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Student Teachers' Views on Media Education Related to New Literacy Skills

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Article Info	Abstract
Article History	High quality media education promotes media literacy and ensures citizens'
Received: 01 February 2022 Accepted: 30 June 2022	smooth participation and engagement in the digital society. Digital media include powerful communication and interaction platforms that require new literacy skills. This study examines what new literacies can be found in the opinion writings of student teachers in relation to media literacy. The research material consists of 37 Finnish student teachers' opinion writings produced during the Media Education
Keywords Media literacy New literacy skills Media education Student teacher	2020 course. The aim of the study is to explore how student teachers identify new literacies as part of media education and how these new literacies are reflected in their opinion writings. As a result of the research, new literacies emerged from the data as a cultural phenomenon of our time. This was reflected in their views on the technological orientation of school and teaching and the importance of media education as a teaching task in schools. An important finding is that the textual subculture of social media is valued as a new form of literacy. The results show that while the narrative value of images, virtual game worlds and easy access to social media via smartphones were identified, the broad understanding of new literacies among student teachers is narrow. Perceptions of media education and new literacies are interlinked and the debate on their relevance as a social phenomenon should continue.

Introduction

"Young people should not be forced to read, but encouraged to pick up different texts," says sixth grader Meretniemi (2022) in an opinion piece in Helsingin Sanomat. He goes on to say even more emphatically that children who find reading difficult should also try audio books. This idea of varied learning styles is also supported by studies. According to a study by Lerkkanen (2018), students' sense of freedom, arousal of interest, positive study habits and different teaching strategies have a strong relationship with motivation (Ryan & Deci, 2020) and thus with the development of students' literacy and reading skills. The construction of a positive self-concept is promoted by a variety of teaching methods (Hyvärinen et al., 2022).

The vision of media education policy in Finland is to improve the ability of every citizen to develop their media literacy through high-quality and systematic media education (Salomaa & Palsa, 2019). The National Literacy Strategy 2030 (Finnish National Agency for Education, 2021) aims to make Finland the most literate country in

the world by 2030, and its mission emphasizes a literate lifestyle as a basis for equality, civilization, and wellbeing. According to the Digital Vision for Higher Education 2030 (Digivisio, 2021), Finland aims to create a model country for flexible learning. From the student's perspective, this means a digital learning ecosystem, a set of digital services that requires students to have a strong command of new literacy skills. Lehti et al. (2018) emphasize that social participation and empowerment require the ability to acquire and critically process information in different textual environments. Education at all levels must ensure that children, young people, and adults have these skills, because as the Finnish National Agency for Education (2021) emphasizes, literacy is an agenda for society as a whole. The importance of continuing education is therefore also highlighted. Teacher education must be at the forefront of awareness of societal changes and provide graduating teachers with strong skills on which to base their entire professional careers. According to Lankshear & Knobel (2011), the concept of new Literacies refers to multimedia and multimodal literacy skills needed in new media environments. Media literacy is an increasingly important area in education.

The 2016 evaluation of the Finnish Teacher Education Development Program (Niemi et al., 2018) suggested that the development program lacked long-term change factors related to teachers' work, such as radical changes in work, sustainable development and climate change, artificial intelligence, and the challenges posed by robotization and digitalization with increasingly demanding media literacy. Lehti et al. (2018) justifies the diversity of literacy skills by the need to interpret and produce a variety of texts in multiple channels alongside technical skills. Salomaa & Palsa (2019) also show that evolving algorithms and artificial intelligence challenge the development of media literacy. However, they point out that traditional media such as radio, television, movies and reading magazines are still consumer-preferred media. The focus should therefore be on diversified media consumption.

Today's teacher education must respond to these changes. Salomaa and Palsa (2019) argue that promoting media education for children and young people is timely and important. Strong expertise and collaboration are needed from educators in the field. In this study, the focus is on new literacy skills and multi literacy under this concept. According to Kupiainen (2017), multi literacy consists of both different text forms and the social contexts in which text practices are situated. In this study, the term "new literacies" is used to describe the multi literacies needed in a wide range of media.

In this study, we seek to understand how new literacy skills are reflected in student teachers' writings on media education. Research data are needed on the knowledge and understanding of student teachers in relation to new literacy skills and their ability to provide pedagogically high-quality instruction to develop these skills. Understanding student teachers' skills in relation to literacy and media education will help to develop teacher education to better meet the wider societal goals and visions of media education. The research methodology is a combination of content analysis and narrative analysis. Narrative analysis has been used to analyze the data by compiling opinion writings with similar content from the research material. The research question is what new literacies are identified by student teachers as part of media education and how new literacies are reflected in their opinions.

New Literacy Skills and Multi Literacy Skills

As textual worlds have expanded from traditional written and printed text to technology-related forms of communication, the concept of literacy has also become richer (Lehti et al., 2018). As a result, the terms 'new literacy' and ' multi literacy ' are more descriptive concepts when talking about literacy (Kupiainen, 2017; Kulju et al., 2020). Kupiainen (2017) clarifies the concept of new literacy skills. He emphasizes that what is new is to view literacy as inclusive, collaborative, and shared, rather than focusing on the cognitive skills of the individual. This does not emphasize the role of technology, but rather understands literacy as a New Ethos Stuff (Knobel & Lankshear, 2007), a view of how reality is constructed and organized through literacy allows us to interpret messages and construct our perception of reality in the world. Kupiainen (2017) sees literacy as a topical activity in different socio-cultural contexts and networks.

