BECID

DEVELOPING PRIMARY AND BASIC SCHOOL TEACHERS' MEDIA COMPETENCIES

D4.1: FINAL REPORT ON T4.1

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INTRODUCTION

The Baltic Engagement Centre for Combating Information Disorders (BECID) is a network of experts working to combat information disorders and promote media literacy in Estonia, Latvia and Lithuania. The Baltic EDMO hub brings together 4 research organisations: the University of Tartu (UTARTU from now on), Tallinn University (TLU), Vidzeme University of Applied Sciences (ViA) and Vytautas Magnus University (VMU). Additionally, we work with 4 IFCN-certified fact-checkers: Delfi Meedia (EE), Re: Baltica (LV), Delfi (LV), and Delfi (LT), whose work is amplified by an associated partner, the Latvian TV channel Vidzeme TV. The Media and Information Literacy (MIL from now on) work package is led by the Baltic Centre of Media Excellence (BCME), a non-profit organisation focused on MIL with thirteen founding members cooperating in Latvia and beyond. As of August 2024, BECID connects 71 individuals from 9 organisations.

Figure 1. EDMO network. Visit edmo.eu to learn more about EDMO Hubs.

It is contextually important to point out the unevenness in macro-level educational policies and the structure and placement of MILs within formal education in the Baltics. For example, MIL has been a part of the Estonian formal education curriculum for secondary

education since 2011, and in autumn 2023, the Estonian Ministry of Education and Research declared MIL a compulsory part of general competencies in all school subjects at all ages. In Latvia and Lithuania, MIL is not a compulsory part of the curriculum, and the teaching of MILs in formal education is, therefore, teacher-dependent. Consequently, it is even more critical to provide ready-made materials.

This report is the deliverable for Task 4.1 (T4.1 from here on), with contributions from five of the BECID partners: ViA, UTARTU, TLU, VMU and BCME. The task aimed to develop training programmes for both future and current teachers, but also for various non- and informal educators involved with teaching MILs.

TLU, VMU, ViA, UTARTU and BCME all led the collaborative efforts of collecting, comparing and reorganising MIL materials from all partners into a comprehensive whole. TLU piloted their vocational training program of 28 hours (1 ECT) tailored for Estonian in-service teachers (four trainings with 83 registered participants all up) and provided valuable insight into the existing gaps based on feedback. ViA contributed to T4.1 by compiling data on past MIL endeavours within the institution, evaluating their suitability for teacher incorporation into a toolkit, assessing existing media literacy resources and identifying teachers' requirements.

UTARTU was responsible for organising the BaltsTeachMIL seminars in 2023 to scale up the results, covering and developing teacher materials on vital issues such as search skills, data literacy, fact-checking and problematic content on social media. Additionally, ViA co-hosted an online seminar in English for 50 Baltic educators, also focusing on MILs. TLU also organised the Zoominars in 2024, both in English and in Russian, to share best practices from their curriculum. **In total, more than 580 educators participated in our Baltic Zoominars.** VMU and BCME led the collaborative efforts of collecting, comparing and reorganising MIL materials from all partners into a comprehensive whole.

In summary, for current in-service teachers, we offered a flexible way for updating their MILs by providing a series of e-seminars that build upon existing in-service teachers' study materials with a strong emphasis on the practical tasks, sub-skills, resources and lesson plans. We trained teachers in training on how to teach MILs. Additionally, we collected best practices to share from the courses created to – hopefully – light a fire in the readers of this report and encourage all to tap into the didactics of playful approaches to teaching MILs.

We built the task on pre-existing materials built in previous projects and by localisation and contextualisation of international materials and research. Still, our primary focus was on generating new materials.

Whether the reader of this report is a teacher, researcher, journalist, training facilitator, youth worker, librarian, social pedagogue, policy maker or colleague from the EDMO network – we hope you find inspirational content in this report and hope you will contact any of the authors for editable full-length versions of the work done within T4.1.

1. TEACHING THE TEACHERS-TO-BE: MIL-RELATED COURSES IN TEACHER EDUCATION

Media and information literacies have become increasingly important, and different countries approach the teaching of these competencies differently. Thus, we approached the task in a multifaceted way – designing and carrying out training programs, materials and interventions in a way that would be suitable and adjustable to many formats within formal education, from mapping the existing courses and MIL-related vocational training (1.1) to entire general syllabi to be used in higher education (1.2), to more precisely targeted teacher training courses (1.3).

1.1. EXAMPLES OF EXISTING TEACHER TRAINING MATERIALS AND COURSES

We began T4.1 by mapping all existing courses from our collaborating universities to see the overlaps and notable gaps. Most universities have courses that, in one way or another, develop the broad competencies that fall under the umbrella of MIL.

We recognised the terminological confusion in the field as there are various and often overlapping concepts used when talking about people's ability to apply informational self-determination in online settings and participatory cultures (Jenkins et al., 2009) in a meaningful way. Media literacies, new media literacies, social media literacies, digital literacies, data literacies, information literacies, computer literacies, network literacies, etc (cf Summey, 2013). The approaches to and definitions of MIL are also varied, with some placing more of an emphasis on critical thinking and MIL as a social or cultural practice (e.g., Bulger & Davison, 2018; Hobbs & Jensen, 2009; Kellner & Share, 2007; Ku et al., 2019; Share et al., 2019), and others emphasising a more skill-oriented approach (e.g., Audiovisual and Media Policy in the EU, 2024; Bawden & Robinson, 2002; Gretter & Yadav, 2016; Grizzle et al., 2021; Ofcom's Approach to Online Media Literacy, 2021; Scolari et al., 2018). As new technologies and platforms enrich the media landscape, MIL must constantly adapt to reflect these new realities. We use MILs mainly in the plural, similar to Livingstone (2004) and Kalmus et al. (2009), to address the varied and individually unique combinations of competencies that MIL must encompass. We understand MILs as the motivation, skills and knowledge required to access, analyse, assess, create and act on media messages in

different contexts, similar to Christ & Potter (1998), Livingstone (2004) and the Audiovisual and Media Policy in the EU (2024).

The universities of this project already had many examples of great courses that focus on media, critical thinking, disinformation, etc (e.g. Argumentation Theory and Critical Thinking (ViA), Media Literacy in the Age of Disinformation (ViA), Media Literacy In Digital Communication (ViA), Media in the Era of Disinformation (UTARTU), Social Digital Literacies (UTARTU), Media Education (UTARTU)). But importantly, as a shared shortcoming and a dire need, all participants acknowledged the problem of existing courses being very specifically targeted and relying on universities' limited resources and lecturers' expertise, lacking up-to-date comprehensive and methodologically sound well-rounded solutions. The following report (especially the next two sub-chapters) is our answer to that need.

