

# Media Education at the Top



# Media Education at the Top

Edited by

Heli Ruokamo and Marjaana Kangas

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# TABLE OF CONTENTS

List of Figures.....	vii
List of Tables.....	ix
Contributors.....	xi
Introduction .....	xvii
Heli Ruokamo and Marjaana Kangas	
Chapter 1 .....	1
A Media Diet Today: A Framework and Tool to Question Media Uses	
Alessandra Carenzio, Simone Ferrari and Pier Cesare Rivoltella	
Chapter 2 .....	15
Self-Assessment Tools for Managing Digitalisation at School—	
Opeka, Oppika and Ropeka (OOR)	
Erika Tanhua-Piiroinen and Jarmo Viteli	
Chapter 3 .....	31
Minors and Artificial Intelligence—Issues Raised by Children and Parents	
Jussi Okkonen and Sirkku Kotilainen	
Chapter 4 .....	41
Transmedia Literacy and Informal Learning Strategies among Finnish	
Teens	
Raine Koskimaa and Tero Kerttula	
Chapter 5 .....	59
Video Triggers in Promoting Knowledge-Seeking Questions in Inquiry	
Learning	
Miikka Eriksson, Henriikka Vartiainen, Petteri Vanninen, Saara Nissinen,	
Teemu Valtonen and Sinikka Pöllänen	

Chapter 6 .....	73
“Triggering De-Learning”: Towards a Video-Centred Pedagogy of Difference Camilla Haavisto	
Chapter 7 .....	87
Designing Affordances for Peer Learning via Online Learning Environments Katri Aaltonen and Päivi Aarreniemi-Jokipelto	
Chapter 8 .....	103
The Short-Term Pedagogical Reception of the Educational Film: <i>Discovering the Core of Vocational Pedagogy</i> Tiiu Tenno and Asko Karjalainen	
Chapter 9 .....	119
The Motives and Needs of Professionals and Peer Tutors when Working as Digital Skills Trainers for Older Adults Kwok Ng, Kaisa Pihlainen and Eija Kärnä	

## LIST OF FIGURES

- Fig. 1-1:** Media uses among young children according to parents.
- Fig. 1-2:** Media uses among children (aged 8-10).
- Fig. 1-3:** Media uses among tweens (aged 11-13).
- Fig. 1-4:** Media uses among adolescents (aged 14-18).
- Fig. 2-1:** OOR-services scaffolding self-reflection in schools according to Kolb's (1984) learning cycle (Sairanen et al. 2013).
- Fig. 2-2:** One example of Opeka's rubric questions: "Guiding students in digital learning environments".
- Fig. 2-3:** All Ropeka's subsections start with one rubric question. This example is from the first subsection, "Strategy". The coloured bar under the question shows how others have answered this question. This is shown to the respondent when he or she has answered the question.
- Fig. 2-4:** Oppika's main page and the starting point for students. The login page for teachers, principals and other staff is available behind the "Teacher" link.
- Fig. 2-5:** Improvements in teachers' assessments of their ICT competence from 2016 to 2018.
- Fig. 7-1:** The theoretical framework of the research.
- Fig. 7-2:** The cyclic process model of the design-based research.
- Fig. 8-1:** The three-act plot structure of *DCVP*.
- Fig. 8-2:** The IEC model in the educational film *DCVP*.
- Fig. 8-3:** A multi-layered metaphorical structure, in which a visual representation of the "peak" complements the verbal message (screenshot from *DCVP*).
- Fig. 8-4:** The short-term reception of the film: the structure and quantity of the concepts and meanings.
- Fig. 9-1:** Schema of the social interaction between learners, professionals and volunteers in the context of the digital skills development of older adults.





## LIST OF TABLES

- Table 2-1:** The example surveys using the OOR questionnaires.
- Table 4-1:** Five most significant tendencies.
- Table 4-2:** Informal learning strategies employed by Finnish teens.
- Table 4-3:** Productive skills.
- Table 4-4:** Narrative and aesthetic skills.
- Table 4-5:** Social management skills.
- Table 4-6:** Risk prevention skills.
- Table 5-1:** Number of small groups and the settings used.
- Table 5-2:** The number and percentage of questions created by each student group in both question categories.
- Table 5-3:** The number and percentage of questions created by those who did not watch a video and those who watched a video about the bioeconomy.
- Table 5-4:** The number and percentage of questions in each category created by student groups that watched either the video about wood processing or tourism and agroforestry and the students who did not watch a video.
- Table 6-1:** The five functions of video within applied pedagogies of difference.
- Table 9-1:** Motivation and Factor loadings. Theme 1: Previous Experiences; Theme 2: Benefit for self; Theme 3: Benefit for others.  
\*Cronbach's Alpha after removal of items 3 and 9.
- Table 9-2:** Major findings.
- Table 9-3:** Differences in motivation and training solution scores between males and females.