The concept of multi literacies refers to the diversity of texts and text media (Kupiainen, 2017) and can be defined as a broad understanding of text, according to which texts can be verbal, pictorial, auditory, numerical, and kinesthetic symbol systems (Finnish National Agency for Education, 2014; Kulju et al., 2020). It is the skills of receiving, evaluating, and producing these different systems in various media, as defined by the Lehti et al. (2018). Kulju et al. (2020) state that multi literacy is needed in both the most traditional media environments and digital environments. They see that with the widespread digitalization of the society, digital environments are particularly highlighted in the world of living for children and young people. Digital gaming worlds, the numerous channels of social media and the constant channels of information acquisition, production and reception of information that opens through smart devices are constantly shaping the multi literacy of children and young people (Tosun & Akcay, 2022). These informal learning channels have created new language learning opportunities (Mutta et al., 2017). At the same time, it is important to understand that the Internet also exposes the user to dangers such as cyberbullying, and according to research findings of Tosun & Akcay (2022), both teacher education and in-service training should equip teachers to guide children and young people into the digital world. The focus should be on individual agency, responsibility, security, criticality, and sustainability.

The importance of media education has increased with the digital revolution (Lehti et al., 2018; Erwin & Mohammed, 2022) and in National Core Curriculum for Basic Education (Finnish National Agency for Education, 2014) it has been highlighted as one of the skills of broad competence, the development of which should permeate the teaching of all subjects. Starting from early childhood education and care (Finnish National Agency for Education, 2018) and continuing through different levels of education, media education can help children to become aware of the effects of media and to act responsibly in different media environments as recipients, consumers, and content producers. Media education requires the teaching of sufficient technological skills and broad-based multi literacy teaching (Pekkala, 2016). From the perspective of media education, technological skills and literacy are an essential part of everyone's good digital literacy. The technological breakthrough into everyday life has provided everyone with the opportunity for non-formal learning (Lampinen & Juntunen, 2013), regardless of time and place. Children and young people also act as producers of non-formal learning materials. The world of schooling seems to have fallen behind this significant technological change, but as Ruokamo et al. (2015) argue,

the digitalization of our society can be seen as creating new opportunities for the development of both university and basic education. The child or young person as pedagogical influencer and social media influencer is a recent but already quite common phenomenon. Indeed, informal learning has grown exponentially through social media. In this study, however, we focus on media education in the context of formal education.

Perspectives on Media Education

New literacy skills are part of the field of media education. The National Core Curriculum (Finnish National Agency for Education, 2014, p. 22) state that students need to be able to practice a wide range of literacy skills in both traditional and multimedia learning environments that use technology in different ways. Media education is a broad concept, covering educational activities that enhance media skills for children, young people, and adults, and addresses all types of media and media literacy (Palsa & Ruokamo, 2015; McDougall et al., 2018). Finnish media education is based on the UN Declaration of Human Rights and the European Declaration of Human Rights (63/1999) (Salomaa & Palsa, 2019). The European Commission (2007) has defined media literacy as the ability to access media, to understand and critique different perspectives of media and media contexts, and the ability to create interaction in different contexts. Media education is at its best a creative activity, and in accordance with the National Core Curriculum (Finnish National Agency for Education, 2014), it should guide students to create and produce diverse content related to the objectives of different subjects jointly and actively. According to Salomaa and Palsa (2019), media education is linked to general educational goals. They state that media education addresses ethical and moral themes and promotes socio-economic, gender, age, and ethnic equality. The Finnish vision for media education (Salomaa & Palsa, 2019) emphasizes the possibility for everyone to achieve sufficient skills for digital citizenship. Multi-literacy skills are included in digital citizenship (Frau-Meigs et al., 2017), which is defined by competent and positive engagement with digital technologies, active and responsible participation in communities at all levels, lifelong learning in formal and informal learning environments, and advocacy for human dignity (McDougall et al., 2018).

The vision emphasizes that media education is timely, equitable, appropriate, and professionally high quality and objective, ethical and sustainable in practice (Salomaa & Palsa, 2019). Consideration of all different media and their importance in people's lives, culture and society is seen as important. Knowing one's own and others' rights in media culture is seen as important, as is cooperation with experts. Meaningful use and production of media is also essential. According to Salomaa and Palsa (2019), media literacy is best developed through high-quality, ethical, sustainable, and effective media education. In media education, media literacy is an essential concept to understand, in addition to multi-literacy. Hobbs (2010) defines a framework for media literacy based on five core competences. These cover access, analysis and evaluation, creation, reflection, and action. McDougall et al. (2018) have complemented the framework with an agency perspective, since in media literacy, in addition to the content of learning, the agency of the learner is very essential. According to the sociocultural paradigm, new literacies can only be taught and understood in the context of social, contextual, and cultural contexts (Lankshear & Knobel, 2011; Kallionpää, 2014).