In order to have a clearer focus, TLU comprised an extensive slide deck (which is also available in Estonian), demonstrating the details of how teachers are being taught media and information literacies for basic school teachers in their vocational training programs (Figure 2) and used these in teachers' vocational teaching programs, collecting feedback and testing out ideas. The rest of the T4.1 project activities have taken teachers' feedback into account at every step.
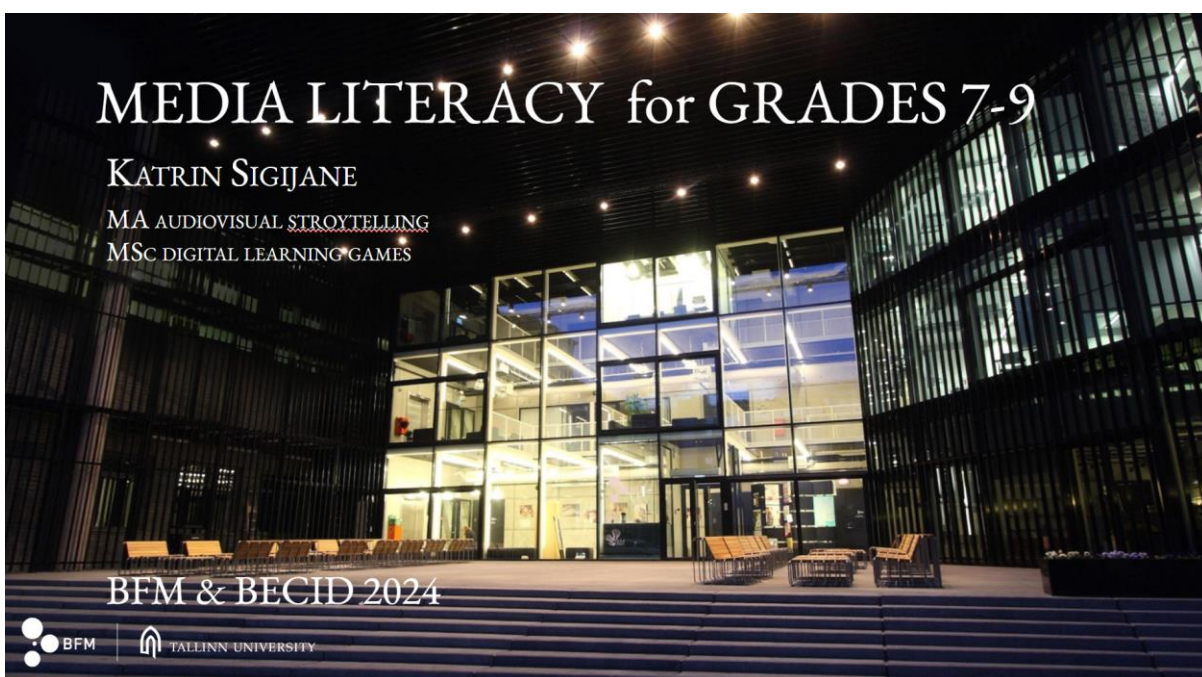

Figure 2. A screenshot from TLU's slide deck, titled "Media Literacy for Grades 7-9".

As TLU's team has a strong background in audiovisual media, these specific materials have a strong emphasis on audiovisual media competences, too. But the overall course materials covered a wide array of MILs:

1. Design thinking & future skills. Design, testing and analysis of an exciting media lesson from the student's point of view.
2. Disinformation. Misinformation. Malinformation.
3. Fact and opinion.
4. The news.
5. How to influence the story with audiovisual literacy components.
6. Media Literacy Games.
7. School Media.
8. The everyday life of an online police officer. Cyber bullying. Information war.
9. Practical exercises and feedback.

Based on participant feedback surveys and focus group interviews, the participants of this course have valued up-to-date examples (see more in 2.4) and practical tips for creating audiovisual content they got from the learning materials and processes. Collaborative learning environment design (see more in chapter 3) and focusing flexibly on current challenges of the information spaces (see 2.1) is also a must-have for contemporary learners. Some have also specifically pointed out the value that is added from knowing the "kitchen side" of the media industry, what has academically been referred to as the "demystification model", which aims to empower the audience by knowledge of the functions and methods of media (Leaning, 2019).

Feedback has also shed light on what is still missing, according to the participants of these courses: mainly the development of media competence in a subject-specific manner, asking how to link the development of media competencies to different subject lessons (see 2.4 for ideas), and secondly, the constant development of information search and evaluation skills (see 2.1 for related accomplished activities).

Another request and perceived need is a functioning MIL teachers' network that would share materials, gather at events and support each other as inspirational professionals (see Chapter 2.1). This has been a silent, hidden aim of all our activities throughout the Baltic BECID hub. In the framework of WP4, the MIL work package of the project, BECID's MIL

team has been working actively from 2022–2024 to raise awareness about MIL issues and related skills in the Baltic context.

Throughout the different formats of feedback, a strong message of teachers needing materials and frameworks that reflect the media world of today's children and youth. Media education has traditionally focused on news media, often moving medium by medium, genre by genre. But contemporary ubiquitous media use and the convergence of formats, platforms and media itself make this irrelevant to young students to some extent. We have followed the principle of building on familiar mediascapes in nearly all of the materials, activities and interventions described in this report.

1.2. A GENERAL SAMPLE SYLLABUS FOR MIL COURSES IN HIGHER EDUCATION

Arguably, MILs should be taught to as many students and professionals as possible. Thus, our first contribution is a very general baseline course design that can be beneficial to many curricula, but especially to educational sciences. Based on different Baltic universities' experiences and piloting efforts, we initially mapped the crucial topics of today's mediatised life within info disorder. Then, based on the best practices, constructed a sample syllabus for the 3/6 ECT course for universities that can help people working in higher education who are planning to design a 3 or 6 ECT course that focuses on the basics/introduction to media and information literacies.

The course's suggested timeframe is 16 weeks (Figure 3), as is relatively usual for Baltic universities, with time management calculations for 1 ECT = 26 hours of work, so the 3 ECT version requires 78 hours of work from students and 6 ECT one requires 156 hours of work.

The syllabus comes with reading suggestions, detailed study tasks and a time management framework. The introductory course lays the foundation for understanding media systems, disinformation and influence activities – all forming the foundation of (digital) media and information literacies, crucial for contemporary democratic societies. It introduces the student to the theories and practices of information society, media, journalism, and social media. To be responsible, safe, and engaged citizens in the networked publics, individuals need to build digital resilience and consistently develop their media and digital literacy skills. This course is dedicated to developing students' digital and media agency so that they can

make use of the various opportunities of the digital mediatised life as well as mitigate potential risks technology-saturated societies uphold.

week	Topic	Activities in class and independently	Reading materials	additional work for 6 ECT course
1.	Introduction, overview of the course, mapping the expectations and agreeing upon common rules.	2h: Independent work task after the class, finding 6 types of information: https://classroom.google.com/c/NTk4ODAzNzM3OTEy/m/NjcwNjQ4MjE3ODDgw/details	1h: Look at the glossary of MIL (In google classroom, by Janis). Which terms are completely new to you? Write them up in the study diary.	5h: Find one recent (max 5 years) academic article about (digital) media and information literacies. First, without help from LLM (AI): What do the authors conclude? How would you use LLM (AI) to understand the conclusion? Do it. Does it line up with what you understood originally?
2.	How our brain works, cognitive biases	2h: Independent work after lecture/ seminar (5+ cognitive biases): https://classroom.google.com/c/NTk4ODAzNzM3OTEy/a/NjY3ODQ2OTM1NTcy/details		21h: Read - Kahneman, D. (2011). Thinking fast and slow. Macmillan.
3.	Seminar	In class group work: match propaganda techniques and cognitive biases. https://classroom.google.com/c/NTk4ODAzNzM3OTEy/m/NjUyNTY3MDg1MDU5/details		
4.	Mediatization, (social) media logics, platforms	1h: Independent work before class: watch a recorded lecture about four big media theories (around 30 minutes) and take notes. Lecture is recorded in 2023 by Maria Murumaa-Mengel, for Uni Tartu course: https://youtu.be/mHnyj09-pVU	4h: Read after: Van Dijck, J., & Poell, T. (2013). Understanding social media logic. Media and communication, 1(1), 2-14. Nölleke, D., Scheu, A. M., & Birkner, T. (2021). The other side of mediatization: Expanding the concept to defensive strategies. Communication Theory, 31(4), 737-757	7h: Oliver, M. B., Raney, A. A., & Bryant, J. (Eds.). (2020). Media effects: Advances in Theory and Research, 4th Edition. Routledge. Summarize three chapters.
5.	Media representations	1h: Independent work before: media effects in everyday life. https://classroom.google.com/c/NTk4ODAzNzM3OTEy/m/Njc0MDQ1ODgzMzEz/details		10h: Media biases - small research project. https://classroom.google.com/c/NTk4ODAzNzM3OTEy/a/Njc0MDQ0ODc4OTMy/details
6.	Mediascapes, platforms, systems	Group work in class: task about your country's media houses, most used social media platforms, outlets, websites etc. Who owns them? How do they make money? What laws do they have to follow?		5h: Check out the course Very Verified (by IREX), available in different languages. https://veryverified.eu/ Time yourself with Toggle (or some other productivity/timer app) - spend 5 hours learning on that course. Write down notes and a reflection - what did you learn, what was the most valuable, what was too basic, what was entertaining etc. What do you know more about now?
7.	Journalism and journalistic work practices	3h: Independent work before class: how to become a journalist? https://classroom.google.com/c/NTk		

Figure 3. A screenshot of the detailed syllabus structure, presented fully in the above-linked website.