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**Ms Sirkku Kotilainen**, PhD is a professor of media education in the Faculty of Information Technology and Communication Sciences at Tampere University, Finland. She leads an international master's degree programme in digital literacy education and supervises PhD studies in the field of digital literacy education. Since the late 1990s, her research topics have covered media education and media literacies, including digital literacies among children and young people. Her research currently focuses on the user

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## Editors

**Heli Ruokamo**, PhD, is a full professor of education (media education) at the University of Lapland in Rovaniemi, Finland. She is a research vice dean at the Faculty of Education and a director of the Media Education Hub. Ruokamo holds the title of docent of media education at the University of Helsinki and the title of docent of network-based learning environments at the University of Turku. Ruokamo has been working for three years as a

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Dr **Marjaana Kangas** is a university lecturer in media education at the University of Lapland, Faculty of Education, and adjunct professor of playful and game-based learning at the University of Jyväskylä. She is the research coordinator at the Finnish Multidisciplinary Doctoral Training Network on Educational Sciences (FinEd). Her research has mainly focused on understanding teaching and learning processes in various learning contexts. Some examples of her research topics are the use of play, games and digital tools in 21<sup>st</sup>-century education, the agency of students and teachers, and digital media literacies and competences.



# INTRODUCTION

Media education has an important role in today's digitalised and globalised world. Scholars have realised that the rapidly changing and vulnerable world has forced us to gain a better understanding of the meaning of, opportunities in and threats posed by new media and digital technologies in education and generally in people's lives (cf. Poyntz, Frau-Meigs, Hoechsmann, Kotilainen and Pathak-Shelat 2021). Due to the global COVID-19 crisis, the meaningful and ethical use of media and digital technologies has become extremely important and the competences required should be universal civic skills and rights. Kotilainen and Pienimäki (2019), for example, emphasise the importance of practical and technical skills as well as expressive and artistic knowledge and critical awareness of mediated digital cultures. Media education has a very important role in education and, therefore, it is currently a priority.

This book brings together international and cross-disciplinary media education research (c.f. Rasi, Ruokamo and Maasilta 2017; Ruokamo, Kotilainen, Kupiainen and Maasilta 2016) and presents topical findings and educational practices from this field. The book offers a wide scope for the exploration of the role of media education from kindergarten and school level to higher education and beyond, across the lifespan. It sheds light on various literacies, such as media, digital, information, transmedia, video games, participatory culture, and web and social network literacies. Various literacies can be seen as central to living in a digitalised society. In Finland, media literacy is defined as belonging to the term, 'multiliteracy' (Kupiainen 2019). In Finnish educational contexts, the term multiliteracy is widely used and understood as a central civic skill that should be focused on in 21<sup>st</sup>-century education. As a multi-layered competence, it entails cognitive, skill-based, and affective components that include knowledge, skills, attitudes, values, and ethics (FNBE 2016). Multiliteracy is seen as the ability to understand, produce and evaluate different forms of information. However, multiliteracies are more often described as pedagogical approaches (pedagogy of multiliteracies) than as educational outcomes or abilities (Palsa and Ruokamo 2015).

Rasi, Kangas and Ruokamo (2019) presented four dimensions of multiliteracy that can be applied in education: 1) the use of diverse information sources, 2) the critical assessment of information sources and information, 3) the production, presentation and sharing of information through diverse texts, and 4) supporting the use of multiliteracy to promote good features. People should learn to critically assess sources of information in terms of the accuracy, reliability, viewpoints, motives and values behind the information, as well as in terms of copyright and issues pertaining to freedom of speech. Recent research shows that the production, presentation and sharing of information through diverse texts have largely been ignored in teaching so far, and digital texts are not systematically produced in Finnish schools (Kulju, Kupiainen and Pienimäki 2020). Supporting the use of multiliteracy to promote good entails that people learn to use digital technologies and media in versatile, responsible, safe and ethical ways for self-expression, interaction, participation and involvement in society (De Kimpe et al. 2019). Good examples of the application of multiliteracy and the tools needed for its application are needed to promote a wide range of literacies in education and in life in general.