Researchers have been interested in the debate on media culture as a broader phenomenon for decades, and the

nature, emergence, development, or presence of a particular phenomenon in the real world is a natural motive for research (Patton, 2002). Children are often seen as victims of media moral concepts and young people as violators of prevailing moral concepts through different subcultures (Vanttaja et al., 2017). According to the study by Vanttaja et al. (2017), in doing so, experts simultaneously create a common definition of good and bad taste, low and high culture, and acceptable or inappropriate behavior. In this respect, the study of media discourse incorporates the idea of social constructionism in the reconstruction of phenomena. A significant finding of the same study is that in the 21st century, the internet, smart devices, and social media have emerged as the main themes in writings on media use (76% in total). They also note that newer forms of culture are more prominent and that when writing about social media, for example, writings are more likely to be associated with risks or threats. However, the researchers also made the interesting point that there were few concerns about gambling. However, it is precisely by approaching the media world from the perspective of children and young people that it is possible to find links between children's everyday lives and formal schooling. This could also help to find new ways to inspire different types of pupils to develop their literacy skills. There is a real need to diversify the teaching of literacy. The National Curriculum for Basic Education (Finnish National Agency for Education, 2014) requires the use of diverse teaching methods in a goal-oriented manner and the use of student-centered, ageappropriate, individualized, and active multidisciplinary learning methods.

Pedagogical Approach to Literacy

Regarding students' motivation to read, especially for boys and at-risk students, Lerkkanen (2018) found in her study that students' interest in reading peaks at the beginning of school, but gradually declines during the first years of school. In addition, differences were found between girls and boys in their interest in reading. The results show that girls were clearly more interested in learning to read than boys. Merisuo-Storm and Aerila (2018) have also found that boys focus more on the events of the story, while girls focus on the details and the emotions and character of the characters (Merisuo-Storm & Aerila, 2018). The literacy gap between Finnish girls and boys has widened (Vettenranta et al., 2016, Leino et al., 2019) and reading motivation is low (Kupari et al., 2013). At the same time, the reading ratio of pupils has deteriorated. According to the PISA study (Leino et al., 2019), 63% of Finnish boys responded positively to the statement "I only read if I have to". Although boys' overall reading skills and motivation to read are lower than girls' and girls show a greater interest in reading both at school and in their leisure time (Kupari et al., 2013; Perälä et al., 2018; Merisuo-Storm & Aerila, 2018). Merisuo-Storm and Aerila (2018) find in their study that boys have stronger confidence in their own reading skills. According to Mutta et al. (2017), research suggests that boys learn language better in game worlds than in formal school environments. Diversifying reading perceptions and reading-related learning experiences could also contribute to boys' positive reading experiences. YouTube videos, social media channels, game worlds and audio books, as mentioned by Meretniemi (2022), are as much textual worlds as written and printed tests. This is supported by the findings of a study by the Reading Centre (2016), which found that boys and those who read the least in their leisure time clearly saw e-books as a more meaningful option more often than other groups (Reading Centre 2016). Positive self-concept has been studied as a factor that promotes learning and interest (Ng, 2020) and the teacher's pedagogical choices play an important role in the development of self-concept (Hyvärinen et al., 2022). (Lerkkanen (2018) argues that the learning tasks chosen by Finnish teachers are related to students' interest in

reading. Tarnanen et al. (2019) also emphasize that the diversity of knowledge construction and representation should be the goal of goal-oriented practice and learning to develop multiple literacies. Teaching methods and instructions can thus determine a lot about the form of textual output produced by students.

Lähdesmäki (2021) argues that designing phenomenon-based and multidisciplinary learning contexts is a key generic skill for teachers. She emphasizes that teacher education should further improve the skills of student teachers to design learning contexts that integrate subjects and support students' active learning process based on curriculum objectives. Tarnanen et al. (2019) see that design skills are important, as a multidisciplinary learning module must be carefully designed to support the applied use of previously learned knowledge and the construction of new knowledge. The Pedagogy of multi literacy (Kalantzis & Cope, 2012) is defined in a similar way, emphasizing the role of the teacher as a designer of learning environments and as a mediator between the learner and the learning environments. Ideally, students learn media skills and use new literacies through a variety of active learning processes, producing complex texts ranging from writing to podcasts and videos. At the same time, they are also practicing their technological skills. The development of quality basic education that emphasizes multi literacy requires that student teachers are given the opportunity to develop their technical and pedagogical technological skills (Bergeson & Beschorner, 2020) in teacher training. Student teachers' broad understanding of new literacies and their ability to design phenomenon-based learning activities that develop students' multi-literacies are best practiced in teacher education.

Methods

The research material consists of opinion writings produced by student teachers in a media education course. The media education course is part of the advanced studies, and its scope is 2 credits. The survey data was collected from Finnish student teachers in adult education for classroom teachers. This university degree program is aimed at reoriented students in the field of teaching and education, and previous university studies are required for admission. One of the authors of this study was the teacher of the course and the designer of the learning assignment. The students were aware that the opinion writing produced could be used as research material. Uniform guidelines were provided for the preparation of the opinion writing. The students were asked to follow the media and explore media articles of interest to them related to education and teaching and learning. Inspired by a media article of their choice, student teachers had to write an opinion piece on the topic and present their own perspective on media education priorities.

The student teachers were asked to write a concise, opinionated, and topical opinion piece on current media topics related to media education. Students were asked to monitor what is written or reported in the media about student empowerment, opportunities, and 'relevance' in relation to students, teaching, and learning. Inspired by this, they had to write an opinion writing. The opinion writing was guided by the fact that it had to present the source, topic, perspectives, arguments, and arguments on the topic, as well as their own positions on the topic - to challenge the reader with their writing. Current literature and articles were attached to the assignment and could be used as a basis for argumentation. Through the learning task, students were encouraged to actively monitor the media and reflect on their perspectives.