1.3. UNIVERSITY COURSE DESIGN FOR "PLAYFUL DEVELOPMENT OF MEDIA LITERACIES"

As one of our aims was to develop primary school teachers' media competencies, we have also designed a specific course for teacher training programs that enrol kindergarten and primary school teachers-to-be. Children need media and information literacies from a very early age because only a tiny fraction of them actually wait until they are 13 to start using social media; extensive screen media experiences often begin in toddler years; contemporary technologies allow very young children to be independent, active media users. UTARTU piloted the course "Playful Development of Media Literacies" (Figure 4) in

the Spring semester of 2024 with 58 students from various education-related curricula (Primary School Teacher, Early Years Teacher, Youth Work, Special Education and Speech Therapy).

Week	Topics and activities	Additional materials
1	Introduction, overview of the course, agreeing upon common rules, etc. What are media, information and digital competences? Current information environments. Digital, media and information competences. Independent work: mapping one's one's expectations, motivation and needs.	Think Critically, Click Wisely! Media and Information Literate Citizens
2	Development of media competences in the Estonian education system. Independent work after the class (in groups of 2 or 3): Whose responsibility is the development of media competences? Mapping and prioritising stakeholders. Making a digital poster on the topic.	
3	Children's and youth culture – where to find it on digital platforms and how to understand its content? Intergenerational differences and similarities in media use. Individual work: Find one item (game, trend, platform, subculture, etc.) of children's or youth culture that you do not understand. Describe what is and why you don't understand it (what are the shortcomings of your media skills? what differences do you have in your values? what internal barriers do you have? etc.). Including illustrative materials, the work should not exceed 3 pages of text in standard format.	A toolkit for evaluating media literacy interventions
4	Masterclass of gamification: motivation and engagement through games.	
5	The 4Cs classification (content, contact, conduct, contract) of online safety and games based on this approach. Individual work: Pick one of the 4Cs risks and prove on the basis of at least two studies that this topic should be dealt with in the age group of 5-7 year old children. Create a game that focuses on this topic. Write down details of the game (aims, rules, aids and materials, etc.). Evaluate your game and possible risks that may occur when playing the game with children.	4 Cs of online risk: Short report & blog on updating the typology of online risks to include content, contact, conduct, contract risks

Figure 4. A screenshot of the detailed syllabus structure is presented fully in the above-linked Google Document.

Methodologically, we found ground in playful problem-based learning didactics, emphasising the importance of creativity and surprising solutions for educators as well as for students. Creative approaches are often perceived as "fun", and fun is an extremely important part of research and education; humans overlooking fun or hiding from it despite its importance as an aspect of human activity (Davenport et al., 1998) does us a disservice. The effectiveness of gamification and game-based learning has proven to enhance the learning process and result in a positive impact on learning outcomes (Plass et al., 2015; Fadhli et al., 2020; Taylor & Boyer, 2020). Well-designed games for developing media and digital literacy act like small focus groups, where children open up and share their experiences better than through interviews or direct questioning (Parsanoglou et al., 2022). This feedback is also valuable for teachers (Hietajärvi & Maksniemi, 2017), providing insights into what children do online.

We set out to teach and learn MILs via physical games and playful approaches that build children's digital resilience, helping kids, youth workers, and teachers reflect on the actual unpolished contemporary digital lives of children. Physical play was central to our course because learning through play is recognised in pedagogy as meaningful, joyful and engaging in interaction-based holistic learning outcomes (Parker et al., 2022). Throughout the course, we extensively worked with our students, fostering hands-on theory-to-action learning activities. In that way, the new generation of teachers will have a mindset of MIL collaborators, hopefully engaged in both formal and informal learning networks (Callanan, Cervantes & Loomis, 2011) long after they have graduated. The course ended with a hands-on public event, the first internet safety drill – DigiRapid in English, DigiÄKK in Estonian – for preschoolers (mostly 6–7-year-olds) from different kindergartens in our city. A selection of the games (Figure 5) created by students and the lecturer Inger Klesment during the course is available on the BECID website. More about the event in chapter 3.1.

Figure 5. A screenshot of the games created by students, presented fully in the above-linked PDF Document.

2. SUPPORTING THE MIL DEVELOPMENT AND NETWORKING OF EDUCATIONAL WORKERS

We have aimed our activities in two main directions: training the trainers, both in-service and future teachers, and helping MIL educators of the Baltics find our materials as well as connect to each other. We have covered our networking efforts in Chapter 2.1 by showcasing our proactive approach to being where our target group is. The overview of materials created for teachers teaching various age groups in formal education is in Chapter 2.2. and 2.3. The additional materials suitable for a broader network of MIL facilitators are in Chapter 2.4.

2.1. BRINGING MIL EDUCATORS TOGETHER

In addition to developing syllabi and new courses for the formal education system, we actively pursued collaborations for in-service teacher training through networks that teachers know and trust at national, regional, and international levels. This approach effectively introduced BECID's goals to relevant professionals in the field and enabled us to work more efficiently, as partners with established audiences and communication channels amplified our message and extended our reach to communities beyond traditional academic networks. Below are examples of successful partnerships within T4.1 over the past 21 months.

At the regional pan-Baltic level, we brought together educators from across the Baltic States, providing direct access to the top trainers, researchers, and specialists from BECID partner universities. This collaboration was organised through the BaltsTeachMIL event series, which included six webinars. Given the linguistic diversity in the Baltic region, where national languages differ, and people from different countries often do not understand each other's languages, we experimented with various methods of promoting and conducting the webinars. Here are the three key lessons we learned during this process:

1. We discovered that the concerns of Baltic educators regarding the internet usage of children and young people are remarkably similar across the region. For example, the divide of values between young boys and girls, spearheaded by red-pill influencers, is present in teens in all three countries. Therefore, pooling resources and involving top experts in joint webinars is both efficient and highly effective.

2. However, it is crucial to contextualise and localise educational resources, not only in terms of translation but also in terms of examples (such as celebrities, influencers, and well-known journalists) and content. Teachers cannot effectively use materials in their classes if the examples do not resonate with the students or if the significance of the examples is unclear. For instance, Latvian students may not be familiar with the names of politicians or opinion leaders in Estonia, which could hinder the effectiveness of the examples.

3. The best approach to a multilingual event where English is not the mother tongue of any participants was tried and tested. The system of opening the webinar with a common introduction in English, followed by breakout sessions in Zoom in the respective national languages of the participants, and summarised altogether in English at the close proved most effective. This approach allowed all educators to express themselves confidently, ask questions, and network effectively, irrelevant to their English skills.

Want to know more? The 2nd BaltsTeachMIL Zoominar titled "Fact-Checking Masterclass" was organised on October 2023 by the team. Read the insights and strategies from Latvian fact-checker Ronalds Siliņš (Re: Baltica), Estonian fact-checker and teacher Kaili Malts (Delfi EE), and Lithuanian cognitive and behavioural engineer Darius Remeika (VMU) here.

2.1.1. NATIONAL EVENTS FOR EDUCATORS

As there are national differences in approaches to MIL in formal, informal and formal education, there was a clear need for additional seminars for educators tailored for local contexts only. To that end, in Latvia, there was a practical seminar for teachers organised by ViA in November 2023, aiming to strengthen the MILs of Latvian language teachers of the European Latvian Association. The apparent need for such direct approaches to subject teachers (and, through them, the students) also highlighted the need to scope up the approach. To that end, from May 2023 to May 2024, in partnership with BECID partners, the University of Latvia and the Latvian Ministry of Culture conducted a local series of events. The primary target audience was students, but teachers were encouraged to actively participate in the MIL lessons conducted in 84 Latvian schools.

We also involved teachers in tailor-made seminars that – at their request – sometimes exceeded the limits of our individual and collective expertise, which allowed us to involve experts from outside of BECID. For example, in November 2023, we organised the third BaltsTeachMIL Zoominar titled "Helping Children Navigate the Tsunami of Misinformation". We invited the Estonian Police and Border Patrol (PPA) as well as specialists from the NGO Peaasi (a wordplay on a matter of the head and the most important matter). The discussion was moderated by Maria Murumaa-Mengel, associate professor of media studies at the University of Tartu; Maarja Punak, police captain and PPA's social media communication specialist; and Heli Luik, mental health expert and experienced counsellor at Peaasi. Read the blog post (in Estonian).

