the 'original' definition in the national core curriculum and the variety of meanings used in scholarly discussions can hinder teachers' understanding of the concept (Palsa and Mertala, 2019).

Indeed, Finnish studies show that Finnish understand teachers the concept despite its multiliteracies poorly, introduction into the national core curriculum (Hankala et al., 2018; Ojaranta, 2019; Rasi et al., 2019). Furthermore, many teachers uncertain about the concept and knowledge of what is expected from them as teachers of multiliteracies (Kulju et al., 2020; Mertala, 2017). The term multiliteracies was not introduced into the Finnish educational field until the launch of the recent national core curriculum, and after that, the term was included in the teacher education programme in Finland. Kulju and his colleagues (2020) pointed out that teaching multiliteracies is a new task for most of the teachers who currently work in schools. Only novice teachers have received training in multiliteracies in their teacher education programmes. However, training does not necessarily lead to success. Internationally, there is evidence that novice teachers can have different understandings of the concept, even if they have gone through the same training. Boche (2014) explored first-year teachers' conceptions of multiliteracies in the USA and found that technological resources at school, students' backgrounds and curriculum aims, for instance, can affect the understanding of the concept.

The term multiliteracies was introduced to change pedagogical practices, which means that the texts and learning environments have to be enriched (Luukka, 2013). For instance, sociocultural and political contexts need to be examined (Mertala, 2018). Yet multiliteracies are described as a skill in the national core curriculum. Finnish teachers have been shown to understand the concept in line with the curriculum (Nygård, 2022). According to Palsa and Mertala (2019), teachers are aware of the competences involved in the concept. This means that teachers highlight interpretation, evaluation and production of multimodal texts. Ojaranta (2019) found similar results: teachers understand the concept in a similar way compared to each other. In particular, multimodal aspects and a broad understanding of text were clearly attached to the concept by teachers in this study. It has also been noted that Finnish teachers see multiliteracies as a complex concept that is interpreted in different ways (Kulju et al., 2018). In the study by Kulju and his colleagues (2018), the interpretation of different texts was the most common aspect of multiliteracies, whereas verbal communication skills gained less notice by the teachers.

Research methods and data

This study presents a qualitative case study of how teachers and librarians understand the concept of multiliteracies. The study combines two cross-disciplinary research projects. The aim of the study was to gather data from two different research projects implemented during the launch of the new national core curriculum, which incorporated the concept of multiliteracies. The two research projects in study considered the notions multiliteracies from similar perspectives. The data were collected through semi-structured interviews, and the interview questions corresponded to each other. The interviews gave the interviewees room to respond openly, using their own words in describing multiliteracies as a concept, how they understand the concept and its components, and what they think of the concept.

The first author examined teachers and public librarians of Finland's Joy of Reading literacy

programme, which was funded by the Finnish Ministry of Education and Culture in 2012-2015. In the programme, thirty school and public library pairs tried to discover ways to increase students' reading motivation. The pairs received training in, among other things, enhancing their cooperation understanding of the concept multiliteracies. The data for this study were gathered after participating in the programme in 2017. The participants came from seven school and public library pairs and one city library within the programme. Both highly active and low-engaged pairs were included. The selection of the pairs for the study was made based on the programme's final reports. The interviews consisted of nineteen interviewees: twelve teachers and seven librarians. Five participants (two librarians, nine teachers) were interviewed in groups and teachers) eight (five librarians, three individually. The groups were formed from either teachers or librarians, so that the different professional groups were always interviewed in separate groups.

The second author investigated Finnish teachers' and school librarians' conceptions of multiliteracies in five teacher training schools. The interviews were conducted between October and November 2016. At that time, the national core curriculum implemented in primary schools, but not in secondary schools. The semi-structured interviews included five school librarians and five Finnish language and literature teachers. All were interviewed separately in five different teacher training schools. All the schools in these interviews were managed by full-time (or nearly full-time) school librarians.

Data analysis

The authors transcribed and managed the data that each had collected, but the data categorisation was discussed and decided by both authors together. Both authors started the analysis of the interviews using an inductive approach, as prescribed by Strauss and Corbin (1998). The analysis of the transcribed interviews started by discovering descriptions of the concept of multiliteracies and its pedagogical implementations. In the next

phase, the original expressions were reduced into themes, such as handling different types of text and information managing issues. The themes were then organised by comparing similarities and differences, as in the method described by Glaser and Strauss (1967). For instance, descriptions of reading, observing and understanding different texts indicated the consumption of texts, whereas presentations, writing and drama were related to producing text.