The data was analyzed using content analysis and narrative characterization, which is typical of narrative analysis. The data was collected in autumn 2020 and consists of a total of 37 opinion writings. All opinion writings have been compiled in a single word file (35 pages, Times News Roman 12, 1.5). The data is fully anonymized. First, the whole text mass was read through, typed according to content, and the first upper categories were created. Content analysis was used to extract from the data only those textual references that commented on the new literacy skills. This analysis resulted in 19 pages (Times New Roman 12, 1.5). This once selected text mass was re-read and tabulated under categories. For each opinion, only the part of the text that clearly related to the category found was included in the table. In this way, the typology used in narrative analysis was exploited to find consistent perspectives in the narrative text (Heikkinen, 2018; Hänninen, 2018). This allowed the text mass to be summarized and placed in the following categories: image as a medium of communication, social media, and smart devices, bullying in the media, the role of school media education, gaming, technology and school, school as media educator (15 pages, Times New Roman 10). The texts in the table were re-interpreted and the text was highlighted using strikethrough to interpret its essential message and summarize the core narrative. This process defined the final categories presented in the results. In the final stage, these condensed core narratives were further analyzed by color-coding the consistent content with the same color and creating a final interpretation.

Results

In a review of the sources selected by students, it appeared that current news on the national news website "Yleisradio" news and news articles from the largest subscribed newspaper in the country, Helsingin Sanomat proved to be popular sources. Quite a few resorted to articles published by the Media Education Assosiation, which were attached to the mission. As individual sources, quite a few student teachers used articles from professional journals in various fields, such as "Opettaja-lehti" (Teacher magazine), "Microbitti" and "Technology and Economics" - magazines.

The Identification of New Literacy Skills	New Literacy as a Cultural Phenomenon
the Narrative Meaning of the Image	Media Related to Bullying
Virtual Gaming Worlds	Technology-Oriented School and Education
the Textual Subculture of Social Media	Schools as Media Educators
Easy Access to Social Media via Smart Devices	

Table 1. Result Categories

In response to the research question of what new literacies are identified by student teachers as part of media education and how new literacies are reflected in their opinion writings, two broad categories emerged from the data two broad categories emerged from the material. The first is the identification of new literacy skill aspects, which fell into four categories: the narrative meaning of the image, virtual gaming worlds, the textual subculture of social media and social media. The second category is new literacy as a cultural phenomenon, which was divided into three categories: media related to bullying, technology-oriented school and education and schools as media educators.

The Identification of New Literacy Skills

The Narrative Meaning of the Image

The visual literacy of taking and sharing selfies emerged from the research data. On the other hand, it was seen that selfies can lead to bullying and that social media distorts children's perception of reality through image processing. However, the right of everyone to express their own personality through selfies and the view that images are an important channel for expressing their identity and interacting on social media through self-expression emerged strongly. In the opinion writings, some raised concerns about the distorted reality of the images discussed and the bullying that follows the misuse of selfies. The point was made that teachers should understand visual communication first and foremost as a means of interaction and communication, and thus as an opportunity for learning and motivation alongside traditional literacy learning. Teachers need to be aware of their own relationship with the media to help students develop their media literacy skills.

Virtual Gaming Worlds

Virtual game worlds were seen as an important aspect of entertainment media for children and young people, and the view was expressed that games education should be included in media education in schools. However, the guiding role of parents and teachers in terms of self-regulation and limiting gaming time was seen as important, as excessive time spent on media can lead to concentration problems. Concentration and a stimulus-free learning environment must be ensured at school. The aspect of student agency was identified as part of gaming.

The Textual Subculture of Social Media

The results show that student teachers recognize the value of children's and young people's textual subculture in social media, even when it contains symbols, images, and non-spelling text. Student teachers see this as a contemporary literacy skill used by young people and children to express themselves and create meaningful groups and networks. It is important for educators to understand and embrace this, even though practicing traditional and face-to-face interaction skills is seen as an important part of the school's mission. Student teachers recognize that literacy is enriched by the language of social media. However, some highlighted handwriting skills as a resource that should be retained in schools, as handwriting practice develops students' fine motor skills and promotes language learning skills.

Easy Access to Social Media via Smart Devices

The data showed that social media exposes children and young people to huge amounts of information and uncontrolled media time, and that creating a child-centered relationship with digital life is an important shared task for educators. Almost every child has a smart device, and it is up to educators to define, together with the child, the limits of its use, thus ensuring the child's peace of mind as he or she grows and develops in an age-appropriate way. Student teachers recognized the importance of a reflective relationship with smart devices and social media, and the importance of raising pupils to be aware of their own limits. The results also showed that

the easy accessibility of social media increased concerns about its dangers and threats. Student teachers associated the threat with some, such as drug-friendly and sexuality-related sites and exposure to cyberbullying. Educational responsibility was identified and even perceived as particularly important, as the teacher is seen alongside caregivers as an important, sometimes even the only, educator who guides the child or young person towards critical thinking and safe media use.

New Literacy as a Cultural Phenomenon

Media Related to Bullying

Increased media coverage of bullying cases was the starting point for many opinion writings. The increase in violence among young people and children has raised concerns and bullying in school, outside school and in virtual environments is perceived as a phenomenon that should be tackled more vigorously. They stressed that teachers and principals do not have sufficient means to tackle bullying. In principle, student teachers pointed out that every pupil has a constitutional right to a safe learning environment and peace of mind. Thus, the view emerged that schools should also allow time and work free from digital activities, as providing a safe learning environment is an important task.