Similarly, when it comes to the cognitive aspects of the age of AI, in addition to BECID's experts, ViA organised the conference "Media Literacy. Cognitive Aspects in the Age of Artificial Intelligence" with various experts from the Baltics and beyond to improve the public's understanding of the cognitive processes related to MIL and how AI and modern technologies affect the creation and consumption of media content in December 2023. This enabled us to strengthen the team's understanding of new topics, as well as support educators in their efforts.

MILs are ever-present in civic education programs related to societal resilience and information security, so we also started cooperating with Naiskodukaitse (women's voluntary defence organisation), which boasts many teachers among their ranks and is increasingly involved in civic education on crisis preparedness in digital environments. We organised four webinars with them, where we focused on the following topics:

- March 2024, Naiskodukaitse + BECID: "Conspiracy Theories" was part of the "Digiliikur" series, which joined efforts from Naiskodukaitse and BECID's team. UTARTU semioticians Andreas Ventsel and Mari-Liis Madisson discussed the emergence of conspiracy theories and their role in society, why conspiracy theories proliferate during major crises and how the internet has changed the spread and audience of conspiracy theories.

- April 2024, Naiskodukaitse + BECID: Cyber Scams. Estonia's Ida-Harju online constable Anna-Liisa Kreitsman talked about the most common scams the police

have to deal with and advised on protecting yourself and people close to you from criminals in the digital world.

- May 2024, Naiskodukaitse + BECID: [Kids on Smart Devices](). Inger Klesment and Diana Poudel shared their experiences on teaching children and young people to be aware of the dangers of the digital world and how to encourage them to engage in useful activities online.

- October 2023, Naiskodukaitse + BECID: Diana Poudel's training "How to Conduct a Safe Internet Guest Lesson for Grades 1-5" for Naiskodukaitse members.

We also strengthened our cooperation with the Estonian Debate Society, which is active in teaching MILs in addition to fact-checking and popularising debate as a tool to develop critical thinking. We organised several webinars together with the Estonian Debate Society. For example, in October 2023, Diana Poudel from BECID facilitated a training "Social Media and Algorithms" for Estonian subject teachers. Similarly, we noticed that KiVa's Anti-Bullying program is increasingly also involved in MILs, especially digital literacies. To strengthen cooperation, Inger Klesment introduced playful approaches to prevent cyberbullying and combat online hate at the KiVa conference.

2.1.2. THE PROACTIVE APPROACH TO SPREADING MATERIALS ON A NATIONAL LEVEL

To make sure the syllabi and materials collected for T4.1 reach the educators, we also aimed to be represented in well-known and already existing training series. For example, in Estonia, the BECID team has taken part in three ÄKK exercises (in 2023 and 2024) for primary school teachers, where they practised coping with unexpected and critical situations under time pressure by adding an information disorder training point. In October 2023, we conducted three workshops at the Tartu Teachers' Festival: Media education gamification workshop (by Inger Klesment), "How Do Students Fall into Social Media Rabbit Holes?" (by Gretel Juhansoo) and "Uhhuu – Who, What, Where?" workshop (by Maria Murumaa-Mengel). In October 2023 and January 2024, Inger Klesment and Maria Murumaa-Mengel (UTARTU) presented newly developed pracademic MIL courses at the University of Tartu's annual teaching in higher education conference to reach audiences who might not have heard of BECID at all.

We also tried moving MIL trainings online and to evening schedules so education workers (who are busy teaching in the daytime) could also participate. For example, Diana Poudel led a training session titled "How to Conduct a Safe Internet Guest Lesson?" via Zoom, attended by approximately 120 participants, including parents, teachers, and youth workers.

In addition to working with subject teachers traditionally involved in teaching media literacy, such as language teachers, we also extended our scope to school principals, organisations intensely engaged in school life, other subject teachers such as art or PE, and school support specialists. Even though their first responsibility is not media education, they too, in the light of the changed national curriculum, will also have to start integrating the teaching of MILs in all subjects and therefore need their own understanding of MILs and resilience to information disorders improved. Some of the seminars and workshops organised to that end were:

- August 2023: seminar "Teachers and Students on Social Media – Communication Norms and MILs" for Estonian art teachers (by Maria Murumaa-Mengel).
- August 2023: workshop "Young People and the Digital World" for social pedagogues (by Maria Murumaa-Mengel and Inger Klesment).
- October 2023: training for Tartu school leaders in response to a bomb scare spam wave "Difficult Topics in School – A Media (Psychology) Centered View and Recommendations" (by Maria Murumaa-Mengel).
- October 2023: in the Mobility Lab's "Inviting School to Move" autumn seminar for teachers, we presented how to develop media skills through movement games (by Gretel Juhansoo and Inger Klesment).
- November 2023: training for Tartu school principals on "How 'Uhhuu' Creeps into Schools and Kindergartens – And Then What?" (by Maria Murumaa-Mengel and Maia Klaassen)
- January 2024: seminar for sexual health educators on how to teach so-called porn literacies in school (by Maria Murumaa-Mengel).
- March and August 2024: workshops for the leaders and advisory boards of Tartu's schools, focusing on information resilience and doing essential background checks on facts and claims (by Maria Murumaa-Mengel and Maia Klaassen).

We participated in the organisation and facilitation of national teacher MIL education via the national media literacy conferences, too, where we moderated the panel discussion on "Who Should Help Children Become Media-Savvy?" (Maria Murumaa-Mengel); the street art tour with Sirla "What Do the Streets Talk About and How Does It Relate to Media?" (Maria Murumaa-Mengel); the media education gamification workshop with Catlyn Kirna (Inger Klesment); the workshop on conspiracy theories in social media with Oksana Belova-Dalton (Gretel Juhansoo) and the workshop "How to Analyse Content Created by Influencers?" at the Media Literacy Conference (Maria Murumaa-Mengel).

With more and more rural schools being eradicated as part of the school reforms due to urbanisation in the Baltics, MILs are increasingly falling into the hands of local communities. For example, the role of local libraries is increasing. Therefore, we strengthened our cooperation with the National Libraries of the Baltic States, the Estonian Ministry of Education and Research, the Estonian Education and Youth Board, and The Estonian Youth Council to provide training for a broader target group than educators in formal education. Showing up when the local communities ask for support in training has become habitual and continues to be the best way to promote our materials to the target group directly. For example:

- February 2023: Online lecture on playful media and information literacy approaches for Estonian youth workers (by Maria Murumaa-Mengel and Inger Klesment).
- March 2023: seminar day on playful MIL approaches for Estonian youth workers (by Maria Murumaa-Mengel and Inger Klesment).
- March 2023: presentation titled "The Value and Vice of Social Media" for participants of the Narva International Student Empowerment Conference (by Maria Murumaa-Mengel).
- March 2023: Teeviit 5 LIVE discussing the career path of a MIL specialist and choices in the educational landscape (by Maia Klaassen).
- April 2023: presentation and panel discussion participation at a teachers' training day, "When Artificial Intelligence Enters Schools..." organised by The National Library of Estonia (by Diana Poudel).
- May 2023: training program "What Young People Do Online" for youth workers, focusing on developing digital competencies (by Diana Poudel).

- August 2023: workshop "Porn Literacies as Part of Media and Information Literacies" for youth workers of Estonia (by Maria Murumaa-Mengel).
- November 2023: conducted a game-based digital and media literacy training for librarians at the Estonian National Library, focused on primary education (by Inger Klesment).
- January 2024: Maria Murumaa-Mengel gave a presentation about AI tools and teachers' helpers to Tartu Private School teachers and parents (by Maria Murumaa-Mengel).