After the inductive phase of the analysis, the analysis continued in a deductive manner (Kyngäs & Kaakinen, 2020). The authors mirrored the data to the theoretical framework and found considerable similarities between the data and the theoretical model of Kupiainen et al. (2015). The model inspired the authors to organise the results into the categories presented by Kupiainen and his colleagues (ibid.). Five main categories emerged:

- Interpreting, producing and evaluating different texts
 - consumption of different texts (e.g. reading, understanding, interpretation, evaluation and observation)
 - production of different texts (e.g. writing, presentations, expressing oneself, drama and theatre)
- 2. The ability to acquire, modify, produce, present and evaluate information
 - information managing skills and information seeking
 - technology
 - teaching concepts
- 3. Building identity, critical thinking and learning
 - identity
 - \circ self-image and self-respect
 - individual abilities and strengths
 - participation and skills needed in society
 - critical thinking
 - o information managing skills
 - o source criticism
 - o influence of different media

- o fact vs. fiction
- learning
 - o different styles and ways of learning
 - o student-oriented methods
 - o setting learning goals
- 4. Ethical reflection in a multicultural world
 - empathy
 - helping others
 - interaction and collaboration
 - norms, rules and the difference between right and wrong
 - · changes in society
 - multicultural issues
- 5. A broad definition of text
 - multiliteracies in different school subjects
 - different text types (e.g. audiovisual material, emotions and pictures)

Information managing skills was an overlapping theme that belonged to both main categories two and three. In main category two, the data primarily concerned the skills needed to handle and produce information. The subcategory of critical thinking in main category three consisted of descriptions of pedagogical solutions to teaching information managing skills.

Findings

The results are reported by describing how multiliteracies were interpreted by teachers and librarians based on the definition of the concept introduced by Kupiainen et al. (2015, p. 16). This model presents five different aspects of multiliteracies, based on the notion in the national core curriculum. Additionally, we report solutions for multiliteracies pedagogy in the context of each aspect, since earlier literature brings up a division in multiliteracy between a skills set (umbrella) and a pedagogical model. The pedagogical solutions of multiliteracies were strongly attached to the descriptions of the concept of multiliteracies, particular teachers in described pedagogical solutions when they were defining the concept of multiliteracies. Some librarians spoke about the pedagogy involved in information managing skills, which is a familiar context for them.

The interviews were conducted in two different studies with a total of seventeen teachers and twelve librarians, both public and school librarians. For the most part, the findings presented a similar view multiliteracies. However, there were significant differences in the data regarding the ability to acquire, modify, produce, present and evaluate information and enabling ethical reflection in a multicultural world. None of the school librarians in the second author's interviews related multiliteracies to an ability to acquire, modify, produce, present and evaluate information, whereas public librarians in the first author's interviews strongly brought up the connection. Teachers and public librarians in the first author's interview data spoke about ethical reflection in a multicultural world, but there were no mentions of this in the second author's data.

What was consistent in both sets of data was that the teachers were confident in defining multiliteracies. However, two teachers pointed out that the concept can be difficult for someone outside their profession understand. Both teachers also mentioned problems with parents not understanding the concept. Most of the librarians differed from the teachers in their confidence in defining multiliteracies. Most of them were insecure about describing the concept and brought this insecurity up clearly in their answers. Several librarians stated that the concept is too broad and too hard to define and that it would be more convenient to talk about smaller entities. such as information management skills and visual literacy. Another public librarian highlighted the traditional role of the library as a service rather than a companion in teaching multiliteracies. She stated that librarians do not usually think what literacy is in their practical work: 'It is books that are borrowed from us and we do not teach literacy. [...] Multiliteracy probably does not exist at the library in a way the traditional [literacy] is. If we think about the basic work at the library, it is focused on books except for different happenings' (L4).

Interpreting, producing and evaluating different texts

Interpreting different texts was seen as an aspect of multiliteracies. obvious participants brought up various ways of interpreting different texts. Reading as a way of interpreting texts was highlighted in their descriptions. Reading was understood in a broad definition including all kinds of texts; for teachers example, few mentioned observation skills for facial expressions, body language and tone of voice. One of the teachers pointed out that the world of texts is constantly changing: interpreting it requires understanding of different types of texts and their characteristics.

All the participants highlighted the aspect of interpreting texts from various sources more than producing them, especially the librarians. When producing texts was mentioned in the interviews, the teachers described multiple ways of creating texts and enlivening them through, for instance, drama and theatre. The production of texts was strongly attached to fiction: 'It [multiliteracies] is one way of expressing ourselves. There are so many ways of expressing the same thing [...] The idea of multiliteracies is that we can tell stories in various ways, we can come up follow-ups for them, give space and opportunities for students to live in the story world and continue the story further by themselves', as one of the teachers put it (T12). The librarians who described the production of texts in their answers highlighted writing and digital presentations as a way to produce texts.

The evaluation of texts was seen to be almost as relevant as interpreting texts. One of the librarians felt that we needed the ability to divide text into smaller entities to understand the bigger picture. Two public librarians defined multiliteracies as thinking: 'I think it [multiliteracies] covers everything that can be read with the eyes and thought by the brain' (L6).

The ability to acquire, modify, produce, present and evaluate information

Acquiring, interpreting and evaluating information was a clearer part of multiliteracies

than producing, modifying and presenting information. Dealing with information was strongly attached to critical literacy in the interviews (see Building identity, critical thinking and learning, below). The participants highlighted information-seeking skills and teaching concepts for students. They saw concepts as a part of the basic literacy skills that are required to understand texts. A teacher stated that it belongs to the pedagogy of when real concepts are multiliteracies introduced in teaching from the beginning. Another teacher pointed out that literacy skills develop together with learning vocabulary, concepts and classification.