Technology-Oriented School and Education

Quite a few commented on the increased use of technology in school teaching and collaboration practices. The COVID-19 pandemic was seen as forcing schools to make the digital leap, leading to, for example, an increase in the use of e-learning materials and a shift by higher education institutions to online courses. It was argued that adequate resources should be guaranteed for the full use of ICT, that e-learning structures should be easy for students to use, and that distance learning should consider the workload of teachers and the prevention of work fatigue. The potential of technology as a channel for cooperation between home and school (such as the Finnish cooperation platform WILMA) was highlighted, and it was suggested that it is important for teachers to pay attention to the format of written messages to avoid misunderstandings. It was also seen that the use of technology in formative assessment of pupils is a school responsibility and teachers should focus on providing positive feedback to pupils on digital platforms. This was seen as contributing to pupils' self-esteem and self-perception. It was also noted that distance learning, e-learning, the widespread use of mobile devices and the use of different software require schools to develop security and protection of information.

Schools as Media Educators

Several opinion pieces stressed that media education is an important part of the educational mission of schools, as media literacy is an essential civic skill for all, promoting democratic participation in society. The guiding role of the curriculum was highlighted, as was the teacher's own example as a media user. Examples of media were mentioned, such as trolling, commercial influence and algorithms, and many pointed out that good media education leads to critical thinking and identification of these phenomena. Extending media education to all citizens and ensuring that teachers are open to changes in society and update their skills and knowledge as media

educators were seen as important. Another important task in media education was the development of emotional and interaction skills and respectful encounters, both face-to-face and in the media world. Schools have a role to play in supporting media education in the home, in particular in dealing with copyright issues.

Discussion

With respect to the research question, it was found that student teachers' perceptions of new literacies focus on descriptions of textual and communicative forms of social media, technological devices, and game worlds. In addition, they identify the cultural impact of new literacy skills as the expansion and transformation of the educational mission of the school and the digitalization and technologization of teaching and communication practices in the school institution. The results show that the systematic understanding of new literacies is somewhat fragmented and narrow. No real perspectives on the development of new literacies were given, rather the independent creativity and agency of pupils in social media through images and different forms of communication was recognized. There was little discussion of pedagogical solutions or of the importance of new literacy skills, other than in relation to images and social media communication channels. For example, the opinions did not highlight pupils' agency (Hobbs, 2010) in using text formats such as audio and video.

Encouragingly, the results show that student teachers are aware of the need for teachers, school institutions and parents to be flexible and able to innovate in a mediated world and technological culture. Responsibility and professionalism are demonstrated by the fact that the teacher's role is first and foremost to ensure a safe learning environment and the freedom to grow and learn, including the practice of media skills. The role of schools as providers of media education is seen as an important and essential part of education for social inclusion and democratic membership (Salomaa & Palsa, 2019). Schools need to strengthen these structures through which student teachers see the school supporting their educational work at home. Research also shows that student teachers recognize social media as a group phenomenon (Kupiainen, 2017) and the narrative value of images as a form of self-expression for children and young people. Taking and sharing selfies was also seen as a positive communication tool to reinforce a positive self-concept and as a way for children and young people to write a narrative about themselves in social media (Hyvärinen et al., 2022). They also recognize the importance of student empowerment and critical reflection skills in the educational task at school. However, the results show that there is still much to be done in teacher education and in-service training. Teacher education also needs to develop its media education (Niemi et al., 2018), and it would be appropriate to consider whether teacher education offers a sufficiently broad range of media education-related courses and to reform teacher education at curriculum level in a sustainable way (Digivisio, 2021; Tosun & Akcay, 2022).

An interesting result of the study is that student teachers identified the positive value of the textual subculture of social media for children and young people. Student teachers see the variety of textual formats used in social media channels as an important part of modern writing skills. This is a very positive finding. Furthermore, the openness towards gaming (Vanttaja et al., 2017) is encouraging, as the results showed that student teachers' attitudes towards gaming were positive from a learning perspective. Media education in teacher education is essential to stimulate students' thinking and understanding of media education and what media education entails

(Niemi et al., 2018). Student teachers also have a responsibility to be aware of their own beliefs and of themselves as media users. Teacher education should challenge its students to do this. Thus, the research suggests that opinion writing and guidance in familiarizing students with the media culture of our time is an excellent opportunity to stimulate student teachers' thinking about media and media education.

Although these results are not applicable to all contexts, the results indicate that teacher training should guide students to understand the diversity of new literacy skills. Teachers need to be aware of their own conceptions of literacy and have theoretical and practical opportunities to understand what emergent literacies are and how to implement sustainable literacy instruction in line with the principles of Hobbs (2010) and McDougall et al. (2018). More attention should be paid to student agency and teacher education should foster the ability of student teachers to create learning contexts that combine learning goals and content from different disciplines (Lähdesmäki, 2021), in which media education is purposefully and systematically included. The role of students as producers and consumers of media should be strengthened (also Erwin & Mohammed, 2022). By following the principles of phenomenological learning (Lähdesmäki, 2021), student teachers can be guided to design authentic learning situations in which students can produce audio, video, visual and social media material such as blogs, vlogs, podcasts, informal YouTube videos, etc.

