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The development of children's language and ethical media competences and media skills

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The children's developing media competences and media skills are evaluated in this article on the basis of the evaluation indicator developed by Hautaviita (2012). The indicator has been developed for measuring the 6–9-year-old children's (the preschoolers and the pupils in grades 1-2) media competences. In it, the children's developing media skills are divided into practical, social, language and ethical media competences, of which this article concentrates on the last two, language and ethical media competences. The research material has been collected by observing sixteen Finnish children closely for a year. In this article, we aim to describe the development of these media competences and how they can be influenced. It provides a wider opportunity to utilize the information effectively in the learning.

Abstract: Time used by the children as well as the adults on television, computers, iPads and similar tablet computers increases all the time. They already take a significant part of the day. It creates possibilities, among others, for the development in skills in learning other languages, but at the same time it challenges the school to operate in an ethically responsible way, and to ensure the children's safe development. Media skills are civics needed in the society and which the school can and needs to have an effect on.

The Finnish school system has proved to be one of the best in the world. This is seen, among others, in the Pisa surveys. The level of information technology equipment in Finnish schools is of a high standard. However, utilising these devices and carrying out of the media education vary, depending on the teacher and on their own level of skills. It would be important to teach the children to use the media correctly and with versatility. In Finland the new curriculum (2016) is being completed, in which information and communication technology skills have been raised as one area of the cross-curricular skills.

In the new curriculum the perspective of the teaching use of information and communication technology is dealt with as a part of the operational culture of the school and the description of the learning environments and approaches, in the definition of the teaching which utilises distance learning connections and as an important tool in the cooperation of home and school and in other cooperation practised by the school. Teachers need further training to respond to developing the teaching and evaluation of the media skills needed in the modern society. (The national core curriculum 2016.)

The children's developing media competences and media skills are evaluated in this article on the basis of the evaluation indicator developed by Hautaviita (2012). The indicator has been developed for measuring the 6–9-year-old children's (the preschoolers and the pupils in grades 1-2) media competences. In it, the children's developing media skills are divided into practical, social, language and ethical media competences, of which this article concentrates on the last two, language and ethical media competences. The research material has been collected by observing sixteen Finnish children closely for a year. In this article, we aim to describe the development of these media competences and how they can be influenced. It provides a wider opportunity to utilize the information effectively in the learning.

Introduction

Media skills, which are the command of the technical skills of the media and the knowledge of its background structures as well as critical and active media use, are connected to the media competences. Media skills are not a quality one is born with but they are possible to learn and to teach. (See Tella, Vahtivuori, Vuorento, Wager & Oksanen 2001.) Media skills refer also to a generally selective and reasonable but active use. It is important to think about the interests of the sender of the message, to react with critical evaluation to the contents and to understand one's own reactions.

In the recommendations on the teaching use of the social media by the Finnish National Board of Education (2012), the educational task of the school is emphasised, the task in which developing the pupils skills and the way they use the social media to be safe, responsible and ethically sustainable are highlighted. All the pupils should be provided with equal possibilities to learn to utilise social media as a part of the media skills (=a synonym for media competence) and to understand the role of the social media in the society. (The Finnish National Board of Education 2012, 1.) Here the responsibility of the school is large because the opportunities of the pupils who come from different economical and social backgrounds are not alike.

Media education is an operation, which aims to develop media literacy skills. In it, it is seen that a child has four different roles as a learner of media skills. First of all, the child is a user who enjoys, experiences, consumes, interprets and plays. Secondly, the child is an expresser who draws, depicts, presents and writes. Furthermore, the child is a participant who operates and influences. And what is important: the child is the person in need of media protection. The adult's task is to protect the children from unfavourable environments by creating a kind of environment where the children can enjoy media safely and can share their media experiences. (Tamminen 2001; Kemppinen 2001; Koivusalo-Kuusivaara 2007; Suoninen 2004; Kotilainen 2001; Mustonen 2002; Kupiainen 2005; Wartella, O' Keefe & Scantlin 2000; Wright 2001; Heim, Brandtzaeg, Herzberg-Kaare, Endestand & Torgersen 2007.)