Both groups attached technology to the concept of multiliteracies. Interestingly, two teachers perceived multiliteracies only as something attached to technology. Both described multiliteracies as an ability to operate technological devices, and one also added media literacy as a part of the concept. In addition, one public librarian stated that multiliteracies means media literacy.

Teachers who were working in primary education highlighted pictures as a source of information. The interpretation of pictures, symbols and signs is useful in teaching when the students are still learning the alphabet, reading and writing. The teachers said that they often discussed pictures with their students. First, they speak about what can be seen and what has happened in the picture. One of the teachers pointed out that this cognitive side of interpretation is usually dominant. However, they also discuss the emotional side of the pictures, which includes interpreting feelings and empathising the feelings of the characters in the pictures.

The findings regarding this part of multiliteracy differed between the two datasets. The librarians in the second author's data did not regard this as a part of multiliteracies.

Building identity, critical thinking and learning

We have separated the three aspects of building identity, critical thinking and learning into separate subtitles to create clarity in the text.

Identity

Helping students to develop self-knowledge and build identity were not very clear aspects of multiliteracies. Only five teachers and two librarians acknowledged these elements as part of the pedagogy of multiliteracies. Most of them believed that teaching multiliteracies skills develops the skills you need in real-life situations. One public librarian stated that the concept of multiliteracies includes all the school subjects and life in general, what kinds of personalities people have and how they express themselves.

Most of the teachers attached the development of personality to multiliteracies teaching. Learning to read and interpret our own bodies and learning to become a student with the norms attached to the role were mentioned in their answers. One of the teachers also stated that reading is much more than a technical performance; instead, it introduces students to different worlds and helps them get to know themselves. Another teacher highlighted that multiliteracies teaching gives room students' own needs, treating them as individuals and respecting them: 'One of the most important tasks at school is to quide students to notice their strengths so that they can build a life-long path and a good life' (T12). She added that it is important to actually see the children, stop and listen to their thoughts. One teacher combined gaining experiences and, more precisely, aesthetic experiences with multiliteracies.

Critical thinking

Critical thinking was an evident aspect of the concept of multiliteracies in nearly all of the interviews. Reliability and source criticism were the most important aspects of critical thinking in nearly all statements. One teacher pointed out that we need to understand the information we encounter, how it is constructed and how it is mediated in the media.

Most of the teachers and public librarians felt that it was challenging to teach students to notice what is true and false, especially because of the overload of information people are facing nowadays. One of the public librarians pointed out that students were overwhelmed by the amount of information and tended to pick up information from the easiest source. Young students, in particular, often believe in everything they read. On the other hand, one public librarian believed that students were quite good at evaluating what was true or false. Young students begin to practise critical thinking step-by-step, at first evaluating whether what their friends say is true. Many teachers said that they teach how to recognise commercial texts and how texts try to affect people. The public librarians did not mention commercials in the interviews.

teachers Most and librarians attached information-seeking skills to critical thinking. Information-seeking skills should be taught from early stages at school first by doing small research and projects. One public librarian was worried that even high schoolers were copying information from the Internet and pasting it to their projects without evaluating or editing texts. She stated that the critical literacy skills of the students were poor. One school librarian connected multiliteracies more clearly to copyright issues.

Many teachers and public librarians talked about ways of teaching critical thinking. They all agreed that the skill needs to be taught and it is not something that develops by itself. The most common way was to talk about the issue with the students in the classroom. Some of the librarians noticed that, at first, it is important to grasp the text types and details. A public librarian stated that it is very important to start teaching how a fiction text and a fact text look by giving examples for younger students. She said that even high schoolers come to ask the librarians whether a book is fact or fiction. Scientific texts have their own kinds of distinctive markings, such as references, another librarian pointed out.

Two teachers highlighted that knowledge of basic concepts helps students to develop critical thinking. A teacher said that some parents advised their child to be 'careful', but the child did not know what careful meant. She pointed out that critical thinking cannot develop if one does not understand the thing that belongs to a certain issue.

Learning

Many of the teachers' interviews included descriptions of learning in connection with multiliteracies. Learning was not typical in the answers of the librarians. Librarians were often also insecure about how they could be involved supporting students' multiliteracies. Concrete examples that some of the librarians mentioned for involving libraries in teaching were school projects that went beyond the boundaries (integrative subject projects) and teaching information-seeking skills. However, some librarians highlighted basic skills and basic reading skills, which were seen as a basis for learning: 'I feel that the most important role for the library is to teach basic reading skills because they are weakening all the time' (L7).

Many teachers spoke about the pedagogy of multiliteracies, versatile teaching and learning methods. The teaching methods were strongly connected to student-oriented teaching, which finds ways to motivate students and takes different levels of literacy skills consideration. These methods included, for instance, reading diplomas including multimodal material and exercises on a computer, a day studying at the library and group work including different ages. The students themselves make their own goals in learning and come up with ways to learn in the best possible way: 'We let the students express themselves in a way which is the easiest way for them. [...] Then the child can choose a way to express himself and come up with a story. Some can use mathematical language, some music, art, comics or traditional writing' (T12).