By identifying students' informal media learning environments and their media literacies, new pedagogical thinking and action can emerge. By combining the pedagogical thinking of media education (Kalantzis & Cope, 2012) and the principles of phenomenological learning from the perspective of student participation in learning to planning and implementation (Lähdesmäki, 2021), the idea of Next pedagogy is presented. It is a way of thinking and acting that combines informal and formal learning. Next pedagogy embraces students and teachers as designers and experts in learning. In this research context, it means linking students' media concepts, skills, and knowledge to the formal curriculum-based media education objectives of the school. A common pedagogical space is created, for pupils and teachers, in which technology and the media worlds are seen as a shared object of learning and development. Phenomenon-based learning (Lähdesmäki, 2021) provides an excellent design-guided basis for this. Exploring Next pedagogy is an interesting topic for further research. Similarly, further research is proposed to build on this study, with a greater focus on linking social media literacy subcultures and formal learning forms.

Understanding the diversity of literacy contributes to the implementation of increasingly diverse teaching in our schools and ensures that new learning methods that develop multiple literacies are continuously available to all students in schools. This will also contribute to the timely identification of learning difficulties related to literacy (Lerkkanen, 2018) and provide ways to contribute to the prevention of the development of reading difficulties. Most reading tests are still based mainly on traditional reading skills, i.e., the ability to read and understand printed text. As we begin to understand the textual material produced by children and young people in informal learning environments, we may also find new ways to develop and explore literacy in formal education.

It is very important to recognize and acknowledge that access to and understanding of information cannot be judged by the textual source from which it is derived. What is more important is how the information is used,

analyzed, and exploited. In media education, schools should focus more on how students search for, process, and produce information, and respect students' agency, agency, critical thinking, and access to information (Hobbs, 2010; McDougall et al., 2018). It is the role of educators to guide these practices in a responsible, ethical, and sustainable way. Providing adequate technological skills should therefore also be part of education (Bergeson & Beschorner, 2020). Teacher education must be at the forefront of educational and pedagogical innovation, and thus be able to agilely strengthen the role of media education in education programs, including through a strong research base on the topic. Education that promotes and provides skills for the future requires vigilance in studying, interpreting, and becoming aware of contemporary phenomena.

Conclusion

Media education is a world of possibilities, it can open a pedagogical environment for teachers where children and young people's media skills and media worlds are combined with the learning objectives of media education and disciplines. This study examined what new literacies can be found in the opinion writings of student teachers in relation to media literacy. The study explored how student teachers identify new literacies as part of media education and how these new literacies are reflected in their opinion writings.

Teacher education plays an essential role in how the visions of Finland as the most multi literate and flexible learning model country in the world (Finnish National Agency for Education, 2021; Salomaa & Palsa, 2019; Digivisio, 2021) can become reality. The basis for a literate lifestyle is created in early childhood education and care and it is strengthened and further developed in basic education through diverse pedagogical methods that strengthen the pupil's own will, choices, and positive self-concept. The opinion writing of a sixth grader (Meretniemi 2022) gets to the heart of the matter: encouraging a reading lifestyle by respecting the pupil's freedom of choice and at the same time challenging them to read.

Children and young people often act solely on their own understanding when producing and receiving informal material on social media. They are often unaware of all that they are exposing themselves to in public media. Media education is also needed to prevent the harmful consequences of digital media. Educators and researchers need to responsibly raise issues of safety, human rights, integrity, ethics, and good childhood. Research and knowledge of national and international standards and ethical guidelines are equally needed in the media age, as educators are always role models for their educates through their own actions.

Similarly, student teachers should have the skills to design student-centered teaching that promotes new literacy skills and takes learning difficulties into account (Lähdesmäki, 2021; Tarnanen et al., 2019). Through teaching, we can contribute to good literacy skills for the children and young people of the future. Everyone should have equal opportunities to progress on their chosen path, so that their own perception of literacy and their view of themselves as learners is as positive as possible. Media education for student teachers, built on new literacy skills and a diverse pedagogical mindset and community of learners, leads to sustainable professionalism and the next pedagogical awareness.