Media education can be examined in relation to the development of the social and cognitive skills and the emotional development of the child. Computer based, digital and interactive media offers versatile social arenas

for the meeting of people. (Mustonen 2002, 59.) In the study of Hautaviita (2012), which was placed in school, the objective was to help and to support the children together with the adult in a safe environment when the objective of their learning was to understand and to choose Internet publications suitable to them. The younger the children are in question, the more concrete learning material and feedback on their own learning they need when learning different things. The concreteness is in connection also with how the teacher can support the learning of the child in a child-centered way, from the own points of view of the learning of the child. When working on the computer, at the first stage it is perhaps difficult for the child to understand, for example, the concept of the Internet, which is an abstract matter to understand in the child's mind, because it does not "really", exist. With small children the need for concreteness in computer work is clarified when the child, for example, gets the drawing they have made with a computer programme as a real printout on paper.

The concept of multimodality is connected to the children's literacy. It means the use of different media elements, such as writing and drawings in the same text. Multimodality is natural in the media environments where the audio, image, writing and graphics occur simultaneously. In the everyday life of the kindergarten and the school the multimodal texts are more and more a part of the children's everyday life. In a good multimodal text the child translates general information into more ordinary, more familiar and more meaningful information. In a text that is multimodal from the literacy perspective, a number of reading practices of the school (written text) and the number of practices of home and media culture (images and drawing) are combined. Furthermore, it is a question of the interaction between the places of reading, home and the school. (Kupiainen 2005, 20–21.) Already, under school age children can be very critical and selective media users who may have very clear ideas, for instance, of what kind of content and means of expressions they expect and require from the media used by them. For the youngest children, different technical and cognitive skills as well as the ability to distinguish media reality and real reality from each other appear as the most important media literacy and interpretation skills. With the age and the development of user experiences, the critical attitude towards the media contents and towards the ways of action of the media is still emphasised in the media uses of the children and adolescents. (Suoninen 2004 49–50.)

Potter brings out the concept of the cognitive media literacy skills, according to which data structures are central: media contents, media industry, the effects of media, information about the reality and the observing self. The individuals are able to develop their knowledge structures better, the better the information they have in these areas. In the media literacy skills model the cognitive skills of processing the information are emphasised. They are learned already during childhood as the basic skills of listening, speaking, reading, writing and observing. The data of the senses is organised to be meaningful observations through the development of cognitive structures. (Potter 2001, 4, 118.)

The level of the media user's (a child, a young person or adult) media language skills (a synonym for media literacy) can vary very much. Still, aspects of all the eight areas of media language skills can be found in the already very young children's media language skills. For children and young people the level of the media language skills depends on the children's age and their user experiences, which are related to different media and on the media education received by them. With the help of the media education the children's skills in manipulating media are developed. In preschool education and elementary instruction the objectives of learning that could be supported by the possibilities of teaching the use of information and communication technology could be actively looked for. The information technology should be possible to adapt so that it would best support the children's deeper understanding of the learned phenomena, the children's mutual cooperation as well as the development of children's skills of thinking, learning and investigating. (Hautaviita 2012; Lahikainen etc. 2005, 210.)

Evaluation and measurement of children's media skills

In the action research by Hautaviita (2012) the 6-9 year-old children practised media literacy and their media skills systematically. For the evaluation of their media competences Hautaviita developed their own evaluation scale, which is utilised in this study. The areas of evaluated contents are divided as follows: practical, social, language and ethical media competences. In this article we concentrate on the language and ethical media competences. The language media competence includes the letter and word recognition, ability to read, interest in reading, interest in writing (by hand and by keyboard), ability for interactive discussion, story crafting and the directing of their own work with the help of speech (an egocentric speech). The ethical media competences in-

clude motivation, identifying own feelings and those of others, self-expression, dealing with disappointments without harming oneself, others or the environment, trusting one's own skills, satisfaction with oneself and the ability to follow rules.

Language media competences and media skills Nine of the children got a result that reaches above the average in their language media competences. This group includes more than half of the first and second grade pupils. In the following Fig 1 the development of the children's language media competences and the levels achieved by them in each contents are presented.