This book provides insights into the use of various teaching and learning methods, such as computer-supported collaborative learning, peer learning and the use of ICT in everyday life. The use of various technologies, such as AI in education, is also presented. The studies presented use several quantitative and qualitative research methods, such as netnography. Research findings provide evidence of the meaning of media and digital literacy in educational institutions and beyond and suggest that the role of technology and social media in learning is evident, for example, in the development of media and digital literacies among both the young and the elderly. This book provides important insights and reflections for children, students, teachers and families who are consumers of media and suggests approaches for researchers, journalists and policymakers who are interested in researching, understanding and promoting media education in their work (cf. Rasi, Vuojärvi and Ruokamo 2019).

The first chapter deals with the media diet and presents a creative idea which is connected to current challenges in the field of media education. In this chapter, Alessandra Carenzio, Simone Ferrari and Pier Cesare Rivoltella highlight the importance of a healthy balance in media use, offering both a framework and a tool for implementing it. The concept of a media diet originated in Italy, in a small village in Tuscany, where children, teens, adolescents and families participated in a media diet experiment and each participant defined the scores and schedules for the media diet. The results

were alarming. Adolescents (14–18 years) had no specific time allocated for media use; instead, they used media everywhere and all the time. They were connected 24 hours a day, 7 days a week. This age group is critical. Families, schools and communities should encourage adolescents to have self-control and construct healthier relationships with media. A media diet should be implemented in order to lead a healthier life.

In the second chapter, Erika Tanhua-Piiroinen and Jarmo Viteli offer self-assessment tools for planning and managing digitalisation in the Finnish school system. The Opeka, Oppika and Ropeka (OOR) tools are for principals, teachers and students to use to assess school cultures and strategies, pedagogical activities, digital environments and digital competences. For example, the Opeka (Opeka.fi) tool has been used by over 50,000 teachers from 2,500 schools since 2012. The use of these tools provides important data for different stakeholders about the status of digitalisation and schools' digital profiles. Results indicated that there were no major differences between different parts of Finland, though some differences were found between municipalities, and within them, between different areas and schools. Fifty per cent of responding teachers estimated their ICT skills to be at a basic level and 20% thought that they had better than basic skills. There is still a need to improve the skills of individuals, but the percentage of people with poor ICT skills is getting smaller. According to responding principals, schools are slowly improving their digital strategies, and their commitment to digital change is getting better. The use of self-assessment tools creates the risk of overestimating or underestimating skills. Tanhua-Piiroinen and Viteli also describe the need to pursue deeper qualitative research in order to better understand the real situation. This research does not show how these results could be generalised to the entire Finnish school system or how they compare to situations in other countries.

Media and information literacies of young people (10–17 years of age) using AI-driven media is the focus of Chapter Three, which was written by Sirkku Kotilainen and Jussi Okkonen. The participants in the pilot case study presented were young people (26 pairs) and parents from Finland (9 pairs), Russia (10 pairs) and South Africa (7 pairs). Volunteers for the interviews were recruited in casual, public settings. According to the research results, unlike their parents, youngsters were not concerned about AI and algorithms. Youngsters seemed to trust AI as a helping agent; their parents did not rely so much on their children's digital skills and expressed a wish to further their education. Research highlights the importance of the integration of media and information literacies with digital and coding literacies as part of civic skills. One crucial issue to note for current and

future purposes is parents' ability to support their children in a society that is rapidly becoming digitalised. Teacher-led media education should be developed towards youth-centred media education. Scholars of media education and information technology should be involved in this process as well. The question of how we can trust AI is an important one. The future is in the hands of young people, and educational systems and policymakers play crucial roles in shaping the future.

In Chapter Four, Raine Koskimaa and Tero Kerttula discuss transmedia literacy skills among Finnish teens. The research methodology and procedure were designed and implemented in eight countries: Australia, Colombia, Finland, Italy, Portugal, Spain, the UK and Uruguay. Data was collected through questionnaires, workshops, interviews and netnography. Transmedia skills are competences related to digital interactive media production and consumption. Skills may vary from problem-solving to content production and sharing. These skills are divided into video games, participatory culture and web/social network literacies. The research identifies four main categories of transmedia skills: production skills, narrative and aesthetic skills, social management skills and risk prevention skills. The research also focuses on eight informal learning strategies: searching for information on YouTube, online forums, using search engines, Wikipedia and social media, getting information through friends and family, and trial and error. Teens of today show significant transmedia skills, which are mostly achieved through informal learning strategies. Friends and family, in particular, play an important role in information-seeking. A worry is that among the study participants, young adults (15–29 years) had the largest increase in time spent online. They used mobile devices practically all the time and everywhere.