Some teachers stated that the goals of learning should be visible for students to promote learning and motivate them to participate. One teacher said that they named the goals connected to a certain task before every small learning situation. One teacher introduced a so-called multiliteracies path, which included skills that the students tried to pursue. At the end of the period, the students evaluate how well they have learnt the skill. The teacher was confident that the students learned to understand the concept of multiliteracies better when they did this kind of self-

assessment, focusing on a certain skill they especially wanted to practise during a period.

Ethical reflection in a multicultural world

The teachers and the librarians brought up the constant changes in society that challenge both students and those who work with them. Multiculturalism is closely linked to changes in society. However, only one teacher mentioned multicultural issues in the interviews.

Many teachers and some public librarians described ethical reflection by mentioning approaches. pedagogical They practised interaction emotional and skills multiliteracies teaching. The exercises aimed at developing students' self-knowledge and how they can put themselves in someone else's position. Social skills were highly valued, for instance, how students take others into consideration. Concrete methods developing emotional and interaction skills included, for instance, image reading exercises when the class discusses what someone in the picture is feeling. One teacher mentioned that they used specific cards with pictures of different emotions for practising emotional skills. A typical way to practise these skills was through conversation. One teacher described how they had discussed in the classroom with preschoolers how to act as a student and how to make the right decisions in a safe way. She said, 'The preschoolers asked what you are allowed to do at the school yard. We discussed whether there can be signs everywhere to tell people what is allowed or not. We talked about how students at school think to themselves whether something they are doing is safe, sound and fair' (T12).

Both teachers and librarians highlighted group work as a method of developing interaction skills. One teacher described a one-week project in which they practised, for example, information-seeking skills, creating video material and designing posters. She said that even if the projects were amazing when they were ready, the most important goal was the learning in the process itself. In this process, the students developed their skills in taking responsibility and others into consideration.

The students had different roles in the group, for example, leaders and secretaries. One of the most successful achievements in this project was to introduce students of different ages into the same group.

This perspective was the second issue in which the two datasets clearly differed. Nothing related to ethical reflection or the multicultural world was found in the second author's data.

A broad definition of text

A broad definition of text was understood as an aspect of multiliteracies by nearly all the participants in the interviews. The teachers' answers were bountiful and can be divided under two headings: versatile forms of mediated messages (e.g. different media texts, signs, pictures, visual materials, symbols, jungle of texts, sounds) and how these messages are mediated (e.g. electronic, digital, interactive, audiovisual, paper, traditional written, spoken). Furthermore, many teachers connected multiliteracy to different school subjects and the difference in their need for subject-related reading (e.g. mathematics, history, geography). It was clear for the respondents that multiliteracy is not only an issue of Finnish language teaching but of all subjects.

The conceptions of librarians about multiliteracies being about the broad definition of text were not as rich as those of teachers. It was largely related to multiple forms of texts and to reading different materials, using different tools and visualisation. Another difference highlighted in the teachers' and librarians' interviews was that the teachers highlighted more social reading skills than the librarians. These skills include, for example, interpreting emotions and gestures.

The most common elements of different text types were media texts, such as on the Internet, emails, mobile phones, social media and newspapers. Many teachers and public librarians also mentioned audiovisual material, such as videos and television, in the interviews. Also, auditive material, such as voice, tone and music, was named as an element of multiliteracies in some of the teachers' and public librarians' answers. A teacher had practised imagining what kind of sound could

be heard when they were discussing a picture. Many teachers and some librarians pointed out that multiliteracies also include social reading skills, such as interpreting emotions and gestures.

A common element of text interpretation was interpreting pictures and signs; most of the participants talked about it. Some teachers highlighted mathematical language. One teacher described a concrete exercise with the students in which they interpreted mathematical language and calculations and converted them into spoken language. She wanted to point out that even though the mathematical language is short, it contains a story. The students had come up with stories from different mathematical calculations.

Discussion

This study investigated how Finnish teachers and librarians in two different datasets conceptualised multiliteracies. Both studies involved teachers and librarians. One dataset was collected from public librarians, whereas the other was collected from school librarians. The first author's dataset consisted of public librarians' and teachers' interviews after being involved in the Joy of Reading programme to increase students' motivation to read. In this programme, they received training multiliteracies and collaboration. analysing the data using an inductive approach, the differences between the two datasets were also searched for. We assume that the significant differences reported in the findings concerning the descriptions of handling, producing and evaluating information and ethical reflection in a multicultural world were affected by the training in the Joy of Reading programme that the first author's participants had gone through.

The results of this study revealed differences in conceptualising multiliteracies between teachers and librarians. Primarily, teachers had a wider conception of the subject, since they provided rich descriptions of the pedagogical aspects of multiliteracies. In most cases, the librarians were hesitant to define multiliteracies even though they had a general understanding of the concept. The teachers, on

the other hand, were confident in defining the concept. The broad definition of text was clearly considered to be essential to the concept of multiliteracies by the participants. Multimodality and a broad understanding of text are understood very well by teaching professionals (Ojaranta, 2019). Both teachers and librarians understood different types of texts, but the teachers' descriptions were slightly richer than those of the librarians. The teachers highlighted versatile forms of messages and how they are mediated. The librarians' conceptions were also related to multiple forms of texts, but they stressed the reception of different texts by reading and visualisation. In addition, the teachers spoke about social reading skills (e.g., interpreting emotions and gestures) more than the librarians did.