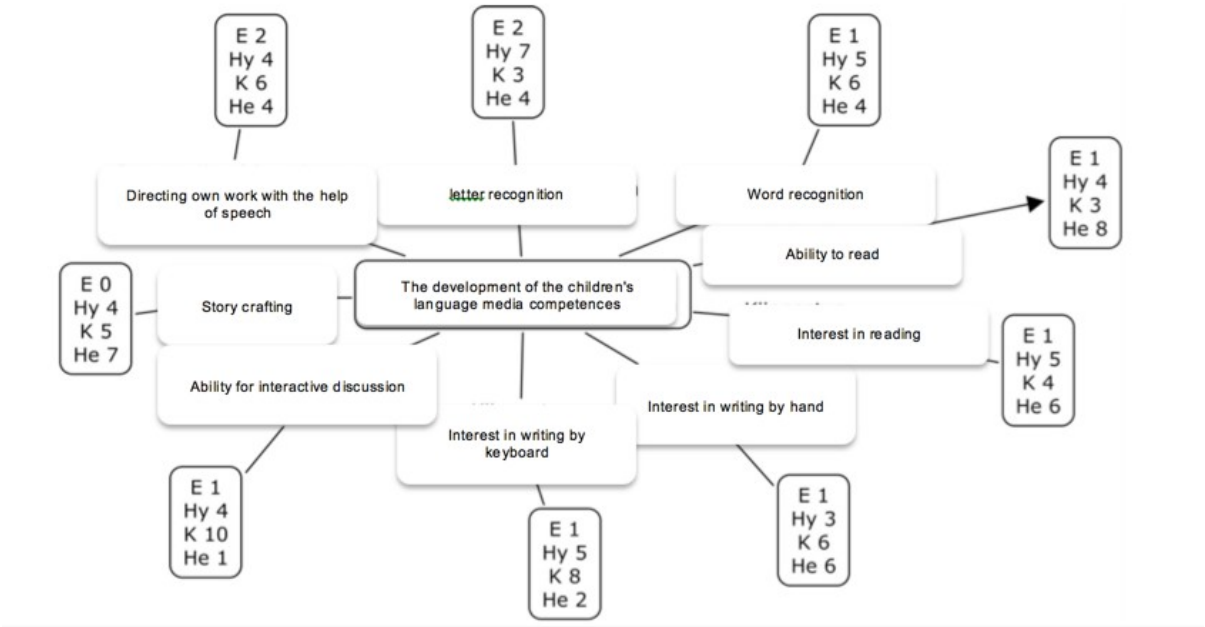

Figure 1. Development of the children's language media competences and levels achieved by them in each content.

Story crafting, ability for interactive discussion, interest in writing by hand, interest in reading and the ability to read remained at a weak level for most of the children. Seven children out of sixteen reached the good level in the area of letter recognition.

Ethical media competences The ethical media competences include motivation, identifying own feelings and those of others, self-expression, dealing with disappointments without harming oneself, others or the environment, trusting one's own skills, satisfaction with oneself and the ability to follow rules.

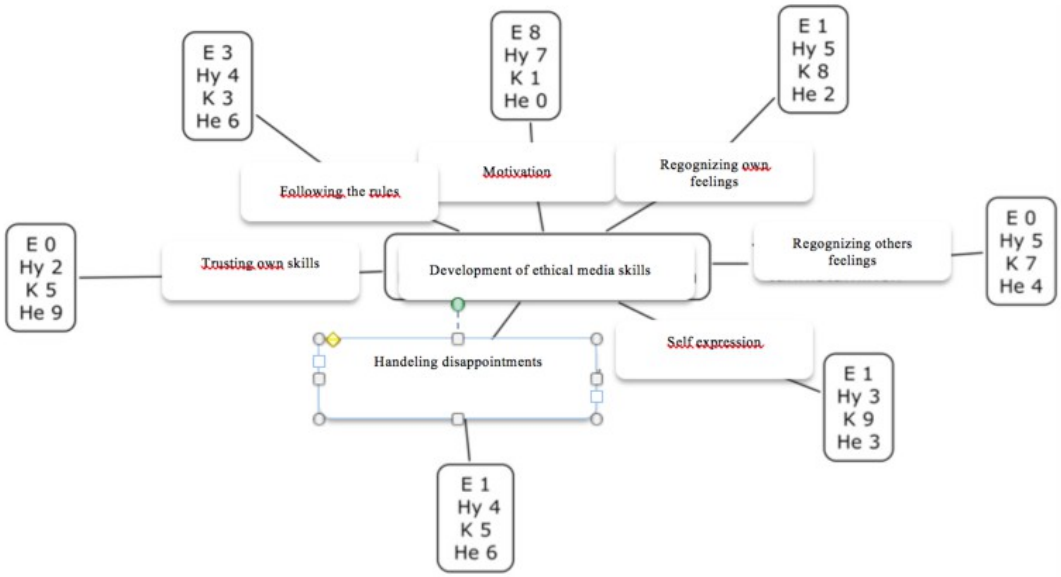

Figure 2. Development of the children's ethical media competences and levels achieved by them in each content.