References

- Bergeson, K. & Beschorner, B. (2020). Modeling and scaffolding the technology integration planning cycle for pre-service teachers: A case study. *International Journal of Education in Mathematics, Science and Technology (IJEMST)*, 8(4), 330–341. https://doi.org/10.46328/ijemst.v8i4.1031
- Digivisio. (2021). Korkeakoulujen yhteinen digivisio. https://digivisio2030.fi
- McDougall, J., Zezulkova, M., van Driel, B. & Sternadel, D. (2018). Teaching media literacy in Europe: evidence of effective school practices in primary and secondary education. *NESET II report*. Publications Office of the European Union. https://doi.org./10.2766/613204
- Erwin, K., & Mohammed, S. (2022). Digital literacy skills instruction and increased skills proficiency. International Journal of Technology in Education and Science (IJTES), 6(2), 323-332. DOI: https://doi.org/10.46328/ijtes.364
- European Commission (2007). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A European approach to media literacy in the digital environment, COM 833 final. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52007DC0833&from=el. Read 1.2.2022.
- Finnish National Agency for Education. (2014). *National Core Curriculum of Basic Education*. Määräykset ja ohjeet 2014: 96.
- Finnish National Agency for Education. (2018). *National Core Curriculum of Early Childhood Education and Care*. Määräykset ja ohjeet 2018:17.
- Finnish National Agency for Education. (2021). Kansallinen lukutaitostrategia 2030: Suomi maailman monilukutaitoisin maa. [National Literacy Strategy 2030: Finland is the most literate country in the world.]
 Opetushallitus, Lukuliike 2021. https://www.oph.fi/sites/default/files/documents/Kansallinen_lukutaitostrategia_2030.pdf
- Frau-Meigs, D., O'Neill, B., Soriani, A. & Tomé, V. (2017). *Digital Citizenship Education. Volume 1: Overview and new perspectives.* Strasbourg: Council of Europe.
- Heikkinen, H.L.T. (2018). Kerronnallinen tutkimus. In R. Valli (Ed.) *Ikkunoita tutkimusmetodeihin 2. Näkökulmia* aloittelevalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin (pp. 170–187). PSkustannus.
- Hobbs, R. (2010). Digital and Media Literacy: A Plan of Action. The Aspen Institute.
- Hänninen V. (2018). Narratiivisen tutkimuksen käytäntöjä. In R. Valli (Ed.) Ikkunoita tutkimusmetodeihin 2. Näkökulmia aloittelevalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin (pp. 188–208). PS-kustannus.
- Hyvärinen, S., Sahito, Z., Uusiautti, S., & Määttä, K. (2022). The teacher's Educational Psychological Game Sense (EPGS) as the foundation of a student's positive self-conception. *International Journal of Research in Education and Science (IJRES)*, 8(1), 50–69. DOI: https://doi.org/10.46328/ijres.2576
- Kalantzis, M. & Cope, B. (2012). Literacies. Cambridge University Press.
- Kallionpää, O. (2014). Mitä on uusi kirjoittaminen? Uusien mediakirjoitustaitojen merkitys. *Media ja viestintä*, *37*(4), 60–78. https://doi.org/10.23983/mv.62840

Knobel, M. & Lankshear, C. (2007). A new literacies sampler. Peter Lang.

- Kulju, P., Kupiainen, R. & Pienimäki, M. (2020). Raportti luokanopettajien käsityksistä monilukutaidosta 2019.
 Kansallisen audiovisuaalisen instituutin julkaisuja 2/2020. https://urn.fi/URN:ISBN:978-952-03-1762 1. Read 12.1.2022.
- Kupari, P., Välijärvi, J., Andersson, L., Arffman, I., Nissinen. K., Puhakka, E. & Vettenranta, J. (2013). *Pisa12* ensituloksia. Opetus- ja kulttuuriministeriön julkaisuja 2013:20. http://urn.fi/URN:ISBN:978-952-263-241-8. Read 12.1.2022.
- Kupiainen, R. (2017). Lukutaidon jälkeen? In V. Korhonen, J. Annala & P. Kulju (Eds.) Kehittämisen palata, yhteisöjen salat. Näkökulmia koulutukseen ja kasvatukseen (pp. 205–218). Tampere University Press. https://library.oapen.org/handle/20.500.12657/31206. Read 13.2.2022.
- Lankshear, C. & Knobel, M. (2011). *New Literacies: Everyday Practices and Social Learning*. McGraw-Hill/Open University Press.
- Lampinen, J. & Juntunen, M. (2013). *Oppijat-hankkeen tuotos. Informaali oppiminen*. Peda.net. https://peda.net/hankkeet/oppijat/ovo/lahtokohdat/informaali. Read 12.2.2022.
- Lehti, L., Peltonen, P, Routarinne, S., Vaakanainen, V. & Virsu, V. (2018). Uusia lukutaitoja rakentamassa: lukutaidon moninaiset merkitykset ja tutkimusmenetelmät. In L. Lehti, P. Peltonen, S. Routarinne, V. Vaakanainen & V. Virsu (Eds.), Uusia lukutaitoja rakentamassa – Building new literacies. AFinLAn vuosikirja 2018 (pp. 6–21). Suomen soveltavan kielitieteen yhdistyksen julkaisuja n:o 76. Jyväskylä. https://doi.org/10.30661/afinlavk.74256. Read 13.2.2022.
- Leino, K., Ahonen, A. K., Hienonen, N., Hiltunen, J., Lintuvuori, M., Lähteinen, S., Lämsä, J., Nissinen, K., Nissinen, V., Puhakka, E., Pulkkinen, J., Rautopuro, J., Sirén, M., Vainikainen, M-P., & Vettenranta, J. (2019). *PISA 18 ensituloksia: Suomi parhaiden joukossa*. (Opetus- ja kulttuuriministeriön julkaisuja; No. 2019:40). Opetus- ja kulttuuriministeriö. http://urn.fi/URN:ISBN:978-952-263-678-2. Read 24.2.2022.
- Lerkkanen, M.-K. (2018). The Influence of Instructional Practices on Reading Motivation in Finland. In P. O. García, & P. B. Lind (Eds.), *Reading Achievement and Motivation in Boys and Girls: Field Studies and Methodological Approaches* (pp. 65–78). Springer. Literacy Studies, 15. https://doi.org/10.1007/978-3-319-75948-7_4
- Lähdesmäki, S. (2021). Ilmiölähtöisen oppimiskokonaisuuden suunnitteluun ohjaavan mallin kehittäminen ILOsuunnitteluprosessin malliksi opettajaopiskelijoiden opetus- harjoittelussa [Developing a model to guide the design of an experiential learning package as a model for the ILO design process in student teachers' teaching practice]. Dissertation,:Jyväskylä university. http://urn.fi/URN:ISBN:978-951-39-8562-2
- Meretniemi. T. (2022). *Ketään ei pitäisi pakottaa lukemaan*. Helsingin Sanomat 23.1.2022. Mielipidekirjoitus. https://www.hs.fi/mielipide/art-2000008557010.html?share=29fe256f40446af8c5967d5a7e96e818. Read 23.1.2022.
- Merisuo-Storm, T. & Aerila, J-A. (2018). Boys' and Girls' Reading Skills and Attitudes During the First Six School Years. In P. O. García, & P. B. Lind (Eds.), *Reading Achievement and Motivation in Boys and Girls: Field Studies and Methodological Approaches* (pp. 65–78). Springer. Literacy Studies. DOI: 10.1007/978-3-319-75948-7_9
- Mutta, M., Lintunen, P. & Pelttari, S. (2017). Kielitaito ja informaalin oppimisen konteksti: kielten opiskelijoiden