To make sure that our work also reached underserved audiences not yet old enough to have reached the basic or secondary school programs on MILs, we also turned more attention to teachers working with the youngest age groups. For example, Inger Klesment conducted several game-based MIL trainings for teachers of primary schools all over Estonia, for example, at Tallinn Technical Gymnasium, Paide Hillar Hanssoo Basic School and Konguta School. In January 2024, we began a three-month collaboration with Tagasi Kooli e-lessons, resulting in the creation of seven unique e-lessons focused on developing MIL skills. Each lesson is accompanied by a worksheet for use during the lesson. Among these are two e-lessons by Delfi Meedia fact-checkers Marta Vunš and Kaili Malts on the dissemination of conspiracy theories and disinformation on social media; Maia Klaassen's lesson on AI - the doom of humanity or a trustworthy helper; Maria Murumaa-Mengel's lesson on Cancel culture; Diana Poudel's lesson on Wolf in sheep's skin: talking to strangers; Gretel Juhansoo's lesson on Conspiracy theories on TikTok; and Inger Klesment's lesson on Why is it so hard to put away your phone?. The voluntary collaboration will continue in Autumn 2024.

In May 2024, in the context of the EU Parliament elections, Maria Murumaa-Mengel conducted two e-lessons in collaboration with the University of Tartu's Youth Academy online lecture series (European Parliamentary Elections and Propaganda) and SALTO Participation and Information (Stay sharp during elections – How cognitive biases and media influence our decisions). Like the previously mentioned materials, these e-lessons are accessible and free, and we are happy to share editable slides.

2.1.3. INTERNATIONAL EFFORTS

Our connections with the international teaching community are not as strong as on the regional or pan-Baltic level, but we are working towards building that up further for even more exposure to materials created – as the working language of BECID is English, all created materials are ready for use and adaptation.

We started and continued several lines of work in already established networks, training in-service teachers online and face-to-face. For example, we cooperated with IREX in the Baltics in January 2023, presenting at their network webinar – "How to Invigorate Students via MIL Micro Interventions – Examples from Our Courses" (by Maria Murumaa-Mengel). We also introduced the local MIL landscape at the webinar titled "Media Literacy in the Baltics" on the psychological aspects of media literacy. A presentation titled "Invigorating Students Through Media Literacy Micro Interventions" (by Maria Murumaa-Mengel). In August 2023, our work reached Australia via the seminar "Media and Information Literacy for Societal Resilience" for students of Victoria University's youth work program (by Maia Klaassen). In October 2023, the syllabi from UTARTU made the final round of the teaching award at the ENLIGHT network's annual conference – "Pracademic Studies – Be Bold and Change the World" (by Maria Murumaa-Mengel and Maia Klaassen), introducing our approach to a pan-European audience in Bordeaux, France. In January 2024, teachers at Malta's St Joseph Mater Boni Consilii Girls School Paola received an online workshop on playful approaches to advancing digital literacies (by Inger Klesment and Gretel Juhansoo).

2.2. MIL MATERIALS FOR KINDERGARTENS AND PRIMARY SCHOOL

Due to the absence of confirmed, standardised materials, Baltic teachers have considerable autonomy in their instructional approach. This autonomy extends to incorporating additional topics seamlessly within the curriculum framework. These topics are interwoven into the main themes and serve as an "umbrella" for transferable skills essential for students' holistic development.

Instead of following a rigid syllabus, the teaching methodology involves various **activities and games**. On Lasteaeg.ee, teachers can find several games both in English and Estonian (Figure 6). Teachers can use these games creatively to suit their students' specific needs and interests. This flexible approach not only fosters a more engaging learning

environment but also allows for the customisation of lessons to address students' diverse learning styles and paces.

Figure 6. A screenshot of a game suitable for kindergarten and primary school is presented fully at this link.

All of the core terminology of a digitally saturated life, for example, can be made into fun, playful materials and approaches, such as in the examples here. With the aid of AI tools (LLMs), it has become straightforward to modify these examples and seek easily understandable examples and analogies for kindergarten teachers independently, too— some examples.

1. **The internet (often referred to in various ways: web, online world, virtual world):** the world of information you access through various smart devices, such as smartphones, tablets, laptops, home computers, Xbox, PlayStation, etc. The internet is like a vast library or a "home" for games and movies, where you can learn and do anything. It's a place where computers around the world communicate and share information, pictures, and videos. For example, if you want to learn how to make a house for your pet or play a game, the internet can help you find that information.

> **Idea for the teacher:** Draw what the children imagine the internet looks like – what kind of people/animals are there, what environments, colours, shapes, symbols, what activities take place there? The teacher

can also show pictures of the following devices and ask if the children know what they are: laptop, desktop computer, smartwatch, smartphone, button phone, rotary phone, tablet, smart TV, Xbox, PlayStation, Nintendo, VR glasses, etc.

2. **Social Media:** Social media is like a prominent meeting place on the internet where people can communicate, share pictures and videos, find new friends, or follow exciting topics. Today, the most popular social media platforms are TikTok, YouTube, Facebook, and Instagram. On social media, you can follow your friends, favourite celebrities, or even companies.

> **Idea for the teacher:** What platforms can the children recall? What platforms do their parents use? Grandparents? Siblings? Themselves? What do children think, why do people post pictures and videos of themselves on social media?

3. **A link** is like a virtual guide on the internet. When you click on a link, it takes you to another webpage or a different page on the same website. Links can be in text, pictures, or buttons, and they help you move from one place to another on the internet. For example, if you're on a news website and see an interesting article, the headline may have a link that, when clicked, opens the full article. Simply put, a link is like a doorway that leads you from one place on the internet to another.

> **Idea for the teacher:** The teacher can show what links look like: 1. Google the name of your kindergarten, for example:
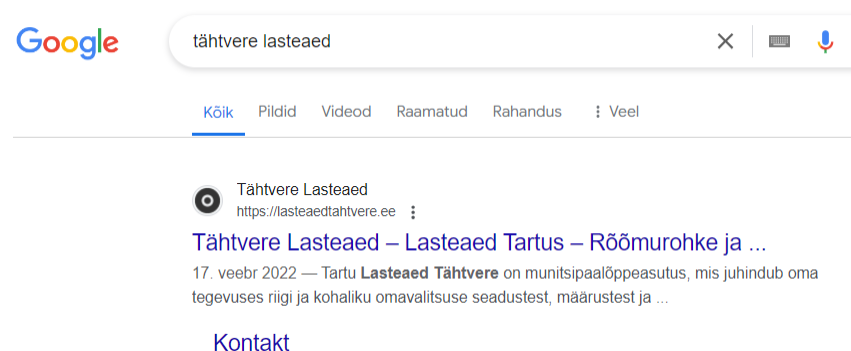
This is actually a link to a webpage—something you can click to go somewhere else. The kindergarten's website also has many links; for example, you can go and look at galleries:
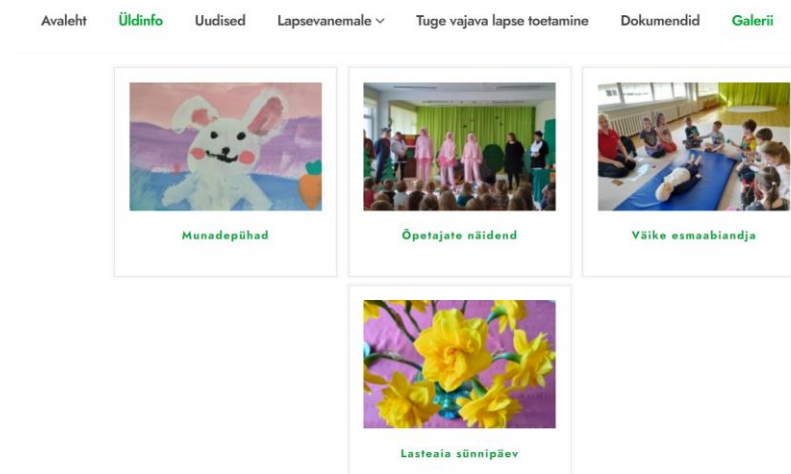
From there, you can click further and further. These are all links – like a chain that connects different places.

4. **An account** is like your personal digital house on the internet. It's a place where you can store your personal items, like emails, photos, or even games and apps. When you create an account, you set up a username and password that give you access to this digital house. Just like in real life, it's important to take care of your account to prevent others from damaging or viewing your belongings.

> **Idea for the teacher:** What could be a good username for a gaming platform? What usernames do the children already have (those who have one)? Why might you or might you not want to use your real name?