The findings show that the focus of the tension on multiliteracies was on the so-called traditional aspects of the concept. Even though the participants gave rich descriptions of receiving and mediating different texts, critical literacy and their pedagogy, little was said about the novel aspects of literacy, such as ethical reflection, multiculturality and building identity. addition, consuming In interpreting texts was more dominant than producing texts, especially in the librarians' answers. The interpretation of different texts was also dominant in the study by Kulju et al. (2018). That said, the participants could have a more traditional conception of multiliteracies than the national core curriculum presents. On the other hand, they described pedagogical issues that were not visible in the national core curriculum. Some teachers and librarians acknowledged changes society in accordance with ethical reflection, but only one teacher mentioned multiculturalism. Many teachers and some public librarians described ethical reflection by describing pedagogical approaches (e.g. learning social skills and norms). This perspective was the second issue in which the two datasets clearly differed. Nothing related to ethical reflection or the multicultural world was found in the second author's data.

Based on the results, the pedagogy of multiliteracies belongs to all school subjects and is not only an issue of Finnish language teaching. Many participants, both teachers and librarians, brought up that the pedagogy of multiliteracies helps students encounter reallife situations. The teachers described how they implemented student-oriented, versatile teaching and learning methods. They thought that the pedagogy of multiliteracies promoted these kinds of methods. Some teachers spoke about promoting individual learning skills, for instance, by students setting their own learning goals. Many librarians were insecure about how they could be involved in implementing the pedagogy of multiliteracies. It is common to uncertain about the concept multiliteracies and how to implement it in teaching (Kulju et al., 2020). However, teaching information-seeking skills, concepts, presentations and school projects were mentioned in the interviews with the librarians. We assume that these teaching methods are very familiar to the librarians. Indeed, teaching information-seeking skills was the most mentioned method of teaching multiliteracies if we consider the answers of both teachers and librarians. The participants agreed that information-seeking skills should be taught from the early stages in school. Technology is an obvious aspect of multiliteracies. One curious finding from the data was that two teachers perceived multiliteracies only as technology and did not hesitate to bring this up.

Overall, the librarians highlighted concerning implementing teaching and information non-fiction. Teachers concentrated more on fiction, for example, producing fiction texts and enlivening them through drama and theatre. One of the teachers pointed out that the cognitive side of interpretation is usually dominant when students are reading different text types. She said that they also discussed the emotional side and gave an example on interpreting feelings and empathising the feelings of the characters in pictures. Many teachers and some public librarians had practised social skills and interaction skills emotional and in multiliteracies teaching. Both teachers and

librarians stressed group work as a method for developing the above-mentioned skills by responsibility taking and others into consideration. One teacher described their most successful group work project, which included students of different ages in the same group. The most important goal of this project was to learn social skills instead of the products created in the process. The described exercises highlight reflective and collaborative teaching methods that are in line with the concept of multiliteracies established by the New London Group and the sociocultural perspective of multiliteracies (see Cope and Kalantzis, 2009). It must be noted that even if the learning concepts between the national core curriculum and the New London Group's multiliteracies generally have common features, these features are not attached to the concept of multiliteracies in the national core curriculum. The learning concept is described separately at the beginning of the national core curriculum.

The concept of multiliteracies was introduced in the Finnish national core curriculum for the first time in 2014. In 2016, schools were assumed to implement multiliteracies in teaching when locally adjusted curricula came into effect. As a relatively new concept in Finnish education, its meaning has not been completely clear. Teachers regard the concept as complex and interpret it in different ways (Kulju et al., 2018). Furthermore, teachers can have differences in understanding the concept, even though they have received the same training (Boche, 2014). Since there are no pedagogical guidelines for implementing multiliteracies in practice in the national core curriculum, schools and teachers are expected to interpret multiliteracies from their own standpoints. This can lead to unsatisfactory interpretations (Kansanen, 2004). If there is no consensus in the understanding of the concept among teachers, one could assume that the situation does not get better when we are looking at two professional groups, such as teachers and librarians.

Based on earlier research, teachers are aware of the competences involved in the concept of multiliteracies (e.g. Nygård, 2022). On average, the teachers and librarians in this study

understood the different aspects of the concept concerning textuality. However, the novel aspects of literacy (i.e. ethical reflection, multiculturality and building identity) were unclear. The theoretical framework multiliteracies by Kupiainen et al. (2015), in line with the national core curriculum, does not take a stand on how multiliteracies could be implemented in practice. In particular, the teachers in our study described their implementation of the concept through practical examples of their exercises with the students. In this way, the teachers provided rich descriptions of multiliteracies as a concept and in practice. They were also confident in describing the concept, whereas the librarians often felt uncertain about defining the concept, how it is implemented in practice and how they could be involved in promoting students' multiliteracies.