In Chapter Five, Miikka Eriksson, Henriikka Vartiainen, Petteri Vanninen, Saara Nissinen, Teemu Valtonen and Sinikka Pöllänen discuss the way in which video triggers promote knowledge-seeking questions. Student teachers (N=126) co-designed questions about the bioeconomy in research situations in forests. One-third of the students watched the video trigger before the question generation, while two-thirds did not. Questions were analysed deductively, statistically and inductively. Surprisingly, the research results showed that the video triggers in a narrow sector of a broader concept are not useful if the goal is to enhance the production of high-quality questions. More general video triggers could be more effective in awakening students' interests and enhancing their knowledge-seeking behaviours to produce more high-quality questions for inquiry. These results indicate that learning when and how to use media to enhance learning is critical.

Chapter Six sheds light on triggering learning through the use of videos. In the chapter, Camilla Haavisto examines how videos such as documentaries, fictional films and news features can be used when learning important topics, such as migration, ethnic relations and global inequality. In this research, the goal was to develop and define conceptual tools by integrating video pedagogy and Freirean critical pedagogy to find ways to use digital technology to enhance transformative learning. Nine experienced educators and faculty members participated in the study. Six participants were from Finnish universities, two were from universities in other Northern European countries, and one was from a university in the US. Research has identified five pedagogical functions of videos: as external referents, and for novelty, affect awareness, conjuncture and evidence. The video-centred pedagogy of difference is a useful tool in understanding and advocating social justice in society. Videos can enhance learning when used in a focused way.

In Chapter Seven, Katri Aaltonen and Päivi Aarreniemi-Jokipielto examine affordances in peer learning in an online learning environment. Researchers used a computer-supported collaborative learning (CSCL) framework and the community of inquiry model, which integrates cognitive, social and tutoring presences to enhance affordances in peer learning. The research employed an educational, design-based approach that included a preliminary research phase, a design and pilot phase and an evaluation phase. Participants in the study were vocational and higher education students. The data was collected using focus group interviews (N=7) which were analysed thematically. Findings indicated that peer groups needed both the teacher-designed activities and platforms, and peer group private platforms. Students need to understand the nature of peer learning and the methods and tools to co-construct knowledge.

Chapter Eight deals with vocational pedagogy using educational films. Tiiu Tenno and Asko Karjalainen explore the short-term reception of the educational film, *Discovering the Core of Vocational Pedagogy*. A qualitative study was used to examine changes in the perceptions of teacher trainees (N=23) regarding vocational pedagogy before and after watching the film. The film was produced using the information, entertainment and communication (IEC) model integrated with elements of drama. The film has three parts: an activating introduction, a middle part in the form of a pseudo-documentary and an evaluative conclusion. Pedagogical reception analysis was used in this study to examine changes in students' mindsets and comprehensions. According to the research results, all the teacher trainees achieved a deeper and broader understanding of vocational pedagogy after watching the film. The use of videos as media can change

students' beliefs and enhance their learning, though it is crucial to be aware that there might be other important factors which affect learning.

Finally, Chapter Nine discusses the motives and needs of professionals and peer tutors who are digital literacy and skills trainers for older persons. Kwok Ng, Kaisa Pihlainen and Eija Kärnä highlight that Finland has the second largest population over 65 years in Europe and the third largest among countries with the most advanced digital economies. Training providers were either non-profit organisations using ICT teacher professionals or volunteer peer tutors. One objective of this study was to compare the differences between these training solutions. The study adopted the Vygotskian social development theory, in which individuals construct their knowledge through social interactions with the guidance of trainers. The authors explored the interaction model of professional trainers, volunteers and learners. The data was collected from volunteer participants (N=172) through two online and paper questionnaire sets to identify motivation and training solutions. Forty-two peer tutors (62–79 years) in eight focus groups were involved in the study. Their tutoring experiences ranged from less than one year to 17 years. The study results highlight both the similarities and differences in the motives of professional teachers and peer tutors. Volunteer peer tutors have stronger motives than professional teachers with regards to 'benefits for self' and a sense of belonging. Both professional teachers and volunteer peer tutors interacting with learners need to be aware of their personal approach to learning when improving the skills of older adults. The approach to learning is always important when media is used in teaching and learning.