5. **A password** is like the key to your secret box or lock. It's a private combination of numbers, letters, or symbols used to protect your account or information online. When you create an account, for example, for your games or social media, you usually choose a password so that no one else can see or use your things without your permission. A good password should be complex and known only to you, and it should never be shared with others.

Idea for the teacher: Children could name places where passwords are used. Then, ask the children what they think are the simplest passwords and wrap up the activity by noting that if others in the circle named their password, it's currently too simple.

6.   **Data:** Personal data includes your name, age, address, or phone number – these are pieces of information that help others identify or contact you. On the internet, personal data can also include your email address, username, password, or even pictures and videos of you. It's important to keep your personal data secure because sometimes, people can maliciously use it to harm you or commit fraud.

Idea for the teacher: Discuss together what kind of information the children would share with a grandparent/friend/coach / a person waiting for the bus with you / the store clerk / the kindergarten teacher / a friend's mom / a YouTuber. What information would they definitely not share? Why?

7.   **Virus**: This is like a minor computer illness that can enter your computer or phone and cause damage. It can steal your data and money, send silly messages in your name, or deceive others. A virus can spread from computer to computer or device to device, usually when someone clicks on suspicious links (like "click HERE to get a free iPhone / Robux") or downloads a file containing malware. Viruses are spread through games and social media as well.

Idea for the teacher: Draw a disease virus and an internet virus. What do they look like? What do the children think, how can you fight and protect yourself against them?

8.   **Cyberbullying:** Cyberbullying is mean and unfriendly behaviour on the internet where someone bullies or insults others. This can include sending hurtful messages and comments, sharing silly pictures or videos, belittling or slandering someone publicly, or spreading someone's personal data (phone number, home address, a secret) without consent.

Idea for the teacher: Discuss with the children if they've seen such content online. What about in the physical world –at home, in the store, in kindergarten, in training, on playgrounds? Which do they think is worse, bullying online or in "real life"? What should you do if you're being bullied? What should you do if you see someone else being bullied? What should you do if you suddenly realise that you've bullied someone yourself?

9.   **Advertisement** is like a short story or picture you see on TV, on the computer, or the street at a bus stop. Very often, YouTubers, TikTokers, and gamers also advertise things. They get paid for this. The purpose of an advertisement is to tell you what you might want to buy or try. Advertisements can talk about new toys, delicious foods, or even new movies. The goal of advertising is to attract people to buy or try something new. For example, if you're a chocolate maker who has just released a new chocolate called "Šuššavušša," you want people to know about this new chocolate. You can buy big ads at bus stops with a picture of the new chocolate. You can make a TV commercial where a cute animated monster, Šušanna, runs around and sings a chocolate song. You can pay a YouTuber or TikToker to eat this particular chocolate in their videos. This way, people will become interested in the product and want to try it, too.

Idea for the teacher: Talk with the children about where they might encounter ads (e.g., street, grocery store, bus stop) and how they recognise that it's an advertisement? Or, for example, a more hidden ad – if a YouTuber drinks Limpa soda or a trampoline center has a Limpa room, what do you think, why Limpa? Has the soda maker paid for it?

2.3. MIL MATERIALS FOR BASIC SCHOOL (GRADES 7–9)

Higher education can benefit from a more abstract outline of the course syllabi, academically free to figure out the exact content of the courses. With basic school teachers, we took a slightly different approach, providing course outlines but also actually usable slide decks as materials that can be translated, modified and used however the teachers see fit. Preferably and ideally, the students will lead the design and choosing of the topics, as this will guarantee some additional internal motivation for the learning process.

Schools have different time allocations and formats to accommodate MILs in their curricula. Thus, we have created smaller detailed "building blocks" for MIL materials (see 2.4). Still, if a teacher has a full course for MILs, we propose the following four options for the general framework (topical outline, homework assignments and slide decks attached):

1. Syllabus (also available in Estonian, with an accompanying 170+ slide materials).
2. Journalistic media course syllabus (also available in Estonian, with accompanying 150+ slide materials)
3. Critical media literacy course syllabus (also available in Estonian)
4. Materials form 1.1, a training for teachers by TLU, can be used to construct a course for the basic school teachers, too (also available in Estonian and can be translated easily into other languages, e.g. via DeepL)

2.4. ADDITIONAL MATERIALS AND LESSON PLANS

To address teachers' concerns about the lack of resources for integrating media literacy into various subjects, as noted in section 1.1, BECID representatives from UT have developed a collection of practical examples to help incorporate media literacy into any lesson.

2.4.1. GLOSSARY OF MEDIA LITERACY TERMS

In order to overcome challenges related to unfamiliar terminology that might very well occur to any readers of this report, we've created an extensive glossary. This glossary clarifies key terms and concepts, providing teachers with the necessary understanding to effectively integrate media literacy into their teaching practices.

The term	Definition
Algorithm	A chain of instructions that allows one to arrive at a solution appropriate for the situation in question. For example, an algorithm can regulate what steps should be taken in a given case and what should be done when certain conditions occur. Today, one of the most common contexts in which this concept is referenced is the selection of content in social media news feeds. From all the content published on the particular platform, algorithms regulate the choice of those pieces that might be most engaging and interesting for the particular user. Among other considerations, the selection of content is based on what the user has been interested in in the past and what type of content currently attracts similar individuals. Content recommendation algorithms can have various goals in terms of user behaviour. One of the most important goals is getting the user to spend as much time on the website as possible.

Alternative media	Media whose principles differ from those of the mainstream media. The difference can be in the agenda (what the media outlet chooses to report on), relations with state and society structures, and content creation approaches, including the understanding of journalistic standards. The term "alternative media" does not refer to any particular media format and can exist in print, electronic (radio and TV), and digital formats. Alternative media are usually non-commercial, and their purpose is to inform their target audiences about topics that are not covered on the agenda of the dominant media at all, or the coverage by mainstream media does not represent the point of view of certain groups of society. For example, a particular subculture may have its own media that reports on the things important to it from the perspective of members of that subculture. Activists of an issue can create such media to promote a particular message or viewpoint. Sometimes, the materials of such media may also contain false information and manipulation. However, this problem does not characterise all alternative media as a media category.
App	A program that allows performing certain functions on a device. There are various specific apps for editing documents (for example, Microsoft Word), viewing e-mail, using various social media (such as Facebook or TikTok), and performing other activities. Web browsers are also apps.
Artificial intelligence	The ability of devices and programs to operate autonomously and make decisions in situations where these systems have not been given specific instructions in advance on how to act. Artificial intelligence is intelligence created by humans to be used in a technological system. Artificial intelligence systems acquire their operational capabilities through machine learning. The learning usually takes place by inputting a large amount of information into the system, and based on this, the program develops the ability to recognise the patterns in the data. As a result, the system is able to identify, based on similarity, the elements that were not present in the information used in the training. For example, if many pictures of cats are presented to the system during the training, the system will be able to recognise a cat in a new and previously unseen picture. Today, many different artificial intelligence systems exist. In public discourse, artificial intelligence currently often appears in the context of large language models. These models are trained on large volumes of text that (to a limited extent) represent human knowledge and the grammatical structures of natural language and are able to process and respond to user requests. Based on such models, chat robots (chatbots) are created, which can maintain a dialogue with users and answer various questions. However, since these models are incapable of human-like reasoning, they cannot evaluate the veracity of the information they provide and are prone to errors. This limitation results from the principle that artificial intelligence systems make decisions by making guesses based on the results of statistical analysis of the material used in training. For example, when