Even if there was uncertainty about defining the concept to some extent, all the participants recognised the change in the literacy world and the need to introduce a new concept to match the needs of society. One teacher described her feelings towards the concept and stated:

We now have a concept to name everything we have always been doing. We have read pictures and symbols but haven't had a name for it. That is literacy. I think that nothing new has been discovered except that it has been named. The meaning of reading has widened and opened. I see myself observing things differently than before now when I know that the concept is wider than just reading text, mathematical calculation or signs. (T5)

Some limitations can be found in the study presented here. The data were gathered from a relatively small sample of respondents, even though we analysed two different datasets. The data of the first author were gathered soon after the new national core curriculum was launched. The data of the second author were gathered before the new national core curriculum was in effect in the secondary school. It is possible that the conceptions of multiliteracies would have changed when the professionals gained more training and/or

experience in the concept its and implementation. There were also some differences between the two authors' datasets. The data of the first author were gathered from teachers participating in the JofR programme, where the participating teachers and librarians were educated on different aspects of multiliteracies, more specifically at this point, to information literacy-related issues. The participants of the second author did not receive such extensive training.

Despite these limitations, our findings on the conceptions of multiliteracies are quite similar to the evidence reviewed earlier in Finland, such as the research by Kulju et al. (2020) studying the conceptions of teachers. This study provides more information on how multiliteracies are understood between the two professions.

Conclusions

The results of this study show that there is a conceptual clarification need for multiliteracies both in grassroots-level work and in the curriculum context. This results from the detachment of the concept from the 'original' definition, the variety of contradictory meanings used in scholarly discussions, the scattered profile of the concept in the national core curriculum and the uncertainty of professionals concerning the concept (Palsa and Mertala, 2019). The broad representation of multiliteracies in the national core curriculum wide, and it can lead to multiple interpretations of the concept. Furthermore, the national core curriculum gives no

guidelines on how multiliteracies could be pedagogically implemented. This is another reason why professionals are likely to interpret the concept in different ways. Professionals could benefit from training, but it would probably not be enough, since understandings of multiliteracies can differ between professionals who go through the same training (see Boche, 2014).

There are a variety of studies on multiliteracies, but there is a lack of research on how the concept is understood and how multiliteracies pedagogy is being applied in schools. When considering the supportive partners that the national core curriculum lists for schools, including libraries, the term multiliteracies is even less researched among librarians. As the teaching goals of multiliteracy skills are shared another professional group, differences in conceptualising multiliteracies are even broader. This can cause even more discrepancies in practice. In addition to further studies on librarians' conceptions of the concept, it could be beneficial to explore the conceptions of multiliteracies at this time, when the national curriculum and local curricula have been in effect for several years.

The analysis did not concentrate on individuals, but rather on two professional groups. It has to be noted that, because of the small number of interview participants, the conceptions of some interviewees turned out to be dominant. For the same reason, generalisations cannot be made.

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References

Boche, B. (2014). Multiliteracies in the classroom: emerging conceptions of first-year teachers. *Journal of Language and Literacy education*, 10(1), 114-135. https://files.eric.ed.gov/fulltext/EJ1030724.pdf

Chu, S. K. W., Tse, S. K., & Chow, K. (2011). Using collaborative teaching and inquiry project-based learning to help primary school students develop information literacy and information skills. *Library & Information Science Research*, 33(2), 132-143. https://doi.org/10.1016/J.LISR.2010.07.017

Cope, B., & Kalantzis, M. (2009). "Multiliteracies": new Literacies, new learning. Pedagogies: An International Journal, 4(3), 164-195. https://doi.org/10.1080/15544800903076044

Finnish National Board of Education (2014). National core curriculum for basic education 2014. National Board of

Education. https://www.oph.fi/sites/default/files/documents/perusopetuksen_opetussuunnitelman_perusteet_2014.pdf (Internet Archive)

Gildersleeves, L. (2012). Do school libraries make a difference? Some considerations on investigating school library impact in the United Kingdom. *Library Management*, 33(6/7), 403-413. https://doi.org/10.1108/01435121211266212

Glaser, B. S., & Strauss, A. A. (1967). The discovery of grounded theory. New York, NY: Aldine de Gruyter.

Halinen, I., Harmanen, M., & Mattila, P. (2015). Making sense of complexity of the world today: why Finland is introducing multiliteracy in teaching and learning. In V. Bozsik (Ed.), *Improving literacy skills across learning* (pp. 136-153). CIDREE yearbook 2015. Budapest: HIERD.

Hankala, M., Kauppinen, M., & Kulju, P. (2018). Opettajien käsityksiä monilukutaidon pedagogiikasta [Teachers' perceptions about the pedagogy of multiliteracy]. [Paper presentation]. FERA-conference, Tampere, Finland.

Harmanen, M. (2016). Monilukutaito laajentaa opetuksen tekstitietoisuutta – kielitietoinen käänne opetussuunnitelmien perusteissa [Multiliteracy broadens text awareness in teaching. The turnover of language awareness in the core curriculum]. In K. Leino, & O. Kallionpää (Eds.), Monilukutaitoa digiaikaan – lukemisen ja kirjoittamisen uudet haasteet ja mahdollisuudet [Multiliteracy in the digital era – New challenges and opportunities in reading and writing] (pp. 10-22). Helsinki, Finland: Äidinkielen opettajain liitto.

Kansanen, P. (2004). Opetuksen käsitemaailma [The conceptual world of instruction]. Juva: PS-kustannus.