Media education affects people of all ages. However, the power to change the world is in the hands of young people. It is imperative to listen to young people and encourage them to be productive, critical and ethical media users. Young people and their families should be connected with the representatives of educational institutions and communities, including policymakers.

It has been our pleasure to act as the editors for this publication, "Media Education at the Top". The concept of this book is rooted in the Media Education Conference (MEC) held in Salla, Finland, 24–26 April 2019 (<https://www.ulapland.fi/EN/Events/MEC-2019>). The MEC is an informal and friendly conference which participants attend in order to exchange ideas and information regarding media education, the educational use of ICT and learning environments. The MEC has been organised by the Media Education Hub (formerly the Centre for Media Pedagogy) every two years

since 2005. Themes of the conferences have varied from The Power of Media in Education in 2007, Network-based Education and Learning Environments (in connection with the ISATT conference) in 2009, Social Media in the Middle of Nowhere in 2011, Media Education in No Man's Land in 2013, Media Education in the Light of the Midnight Sun in 2015, Media Education under the Northern Lights (in connection with the FERA Conference) in 2017, and Media Education on the Top in 2019.

MEC 2019 took place close to Sallatunturi Hill. The Centre for Media Pedagogy, now the Media Education Hub, celebrated its 18th birthday. We are so proud that our hub is now a young adult.

We are happy to finalise this foreword at the end of the Global Media and Information Literacy week on the Arctic Circle, at the beach of the Kemijoki river.

31st October 2020

Heli Ruokamo and Marjaana Kangas

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# CHAPTER 1

## A MEDIA DIET TODAY: A FRAMEWORK AND TOOL TO QUESTION MEDIA USES

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### **Introduction**

The idea of a media diet has been connected to Media Education since its inception. What has changed over these years is the aim of a media diet, reflecting important changes that have taken place in Media Education: from protection to promotion. Over the years, we have seen some interesting transformations. Firstly, the decisive role of “spectauthors” (Toffler 1980), as digital media appears very easy to use—in terms of technical issues—and is always more attractive as regards communication. We want to tell our story and now we can do it from our personal smart devices—this is a way of amplifying the message. Secondly, this easy access to media and to the power of the word now attracts more and more cyber stupidity (Prensky 2010) but also promotes a savvy relationship with digital devices and media (Rivoltella 2015). Thirdly, Media Education boundaries have now surpassed those of school environments (Rivoltella 2017), opening up opportunities to communities, the third sector, etc.

Building or suggesting a media diet does not mean preventing children or adolescents from using the media, such as videos, the Internet, social media sites, video games and so on, and this is what makes the media environment so far-reaching and fascinating. It means, on the contrary, enabling a personal and community-wide reflection on our media uses, highlighting the meaning of our choices and habits in everyday life, and grasping the great possibilities offered by digital media. As Tisseron wrote (Tisseron 2016), self-regulation is the key word and it sounds like a new word or the

output of a media diet. If you are able to regulate yourself, you don't need to start a media diet, or you may just have finished the process behind the diet (finding the appropriate "media food", defining situations where we can use specific media, rejecting or changing the rules, considering a digital detox, introducing a media diary etc.). If you are able to identify when smartphones and tablets can be useful, but also understand when they should be placed under the counter (or in your pocket), you are able to regulate your practices internally, without the intervention of an adult (a teacher at school, a parent at home, an educator or a social worker in the case of communities). Self-regulation is important and fosters a climate of respect and care. The French psychiatrist adds two other important elements: media rotation, which implies the possibility of choosing between different activities and media, that is to say, we have to create a positive and rich basket containing television, YouTube, Fortnite, blogging, visiting a museum, skating or dancing, writing and playing according to personal interests. Everything counts, including media; last but not least, the enhancement that we find in the "contract pedagogy", in dialogue and in reciprocal confrontation (Meirieu 2002).

### **Back to the origins: what is a media diet?**

An important experimental study concerning a media diet took place in Italy in 1995 and was conducted by Enrico Menduni (Menduni 1996) and his team (the former Siena Media Studies group at the University of Siena) across an entire village in Tuscany. What happened in Abbadia San Salvatore launched the media diet as an important strategy for both media education and family education.