Five of the sixteen children who participated in the study experiment reached the average level or above in ethical media competences (Fig 2). Out of the contents of ethical media competences, motivation rose above the others in the results, as it reached an excellent level for eight of the sixteen children. Weaknesses were found the most in the following contents of ethical media competences: following the rules, trusting one's own skills, and dealing with disappointments.

During the study and at its final stage the children also brought out their own wishes in connection with working on the computers. Playing games is the fulfilment of the majority's wishes. Experiencing having fun is connected to playing games. A few children experienced as important also the fact that with the help of using computers one could become a better learner, among others, in reading, writing and mathematics.

The study task was to clarify how the child's cognitive and social media competences appear and develop towards the media skills? Each one of the children proceeded at their own personal level in all their development and their learning. Each child had their own divergent competences to adopt and to learn different matters. Children's practical and social media competences were at their own budding level. The level of each child's media competences was analysed using the evaluation scale of the media competences.

The children's personal experiences and the level of development of the moment had an effect on how each child's media competences developed towards the media skills. A little under half of the children exceed the average of the indicator that has been used in measuring media competences. The experiences and ideas received by the children as well as their own level of development of the moment seem to be more significant for the development of the children's media competence. Media virtuosos are found in every grade. The more the children had either earlier personal experiences of using the computer or the more experiences they got during this research experiment, the more skilled they were in their media competences. It would be interesting to find out in the future if the literacy skills of the child are connected to the development of media skills, it is likely that they have a big significance especially to the language media competences but they can also have significance to the ethical media competences through comprehension in reading. (Cf. Tamminen 2001; Kemppinen 2001; Kotilainen 1999; 2001; Heim ym. 2007; Herkman 2007; Martsola & Mäkelä-Rönnholm 2006; Kupiainen 2005; 2007; Suoranta & Ylä-Kotola 2000.)

The boys are usually interested in the interactive media technology at an earlier stage than the girls. This has led, among others, to the fact that nowadays in Finland the boys are ahead of the girls in their English skills, even though the girls otherwise succeed better at school. According to the study, the boys have more televisions, computers and game devices which aid developing language skills, than the girls. The girls use music devices

and dance mats. (Luukka, Hujanen, Lokka, Modinos, Pietikäinen & Suoninen 2001; Marsh, Brooks, Hughes, Ritchie, Roberts & Wright 2005, 20; d'Haenens 2001.) The differences between the media preferences and the gender are more obvious in older age groups; the game consoles are popular with the boys and the portable music devices are popular with the girls. Among 14-year-old children, 80% of the boys and 56% of the girls have computers. Among 8-10 year-old children, the boys have more computers in their own rooms than the girls, the difference is more than 10 % (Suoranta, Lehtimäki & Hakulinen 2001; Suoranta & Lehtimäki 2004.) Nearly 40% of the children have a television and 26% have a computer in their own room, the boys have considerably more computers (12 % more) and the televisions (17 % more) in their rooms than the girls. (Lehtimäki & Suoranta 2005, 193.)

Conclusions

The implementation of media education should be developed as a part of teaching information and communication technology. By implementing media education, the pupils' media literacy skills can be developed. It includes the control of tools and learning to use them, the analysis and critical evaluation of media presentations and production of their own media presentations. Along with media education, attention needs to be paid to the challenges created by the social media during the children's leisure and school time. According to Wuorisalo (2010), the comprehensive introduction of social media promotes the adoption of the civics of the information society in the teaching in an inspiring way. The utilisation of social media as a learning environment diversifies cooperation, facilitates the sharing of information, makes concrete the learner-centred approach and deepens learning experiences. (Wuorisalo 2010, 92, 94.) Social media is a part of the children's everyday life at leisure, so it is only a question of bringing the leisure and the school closer to one another. When the subjects of interest for learning are brought from the pupils' own world of experience, learning results improve at the same time.