Kauppinen, M., & Kinnunen, T. (2016). Digitaalinen monilukutaito: oppimaan oppimista päivitetyin keinoin [Digital multiliteracy: learning to learn with updated methods]. In K. Leino, & O. Kallionpää (Eds.), Monilukutaitoa digiaikaan – lukemisen ja kirjoittamisen uudet haasteet ja mahdollisuudet [Multiliteracy in the digital era – New challenges and opportunities in reading and writing] (pp. 127-151). Helsinki, Finland: Äidinkielen opettajain liitto.

Korkeamäki, R. L., & Dreher, M. J. (2011). Early literacy practices and the Finnish national core curriculum. *Journal of curriculum studies*, 43(1), 109-137. https://doi.org/10.1080/00220271003801959

Kuhlthau, C. C., Maniotes, L., & Caspari, A. (2007). *Guided inquiry: learning in the* 21st century. Westport, CT: Libraries Unlimited.

Kulju, P., Kupiainen, R., & Pienimäki, M. (2020). Raportti luokanopettajien käsityksistä monilukutaidosta 2019 [Report on class teachers' perceptions of multiliteracy]. National Audiovisual Institute. (Internet Archive)

Kulju, P., Kupiainen, R., Wiseman, A., Jyrkiäinen, A., Koskinen-Sinisalo, K.-L., & Mäkinen, M. (2018). A review of multiliteracies pedagogy in primary classrooms. *Language and Literacy*, 20(2), 80-101. https://doi.org/10.20360/langandlit29333

Kupiainen, Reijo, Kulju, Päivi, & Mäkinen, Marita (2015). Mikä monilukutaito? [What is multiliteracy?] In, T. Kaartinen (Ed.), Monilukutaito kaikki kaikessa [Multiliteracy is everything] (pp. 13-24). Tampere: Tampereen yliopistopaino Oy.

Kyngäs, H., & Kaakinen, P. (2020). Deductive content analysis. In, H. Kyngäs, K. Mikkonen, & M. Kääriäinen (Eds.), The Application of content analysis in nursing science research (pp. 23-30). Springer, Cham. https://doi.org/10.1007/978-3-030-30199-6_3

Lance, K. C., Rodney, M., & Hamilton-Pennell, C. (2002). How school librarians help kids achieve standards: the second Colorado study. San Jose, CA: HI Willow Research and Publishing.

Latham, D., Julien, H., Gross, M., & Witte, S. (2016). The role of inter-professional collaboration to support science learning: an exploratory study of the perceptions and experiences of science teachers, public librarians, and school librarians. *Library & Information Science Research*, 38(3), 193-201. https://doi.org/10.1016/j.lisr.2016.08.002

Lindberg, P. (2014). Kumppanuus Suomen yleisissä kirjastoissa [Partnership in Finnish public libraries]. [Unpublished licentiate thesis]. University of Oulu, Finland. (Internet Archive)

Lo, P., Chao-chen Chen, J., Dukic, Z., Youn, Y., Hirakue, Y., Nakahima, M., & Yang, G. (2014). The roles of the school librarians as information literacy specialists. A comparative study between Hong Kong, Shanghai, South Korea, Taipei and Japan. New Library World, 115(7/8), 314-339. https://doi.org/10.1108/NLW-01-2014-0012

Loertscher, D. V., & Woolls, B. (2017). Overview: collaboration for diverse stakeholders. In M. Marcia (Ed.), Librarians and Educators Collaborating for Success: the International Perspective (pp. 3-9). Santa Barbara, California: Libraries Unlimited.

Luukka, M.-R. (2013). Opetussuunnitelmat uudistuvat: tekstien lukijasta ja kirjoittajasta monilukutaituriksi. [Curriculum reform: From readers and writers to masters of multiliteracy]. Kieli, koulutus ja yhteiskunta: Kielikoulutuspolitiikan verkoston verkkolehti [Language, Education and Society: Online Magazine of the Language Education Policy Network], 4(5). https://www.kieliverkosto.fi/fi/journals/kieli-koulutus-ja-yhteiskunta-joulukuu2013/opetussuunnitelmat-uudistuvat-tekstien-lukijasta-ja-kirjoittajasta-monilukutaituriksi

Merga, M. K. (2019). Collaborating with teacher librarians to support adolescents' literacy and literature learning. *Journal of Adolescent & Adult Literacy*, 63(1), 65-72. https://doi.org/10.1002/jaal.958

Mertala, P. (2017). Näkökulmia monilukutaitoon: opettajuus ja situationaaliset lukutaidot. [Perspectives on multiliteracies: teaching profession and situational literacies]. Kieli, koulutus ja yhteiskunta: Kielikoulutuspolitiikan verkoston verkkolehti, 8(6).

https://www.kieliverkosto.fi/fi/journals/kieli-koulutus-ja-yhteiskunta-joulukuu-2017/nakokulmia-monilukutaitoon-opettajuus-ja-situationaaliset-lukutaidot

Mertala, P. (2018). Lost in translation? - Huomioita suomalaisten opetussuunnitelmien

monilukutaito-käsitteen tutkimuksellisista ja pedagogisista haasteista [Lost in translation? – Remarks on the investigational and pedagogical challenges of the concept of multiliteracy in Finnish curricula]. Media & Viestintä [Media & Communication], 41(1), 107-116.