Menduni advocated an experiment whose goal was to reduce the television consumption of tweens through the adoption of a media diet. The "food metaphor" is still useful: a balanced diet means eating a little of everything in moderation. The aim, in fact, is to avoid both media anorexia (the below zero option, meaning no media at all), estranging children and adolescents from a large part of their social growth and social life, and media bulimia, rendering them unable to choose and take a stand between media contents and systems.

In the preparatory phase of the trial, researchers defined specific criteria and gave detailed scores to television programmes—higher scores for programmes with frequent advertising breaks and no scores for news and documentaries, while very stereotyped content was linked to higher scores, for example. The research team applied these criteria to a normal week of

television. The hypothesis was that children could use this diet to monitor their consumption—they would have a maximum possible score every day, choosing what to watch so as not to exceed the limit. A problem occurred when the children realised that the team was just looking at national programmes (national television channels) without considering local television offers. This problem was a good chance to ask the children themselves to define scores for those local programmes that were excluded from the list (the same criteria that were adopted to provide scores for national television channels have been adopted for local ones). Besides, the list of scores and programmes had to be completed after watching television, creating opportunities to discuss some interesting topics related to emotions, questions, shared consumption, and so on. This helped participants to obtain a deep perception of the issues and allowed time for questions among family members. In fact, when television viewing was shared with parents or brothers and sisters, children could receive a discount.

The Abbadia diet not only regulated daily TV consumption, but it actually became a media education tool. After having administered a questionnaire before the experiment, the diet lasted a month, then at the end of the diet, a new questionnaire was administered and then again after two months. Results showed that at the end of the diet, consumption dropped by 40%, then increased by 20% and then settled with a 20% decrease compared to the beginning of the experiment.

### **Media uses: four questionnaires**

Against this background, the research centre, CREMIT (Research Centre on Media Education, Innovation and Technology, Catholic University of Milan), launched a large-scale initiative involving schools and groups and allowed them to access a questionnaire in order to discuss a media diet with the users. They collected data on media practices among children, tweens and adolescents, including the opinions of families with children aged 3-8. The tools were composed of a set of questionnaires for four age groups: 3-8 (destined for parents), 8-10, 11-13, and 14-18. The four questionnaires were first launched in 2018 after going through several stages of a methodological process. In January 2017, media educators and researchers from CREMIT had created a group to study existing questionnaires, to read literature on media uses, to examine data already collected in the past in order to define the main changes in the media environment, and to create a new tool. Then, in April and May, we contacted teachers to ask for their comments on the questionnaires, especially in terms of resolving linguistic

issues and looking at the questions set (length, difficulty, comprehension), as the questionnaires were mainly disseminated with the help of schools. In total, 80 questionnaires were completed, including professionals' opinions in the area of cyberbullying. We validated the questionnaires using a pool of experts from the fields of communication, research, pedagogy and media education, and we received five reports for each age group. Then the questionnaires were issued by a researcher as a pre-test stage to 200 students (three groups for each age category). We collected more or less 11,000 questionnaires: 908 from families, 3,212 from children aged 8-10, 4,122 from the 11-13 age group and 2,641 from the adolescents involved (June 2018 to May 2019).

The questionnaires are still available (the following analysis refers to data collected in May 2019) and they are organised into four areas: the first intends to obtain information on basic media uses, trying to gain a new perspective on personal practices; the second wants to reflect on time issues in the framework of a self-analysis; the third refers to content; and the last part talks about rules and regulations (the presence of a regulation or family rules, the origin of the agreement etc.). The data are not connected to a statistical sample, but we should consider the large number of questionnaires received. Schools interested in media education—or just in asking questions about media with students and parents—chose to take part in the study. The aim here is not to represent a specific population, but to gain a picture of how to discuss and relate to media, balancing uses and developing a better understanding of the individuals and groups involved.

Online delivery has been helped by many schools and institutions who are linked to the research centre's activities: schools involved in research experiences, schools involved in teacher training sessions, and other national and local projects. After collecting the questionnaires, a brief report was delivered to be discussed without the support or specific intervention of the researchers or the team. This was a good move, as it really embraced the objectives of the questionnaires—not just identifying situations (even though they were interesting), but promoting changes in the community involved in the study.