Attention has to be paid to the challenges of the changing media world in teaching children of various ages. The media worlds of the Finnish children and adolescents can be crystallised in the following key points. The social media is not new but the following step of the development of the Internet. Working together, the active communication, participation and grouping are emphasised in it. Other media are also consumed increasingly on the Internet. The adults' behaviour is much determined by the general discussion, which is presented regarding the media, children and raising them. Parents are uncertain partly because of the lack of information but also because there doesn't seem to be one absolute truth connected to the phenomena. If the adults do not take the role of an active participant in the media culture of the children and adolescents, the child will be left with the power of the use and control of the media. The media is used at the same time, side by side or in layers. Simultaneously doing many things, being in several communities or on discussion channels and the merging of leisure and school time offer new challenges to the education and teaching. The digitalisation of media culture makes possible the more fluent creation and operation of networks and of small groups. An individual human being or a small group can influence relatively widely in the net through their opinions and thoughts. The adult culture does not have a similar authoritative position any more. (Kangas etc. 2008, 15.) However, the parents and the teachers still have to be that reliable adult the child can lean to, therefore it is important that the adults know what the children do in social media and where they are in there. The adults create the limits, because the social media does not. So the responsibility for the children's safety lies with the adults.

According to Van Scoter, Ellis and Railsback (2001, 5) the technology (for example the use of a computer or camera) supports and encourages the development and learning of preschool and elementary age children. In the teaching of the small children, the use of technology has to be based on the careful prior planning in which attention is generally paid to the level of development of the children of this age and to the demands of the childhood. Van Scoter, among others, (2001, 6) emphasises that the new interactive technologies are facilitating the creation of such a learning environments where learning by doing is possible. Furthermore, they see that the technology helps people to see and to perceive better concepts that are difficult to understand. The developmentally suitable use of technology means that the children can create and invent. They can, for example, compose and record music on the computer or draw mathematical figures with a writing or drawing programme on the display. Van Scoter, among others, (2001, 14–15) emphasises paying attention to the child's age and the level of development when the teaching use of the computer is planned. From the curriculum perspective, it is important to pay attention to the individual child's age, their level of development at that moment and their way of learning as well as to think about how the child benefits from the planned operation with the technology emphasis.

Suoranta (2003, 13) states that in addition to the traditional manual skills, which are practised at school, the media cultural skills seem to form as key skills. Suoranta states that media culture is also a central operational environment for the children and young people. When a media environment which is suitable for the their own age level and level of development is created for small children, the children's media growth is possible. The target-oriented media education must be begun at a young age, in which case the practising of media skills happens in small steps whilst paying attention to the children's level of development and the set objectives. Media education for the young children needs to be functional and safe with an adult present. The key is the process created among children, peer learning and own media production. (Niinistö & Ruhala 2007, 133; Herkman 2007; Kotilainen 1999; Hsi 2007; Martsola & Mäkelä-Rönnholm 2006; Niinistö etc. 2006; Suoninen 2004; Koivusalo-Kuusivaara 2007.)

The solid base for the children's media skills develops when piloted by safe human relations. The good child-parent relationships, other adults sharing their life experience and their observations with the child as well as the important, same-age friends are seen as significant in the background. As Greenfield and Zheng (2006) have brought out, the warm and communicating relationship between a child and a parent is one of the most important methods when navigating even among the most challenging materials of the media world. When the basic structures of the child's life are in order, also then the knowledge and skills of the media education will also sink into the favourable soil. (Salokoski & Mustonen 2007, 121). In media education the objective is a balanced media relationship in which physical, comprehensive and social, in other words focal relationships, which help to build the life's significance and to open the world, are brought to the media relationships. Human being needs new forms of experience which help in finding meaningfulness in the world saturated by technology and media. Kupiainen (2005) emphasises that the world seen through the media is different to the one with so-called naked eyes because every technology always changes our experience of the world. He adds that the world is ”homely” only when we can motivate its visuality from our own starting points. (Kupiainen 2005 ,147–148.)

There is only a little research information, which is related to the media education. In Finland, the Mediamuffinssi-project of the Ministry of Education is internationally a trendsetter in the promotion of the small children's media education. The best practices of the media education, which are carried out in different parts of the world, are missing. There are a lot of unutilised opportunities for supporting the children's development and learning in the world of media education. (Salokoski & Mustonen 2007, 9–10.) Plenty of research which is related to the media education is conducted in the Finnish universities and higher education, however, it is scattered and uncoordinated. The media education research is not practised as an independent area of research but in connection with different sciences, for example, communication and pedagogy. However, the media education and learning material, which is related to it, are almost completely missing from the schools. The study of Hautaviita (2012) is a model of a functioning practice in evaluation of media education and media competences in preschool education and elementary instruction. (Salokoski & Mustonen 2007; Kotilainen 1999; 2001; Koivusalo-Kuusivaara 2007; Angeli 2004; Kiridis, Tsakiridou, Kaskalis & Golia 2004; Laffey 2004; Tsitouridou & Vryzas 2001; Yelland, Grieshaber & Stokes 2000; McCarrick ja Le 2007; Prensky 2010.)