Mokhtar, I. A., & Majid, S. (2006). An exploratory study of the collaborative relationship between teachers and librarians in Singapore primary and secondary schools. *Library & Information Science Research*, 28, 265–280. https://doi.org/10.1016/j.lisr.2006.03.005

New London Group. (1996). A pedagogy of multiliteracies: designing social futures. *Harvard Educational Review*, 66(1), 60-92. https://doi.org/10.17763/haer.66.1.17370n67v22j160u

Nygård, T. (2022). There is a lot to practise. A nexus analytical study on promoting multiliteracy in health education. Acta Universitatis Ouluensis E 211. http://jultika.oulu.fi/files/isbn9789526233154.pdf (University of Oulu PhD dissertation)

Ojaranta, A. (2019). Information literacy conceptions in comprehensive school in Finland: curriculum, teacher and school librarian discourses. Åbo Akademi University Press, Finland. (Åbo Akademi University PhD dissertation)

Palsa, L. (2021). Developing a theory of conceptual contextualisation of competence-based Education: a qualitative study of multiliteracy in the Finnish curriculum framework. Acta electronica Universitatis Lapponiensis 309. https://urn.fi/URN:ISBN:978-952-337-263-4 (University of Lapland PhD dissertation)

Palsa, L., & Mertala, P. (2019). Multiliteracies in local curricula: conceptual contextualizations of transversal competence in the Finnish curricular framework. *Nordic Journal of Studies in Educational Policy*, 5(2), 114-126. https://doi.org/10.1080/20020317.2019.1635845

Palsa, L., & Ruokamo, H. (2015). Behind the concepts of multiliteracies and media literacy in the renewed Finnish core curriculum: a systematic literature review of peer-reviewed research. Seminar.net: International Journal of Media, Technology and Lifelong Learning, 11(2), 101-119. https://doi.org/10.7577/seminar.2354

Pearlman, R. (2009). Making twenty-first century schools: creating learner-centered schoolplaces/workplaces for a new culture of students at work. *Educational Technology*, 49(5), 14-19. http://www.jstor.org/stable/44429712

Public Libraries Act (2016). https://www.finlex.fi/en/laki/kaannokset/2016/en20161492.pdf (Internet Archive)

Rasi, P., Kangas, M., & Ruokamo, H. (2019). Promoting multiliteracy in the Finnish educational system. In M. Paksuniemi, & P. Keskitalo (Eds.), *Introduction to the Finnish educational system* (pp. 96-157). Brill | Sense. https://doi.org/10.1163/9789004394278_007

Räsänen, Marjo (2013). Visuaalinen monilukutaito – Luokanopettajaksi opiskelevien monikulttuurisuuskäsitykset ja kuvataide [Visual multiliteracy – teacher trainees' conceptions of multiculturalism and art]. Kasvatus [Education], 44(3), 270–285.

Smith, M., & Hepworth, M. (2007). An investigation of factors that may demotivate secondary school students undertaking project work: implications for learning information literacy. *Journal of Librarianship and Information Science*, 39(1), 3-15. https://doi.org/10.1177/0961000607074810

Strauss, A., & Corbin, J. (1998). Basics of qualitative research techniques and procedures for developing grounded theory (2nd ed.). London, UK: SAGE.

Tikkinen, S., Korkeamäki, R.-L., & Dreher, M. J. (2020). Finnish teachers and librarians in curriculum reform. *International Journal of Educational Research*, 103, 1-11. https://doi.org/10.1016/j.ijer.2020.101615

Williams, D., & Wavell, C. (2006). *Information literacy in the classroom: secondary school teachers' conceptions* (Report No. 15). Robert Gordon University, Aberdeen Business School, Department of Information Management. (<u>Internet Archive</u>)

Appendix I

Definition of multiliteracy in National Core Curriculum for Basic Education (2014)

Transversal competencies Multiliteracy (T4)

The pupils are guided to deepen their multiliteracy by expanding the range of texts in the teaching and learning of all subjects. In this context, texts means information expressed by systems of verbal, visual, auditive, numeric, and kinaesthetic symbols and their combinations. The emphasis is on practising the pupils' analytical, critical, and cultural literacy. The pupils practise using all of their sensory faculties and utilising different ways of knowing diversely in their learning. Producing, interpreting, and communicating information are practised in ways characteristic of different subjects and in cooperation between subjects. The pupils are also encouraged to use their multiliteracy when participating and being involved in their own surroundings, the media, and the society. School work offers plenty of opportunities for practising these skills in a cooperative setting. The emphasis in multiliteracy development increasingly shifts to context and situationspecific texts. The pupils' multiliteracy is advanced by introducing them to narrative, descriptive, instructive, argumentative and reflective text genres. Cultural, ethical, and environmental literacy are supported in teaching and learning. Texts related to working life are also analysed and interpreted. The pupils develop their consumer and financial skills by familiarising themselves with texts that treat the topics in a versatile manner and by learning about the contexts in which they are used. Numeracy is advanced for example when assessing the reliability of opinion poll results or the cost-effectiveness of a commercial offer. The pupils are guided in developing their visual literacy by using different modes of image interpretation and presentation. Media literacy is developed by being involved in and working with various media. The pupils are encouraged to express their views using different means of communication and involvement.