	responding to a question, such a system will answer with words that, based on the training material, have the highest probability of being related. One of the most popular services of this type is ChatGPT. Also, some systems are trained not only on text but also with visual materials and can create images or videos based on a textual description.
Astroturfing	An expression of opinion or support that resembles civic participation or an expression of public opinion is actually an orchestrated attempt to manipulate public perception and influence decision-makers (especially at the political level). Such tactics are often used by companies or political organisations that may organise and sponsor associations, movements, and other organisations, which then publicly express the opinion needed by the sponsors. In the online environment, trolls (the term is defined in this glossary) can also act on behalf of interested parties, and each troll can manage several accounts to give the impression that many people are expressing the opinion in question. The name comes from the artificial turf brand AstroTurf and, as such, refers to fake grassroots activity.
Ban	Prohibition to participate in any group or activity or exclusion of a member of a group or activity. The term usually applies to online environments, such as game communities, social media, or discussion groups. Banning is carried out by participants with privileged (administrator) rights. Bans are being issued based on the violation of rules that govern the particular environment.
Blog	A website that contains posts in reverse chronological order (newest posts at the top) and is usually about a specific topic. A blog is usually maintained by one person who chooses its thematic focus, but several people may also update a blog. Some blogs are online diaries whose authors document their lives and describe events and reflections. However, the news, opinions, and explanations related to a topic important to a broader audience - politics, sports, economy, technology, etc. - can also be covered in blogs. Blogs are a form of social media. They can be separate websites or part of blogging platforms - online services that allow anyone to create their own blog without technical knowledge of building and maintaining a website. Popular blogging platforms include WordPress, Blogger, Tumblr, and Medium.
Bots	Computer programs for autonomous performing of tasks. For example, a bot may be tasked to find or sort information according to pre-defined parameters, hold a conversation (chatbots), or distribute messages. The name comes from a shortened version of the word 'robot,' but unlike robots, bots often don't necessarily involve complex technical solutions and may be relatively simple programs. In the context of social media, bots are automated accounts that can be used to mass-distribute information in the interests of the bots' owner. Often, the task of bots is to amplify a message. For example, if an organisation or an individual wants to make a statement or viewpoint more prominent in the online information environment, bots can be used to promote the respective message - to share it and

	thus attract the attention of other users. Bots can also be used to target adversaries and ensure that opponents are drowned in critical responses to their messages. Bots can also be used to manipulate social media algorithms - for example, creating the impression that a particular topic is more popular than it actually is, thus making the given social media platform more likely to recommend the content in question to other users. Bots are often part of larger networks and centrally coordinated. Used like this, bots can be one of the tools of propagandists and manipulators. However, as a technological solution, bots are neither good nor bad – they can have both positive and negative uses.
Bullying	A form of regular physical and/or emotional abuse within a group (especially among students in a class or school). Bullying is a purposeful and repeated act of humiliating, intimidating, coercing, or otherwise causing distress to the attacker or attackers. What distinguishes it from other types of conflict is the power imbalance and strength in the relationship between the victim and the attacker. A related concept is mobbing, which refers to a similar phenomenon in the workplace. Bullying does not always take the form of a direct confrontation, and one of its manifestations is the social isolation of the victim – exclusion from the group, ignoring, not talking to him or her, and turning others against him or her. Bullying can also take place online (cyberbullying). This can also be a continuation of violence that has emerged during offline interactions. Attackers may send aggressive messages to the victim, spread rumours, publish private information, etc. Unlike face-to-face violence, which is usually confined to a specific place and time (such as the school during the day), online bullies may be able to reach their victims around the clock. Bullying is a systematic problem, and to prevent it, the understanding and actions of the employees of the institutions involved (i.e., schools) are essential. They should educate the individuals about unacceptability, punish those who engage in it, and introduce support mechanisms that allow victims to seek help.
Cancel culture	A phrase that refers to the exclusion of someone from social or professional circles because of the person's beliefs or actions. The phrase has a negative connotation and is usually used when one sees such ostracism as an unreasonably harsh response to the expression of an opinion that has a right to exist. Critics of cancel culture interpret it as an unjustified limitation of the freedom of expression. Cancellation can occur, for example, when an actor, athlete, or scientist loses contracts and career opportunities because he or she has said something that a particular segment of society deems unacceptable. Cancellation may include calls to go after individuals based on ideological differences. An opposite position is that people have the right to take action against those whose actions they deem to be wrongful, harmful, or otherwise unacceptable as a way of holding the perpetrators accountable for their choices.

Confirmation bias	The tendency of individuals to pay more attention to information that confirms their previous views and beliefs. Confirmation bias is manifested, for example, when an individual searches for and selects information: arguments in favour of an individual's pre-existing beliefs may appear more plausible and attractive than arguments against them. Such an outcome is exhibited most strongly in the context of issues that arouse emotional reactions or views that are deeply rooted in the individual's worldview. Confirmation bias is fueled by the fact that people often want to feel right. In addition, confirmation bias may happen unconsciously, and the individual may not perceive that he or she is making such an error.
Conspiracy theory	An explanation of an event or process that assumes the involvement of some hidden, powerful, and usually malevolent group of people in that event or process. Conspiracy theories explain the unplanned and accidental as the result of systematic and purposeful action of hidden forces. At the same time, conspiracy theories provide believers with the sense that order and logic exist in the often chaotic and unpredictable world, and this theory allows one to uncover what is 'actually' happening. Conspiracy theories tend to be hard to disprove for a variety of reasons. Sometimes, they offer explanations on topics that are not fully understood or studied and about which reliable and verified information is lacking. The unavailability of such information prevents the theory from being empirically tested. However, it does not follow that a conspiracy theory, which replaces the missing information with assumptions, is the most plausible explanation in such a case. Conspiracy theories are also often constructed to make them impossible to refute. For example, it may be impossible to articulate what kind of evidence (if they existed) would make conspiracy theorists change their minds. Such theories tend to place the onus on non-believers to prove that what the theory's proponents believe exists actually does not exist. For example, a conspiracy theory that a secret government runs the world requires proving that what is not objectively observable (the secret government) indeed does not exist. This task, of course, is impossible, but the conspiracy theory interprets the inability to directly observe such a government as an argument that such a government is hiding its existence. Conspiracy theories are often rooted in the beliefs and expectations that arise from people's worldviews rather than objective evidence.
Credibility	The quality that makes information trustworthy and reliable. Based on it, the information may be considered to be accurate and to be taken seriously. Information that can be credible if an individual himself or herself has been able to verify, through collecting information from various sources or by examining it empirically. Additionally, the credibility of information can be deduced if a source or distributor takes responsibility for it and this source and distributor is reputable (i.e., is known to disseminate accurate information).

Critical thinking	The process of evaluating the available evidence, statements, etc., to arrive at a rational and justified judgment about the truth and reliability of this information. Through critical thinking, it is possible to see errors in reasoning and logic, data manipulation, gaps in evidence, and other flaws. Critical thinking helps protect an individual from the influence of misleading messages. However, critical thinking is not about criticising everything and believing nothing.
Deepfake	An artificially created image or video that combines elements from different sources. For example, a video of one person saying something can be combined with a video of another person to create a video that appears to show that the other person is using his or her voice and facial expressions to say what was actually said by the first person. Another example of a deepfake is transferring a representation of one person's face or other body parts to an image or video of a different person. Deep fakes are created using artificial intelligence technologies that have made the complex actions of creating and blending images and videos relatively widely available today. Deepfakes are sometimes used for entertainment purposes, but this approach has dangers when it comes to propaganda. Propagandists may create the impression that a public figure has made a claim that he or she has not, and this may either damage that person's reputation or influence the audience's choices (for example, in an election).
Digital communication	Communication (exchange of information, maintenance of relationships, conveyance and reception of messages) that takes place in the digital environment – online, by using digital technologies (computer, phone)
Digital security	Security measures that need to be observed in the digital environment. They include actions related to protecting communication devices (phones, telephones) and accounts (social media, e-mail, bank) against unauthorised access. To strengthen a device's protection, one should regularly update its software, use an antivirus app, and protect the device with a secure, hard-to-guess password, fingerprint scan, or other means. Physical access to the device by others needs to be prevented. The same password should not be used for different accounts so that in case of theft of such a password, an attacker does not gain access to other accounts. Two-step authentication must be enabled (in this case, when logging in to the account, alongside the password, a one-time code is required, which is sent as a text message or displayed in the mobile app). Clicking on suspicious and unfamiliar web links, especially those sent to the user by unfamiliar senders, should be avoided. Digital security also requires being critical of information sources that encourage you to do something (invest, transfer money, enter account access data, install some software on your device) to avoid possible fraud (see: phishing).