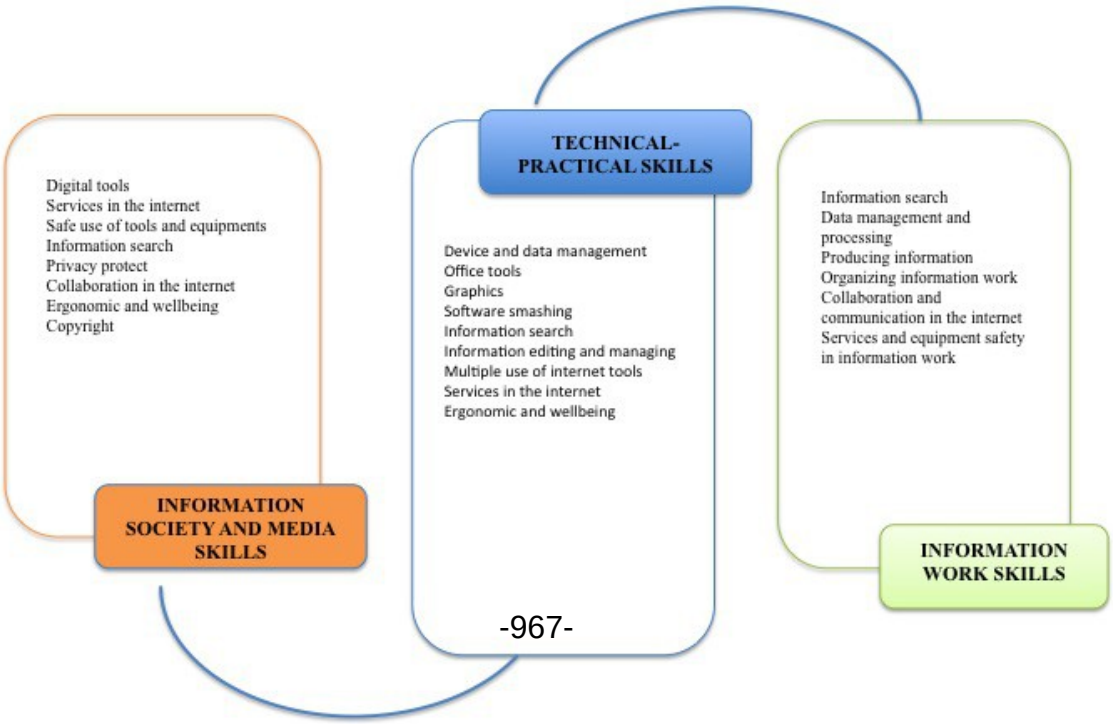

Figure 3. The areas included in the evaluation tool for the skills (Tieke ry. 2013)

The media skills, needed in the information society, can be evaluated with the help of the tool, the evaluation of the skills that has been presented above. In the above figure the skills are divided into the media skills needed in the information society, to technical and practical skills and skills needed in the information work. If the learning of the contents in this model succeeded in practice already from the beginning of elementary school, all the pupils would get equal starting points for the study of their media skills.

The children accept the control of their media use. Considerable differences are seen in the media relations of the girls and boys. The boys play and use the Internet and read more comics. The girls read more books than the boys. The gender differences are also seen in the possession of media devices and in the media education of families. Boys more often had media devices that were meant especially for playing games. The children have very different ways of using media. Systematic and comprehensive implementation of media education is needed in schools. Thus the children could have more equal opportunities to use their media skills in the media learning environments. Media contents need to be integrated in the different subjects taught.

The responsibility in guiding and educating the children to be the members of the media society lies with the parents as well as the teachers. The education partnership should be utilised also in educating in the media skills. According to Suoninen (2012 ,174), the different generations are not necessarily interested in the same content but the interest of the parents in their own children's media favourites can also be considered to be part of the parental responsibility. Shared media sessions and discussions support the development of the children's media skills and create safety.

At schools, information technology can be used to prevent social exclusion and to secure equal learning opportunities for the citizens. If the children were provided with versatile experiences in connection with the media education in the comprehensive school, the pupils would have good media skills and competences for managing also in social media. The pupils have to know how to behave in an ethically acceptable way in a social media and they have to be able to manage safely, also psychologically. The child has to know how to choose contents from the media that are suitable for their own world and age. Growing as the member of the information society indeed contains studying the media skills. Media skills are one of the modern human's civics.

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