ja yhteiskuntatieteilijöiden käsityksiä kielitaidosta ja teknologioiden hyödyntämisestä oppimisen tukena. In S. Latomaa, E. Luukka & N. Lilja (Eds.), *Kielitietoisuus eriarvoistuvassa yhteiskunnassa – Language awerness in an increasingly unequal society*. AFinLAn vuosikirja 2017 (pp. 181–200). Suomen soveltava kielitieteen yhdistyksen julkaisuja n:o 75. https://journal.fi/afinlavk/article/view/60777. Read 6.2.2022.

- Niemi, H., Erma, T., Lipponen, L., Pietilä, M., Rintala, R., Ruokamo, H., Saarivirta, T., Moitus, S., Frisk, T., Stylman, V. & Huhtanen, M. (2018). *Maailman parhaiksi opettajiksi. Vuosina 2016–2018 toimineen Opettajankoulutusfoorumin arvioiti.* Kansallinen koulutuskeskuksen arviointi Julkaisut 27:2018. http://hdl.handle.net/10138/278421. Read 12.2.2022
- Ng, C. (2020). What kind of students persist in science learning in the face of academic challenges? Journal of Research in Science Teaching, First published: 25 August 2020, https://doi.org/10.1002/tea.21652
- 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). pp. 101–119. https://doi.org/10.7577/seminar.2354.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. 3rd edition. Thousand Oaks: Sage.
- Pekkala, L. (2016). Monimuotoisen mediakasvatuksen rajapinnoilla. In L. Pekkala, S. Salomaa & S. Spišák (Eds.), Monimuotoinen mediakasvatus (pp. 8–17). Kansallisen audiovisuaalisen instituutin julkaisuja, 1/2016. https://www.mediataitokoulu.fi/monimuotoinen_mediakasvatus.pdf. Read 1.1.2022.
- Perälä, M., Torppa, M. & Eklund, K. (2018). Lukivaikeuden kehitykselliset alaryhmät ja niiden vertailu kognitiivisissa taidoissa sekä toimintatavoissa. Oppimisen ja oppimisvaikeuksien erityislehti: NMIbulletin, 28(4), 17–33. http://urn.fi/URN:NBN:fi:jyu-201908143823. Read 3.2.2022.
- Ruokamo, H., Kotilainen, S. & Kupiainen, R. (2015). Mediakasvatusta nyt ja tulevaisuudessa. In L. Pekkala, S. Salomaa & S. Spišák (Eds.), *Monimuotoinen mediakasvatus* (pp. 8–35). Kansallisen audiovisuaalisen instituutin julkaisuja, 1/2016. https://www.mediataitokoulu.fi/monimuotoinen_mediakasvatus.pdf. Read 5.2.2022.
- Ryan, R. M. & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61. https://doi.org/10.1016/j.cedpsych.2020.101860
- Salomaa, S. & Palsa, L. (2019). Mediakasvatus Suomessa. Kansalliset mediakasvatuslinjaukset. Opetus- ja kulttuuriministeriön julkaisuja 2019:37. https://medialukutaitosuomessa.fi/mediakasvatuslinjaukset.pdf. Read 24.2.2022.
- Tarnanen, M. J., Kaukonen, V., Kostiainen, E. & Toikka, T. (2019). Mitä opin? Monilukutaitoa ja tutkivaa oppimista monialaisessa oppimiskokonaisuudessa. Ainedidaktiikka, 3(2), 24–46. https://doi.org/10.23988/ad.81941
- Tosun, N. & Akcay, H. (2022). Cyberbullying/cyber-victimization status, cyberbullying awareness, and combat strategies of administrators and teachers of pre-school education institutions. *International Journal of Technology in Education and Science (IJTES)*, 6(1), 44–73. https://doi.org/10.46328/ijtes.336
- Vanttaja, M., Järvinen, T. & Norvanto, T. (2017). Mediakulttuuri, koulu ja moraalinen säätely Opettaja-lehdessä 2000-luvulla. *Kasvatus & Aika 11*(2). https://journal.fi/kasvatusjaaika/article/view/68713. Read.

12.12.2021.

Vettenranta, J., Puhakka, E., Rautopuro, J., Vainikainen, M-P., Välijärvi, J., Ahonen, A., Hautamäki, J., Hiltunen, J., Leino, K., Lähteinen, S., Nissinen, K. & Nissinen, V. (2016). *PISA 2015 ensituloksia. Huipulla pudotuksesta huolimatta*. (Opetus- ja kulttuuriministeriön julkaisuja; No. 2016:41). http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/79052/okm41.pdf. Read 30.1.2022.

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