## **Results: how do children, tweens and adolescents use media in everyday life?**

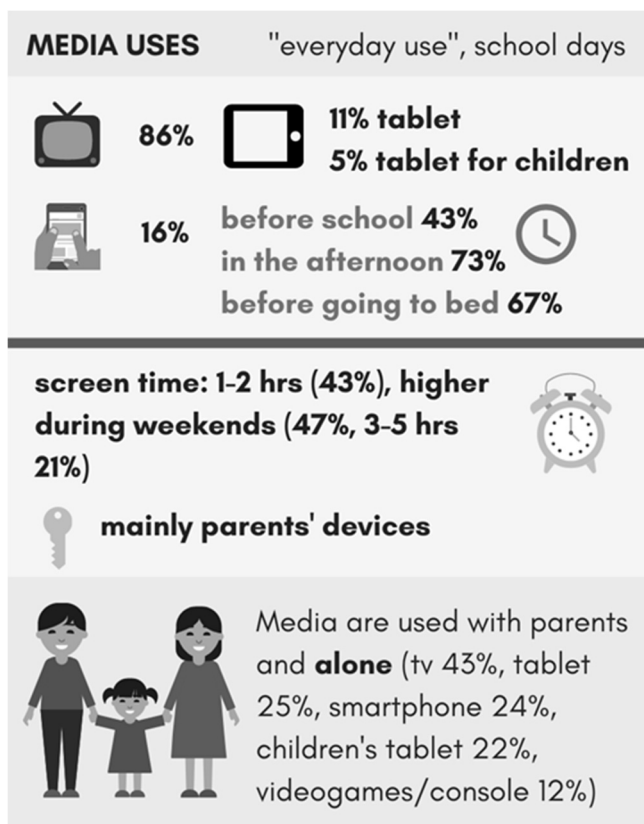
We present the main results of the study with one common aim: to share a picture of media uses among children, tweens and teens in order to

discuss—with the schools and families involved—the need for better reflection on media issues. To support a media diet and to discuss the most effective strategies in order to be informed and conscious citizens within a digital society, we need to start with media uses and then question practices in action. After less than one year of research (10 months actually), we can present the results—they are not considered as being representative of Italian young people. The results should be read in terms of transforming the questionnaires into a self-analysis tool: percentages can be used to set an average and create questions (like pop-ups, or during sessions with schools and family groups) associated to specific results (above or below average). Statistical validation is the next step. Considering the richness of the data, we will present them in age groups, even if they are not representative of the Italian population.

### **Young children's uses: the living room culture**

Looking at the first age group, thanks to the mediation of parents, we can focus on media uses among very young children: 39% attend kindergarten (3 to 5-year-olds) and 61% attend primary school (first two years, 6 to 7-year-olds). Parents declare an intense use of devices (as in Figure 1-1): 86% watch television every day on school days and use mobile phones (parents' devices) and 11% have contact with a tablet (5% have a personal child device). Time is important, as children access media before school (43%), in the afternoon (73%) and before going to bed (67%). A day with media has an average screen time of 1-2 hours, reaching a peak during the weekend (3-5 hours per day for 21% of children). What is really significant is the sharing of the device: parents declare that they share consumption with children, especially in terms of digital media and portable devices: 43% watch television alone, 25% use a tablet alone, 24% use a smartphone alone and 22% have individual access to his/her personal tablet. Video games are not so popular when used in individual mode (12% play alone). This looks like the "living room" culture described by Sonia Livingstone in her famous study on television and media in the family environment (Livingstone 2007).

Children watch videos (75%), play (59%) and listen (39%) to music, never during dinner time (77%, which means that it is a normal habit for 23% of families). Why do they choose screens? The answers, according to the children themselves, are usually similar: because they are tired or bored. So, forms of media are still considered to be a very easy way of keeping children busy or a way of relaxing without demanding more attention and skill. This is a big misunderstanding.



**Fig. 1-1:** Media uses among young children according to parents.

### Children's practices: hanging around with media

As we move to children aged 8-10, we have a shift into a more personal media world: they still watch television (76%), use tablets (23%), indeed, 45% have a personal device, use a smartphone (24% use a smartphone, 28% have a personal mobile phone) and play video games (20%) every day on school days. They use media before going to school (44%), in the afternoon and before going to bed, especially television, as shown in Figure 1-2. Screen time is not so high, considering that they leave school at 4 pm (especially in the north of Italy) and they usually have other hobbies such as sport, art and other activities.