Disinformation and misinformation	Types of false information. Disinformation refers to deliberately false information intended to achieve a particular effect or cause a specific behaviour in the audience. To achieve this, the information provided may be distorted, essential details withheld, and unfounded claims made. In contrast, misinformation is information that is not created or disseminated with the intent to cause harm but, due to the error or carelessness of the communicator, is incomplete and misleading and does not give the audience a complete and truthful picture of what is being communicated.
Fact	A unit of information that refers to something true, actually existing. Facts are empirically verifiable (observable objectively with human senses). Facts are independent of beliefs and opinions.
Fact-checking	Evaluating the truth of certain statements or claims. Every media user can check the facts by comparing what is said in the outlet consumed by him or her with the information found in other reliable sources or by researching the origins of the given statement. Fact-checking is also a genre of journalism in which journalists examine statements- usually made by publicly known persons, such as politicians, or claims that have gained attention on social media. Fact-checking journalists assess the truthfulness of the given statement and provide evidence that supports such an assessment. This is one of the ways in which the spread of false information in the information environment can be limited.
False balance	Bias of giving equal weight to all parties involved in an event or discussion. It can be encountered in journalism stories. Different opinions exist on many topics, but not all are equally supported by facts and current knowledge. The task of journalists is not only to convey different points of view but also to understand the topic themselves to such an extent that they are able to determine which of the various positions existing in society on the relevant issue are the most prominent and justified. Accordingly, these positions merit being included in the stories. Treating all opinions as equally important creates the impression in the audience that there is more ambiguity than actually exists on a given issue. For example, some people believe that the earth is flat. However, when journalists write about the shape of the planet, there is no reason to include such opinions; otherwise, such materials may give the impression that the question of whether the earth is round is not entirely settled. The same is true of climate change: although most scientists have concluded that it is occurring and caused by humans, some people and organisations disagree with these conclusions for various reasons. Putting their opinions side by side with findings by scientists can give the false impression that the issue is still not settled and there is a lot of genuine disagreement and confusion about it.
Filtering	Selection of information by weeding out the irrelevant or unreliable. The ability to find, evaluate, and select the necessary information is one of the basic skills of media literacy. It allows one to keep up with current developments, solve various problems that require advice or instructions, and use one's time more efficiently so that one does not

	have to spend it on unneeded information. Information filtering helps avoid information overload - a situation in which there is more information than the individual is able to perceive and evaluate, which leads to the inability to make decisions. The importance of filtering is increased because the amount of available information is constantly growing, and many interested parties create and distribute information and want to attract people's attention by various means. People, therefore, need to be able to decide what information is worth spending their time and cognitive resources on. Effective information filtering is possible when an individual has defined what information he or she wants and is able to use the means at his or her disposal to select this information and reduce the proportion of unimportant information in his or her environment. One of the ways in which filtering is possible in social media is by following information sources that are relevant to the individual, unsubscribing from irrelevant ones, and also avoiding clicking on unimportant or low-quality information sources, thus not signalling the information recommendation algorithms that the individual wants to receive such information.
Haters (also anti-fans)	Individuals who strongly dislike something - a person (for example, a celebrity) or a collective, phenomenon, or object (for example, a music genre, band, or song) - express this dislike. Antifans may form groups based on a shared dislike, and their activities may include not only posting negative comments online but also spreading rumours, sending hateful messages to the subject of hate, disclosing their personal information, and other mean actions. Therefore, anti-fandom can also manifest as bullying (see the concept in this dictionary). However, any publicly expressed criticism, which may be justified, is not the same as aggression.
Identity theft	The misappropriation of personally identifiable information allows one person to impersonate another person to perform unauthorised activities. Stolen can be identity documents (such as passports) and non-material information (state-issued ID numbers, passwords, internet bank login data, fingerprint information, digital signature, etc.). Identity theft is often done to acquire material valuables unlawfully, but immaterial gains are also possible. For example, a criminal can take out a loan in another person's name, which the lender will expect from the victim. Identity theft can also be a way of trying to cover up the traces of someone else's crime. The risks of identity theft can be reduced by following the principles of information security - including using secure passwords and two-step authentication, as well as not revealing sensitive information about yourself to others (identity document or bank card data) and keeping the digital devices and apps regularly updated and safe from viruses (see digital security).

Influencers	Social media users who promote various products or brands to their followers for personal gain. Influencers create content that engages an audience. The content often centres around the influencer's persona and may or may not contain truthful, useful, or entertaining information. The size of the audience and its other characteristics affect the influencer's income. Followers of influencers may develop an emotional attachment to them. This increases followers' trust in what influencers say and increases their receptiveness to advertising messages.
Information	An aggregation of data or details on any subject. Based on the information, knowledge can be created, but the information itself is not knowledge. For information to become knowledge, a person must give it meaning, interpretation, and explanation. Unlike information, knowledge is directly applicable in creating something or explaining a process in question.
Internet	A global computer network where information can be transferred and various services accessed, including e-mail, chat, and file sharing. The information available on the Internet and the software that operates the services available on the Internet are located on servers – computers that transmit the requested information upon receiving a command. Although the terms "Internet" and "Web" tend to be used interchangeably, they differ. The Internet allows devices to transfer data, but the World Wide Web allows access to web pages. Many apps that enable accessing various services on a device, such as navigation or email, rely on the Internet rather than the Web. In contrast, browsing web pages by visiting addresses (such as www.google.com) takes place on the web and requires a browser app.
Media literacy	A set of skills and competencies related to the ability to use media - access, evaluate, create, and disseminate information
News	A journalism genre that informs about current events. Typical news topics include politics, public affairs, economics, sports, culture, and entertainment. News stories are written in a way that answers the fundamental question: who? what? when? where? and why? Journalistic standards require that the style of presentation of information in the news is neutral. The main task of the news is to provide the facts so that the audience can learn about what has happened. However, if a news story employs emotionally charged words or overtly expresses an attitude (for example, the author himself or herself declares, instead of referring to sources, that someone or something is 'evil' or 'good,' 'cowardly' or 'brave,' 'valuable' or 'useless,' etc.), this is a sign of bad journalism. Such style suggests that the author of the story is trying to manipulate the audience into developing particular views instead of providing facts that would allow the audience to develop opinions on their own.
News	A genre of journalism that reports on current events. In creating the news, the professional standards of journalism must be followed: the truth must be told, reliable sources must be used, information must be collected from all involved parties, and in case of contradictions,

	the validity of the opinions of the various parties must be evaluated. The reporter must be independent of the parties involved. In the news, the presentation of information is usually neutral. The news should be separated from the author's personal opinion: journalists typically express their personal views in the comments and opinions section of the media. News has various standard categories. For example, domestic politics, public events, foreign policy, economy, sports, culture, entertainment, etc. Journalists use several criteria to judge whether an event is newsworthy—for example, timeliness, proximity, conflict, significance of the event to the audience, etc.
Open source	Software source code that is freely available for modification, reuse, and distribution. Source code refers to a set of instructions written by the programmer through which the specific piece of software is created and its functionality is defined. If the source code is closed, others are not allowed to change the program and create new versions of it without the permission of the program author. Open-source programs are often built as non-commercial and public benefit projects and can be developed through the collaboration of different programmers. Popular open-source software includes the various Linux operating systems, Firefox web browser, and Libre Office, which is an alternative to Microsoft Office. In a broader sense, the term "open source" can be applied to other areas in which the processes, plans, blueprints, and other documentation of something are available and transparent to observers from the outside.
Opinion	A judgment, point of view, or statement that represents the views of a person or organisation and their interpretation of the facts. The opinion is subjective and is not subject to fact-checking. However, the justification of an opinion can be evaluated. A statement of opinion may contain references to specific facts. These facts, in turn, can be verified, and if they are wrong (that is, they are not facts), it is possible that the opinion is based on false information and is therefore not valid. The opinion may also contain errors of logic and reasoning, and opinion can be checked for such problems. A quality opinion must be based on true facts, contain complete information, and rely on reasoning that is rooted in logic.
Phishing	A form of manipulation in which scammers extract the information they need from the victim or persuade the victim to do other activities, such as to install spyware on their device (see the term in this dictionary). An example of a phishing attack is an e-mail message, the sender of which pretends to be a representative of a reputable company or institution and asks the addressee either to click on a link where personal data must be entered or to open an attachment that infects the victim's computer. Phishers can use various means of communication, including phone calls and text messages. Scammers also distribute malicious QR codes, and after scanning such a code, the device may attempt to download malware or open a website that imitates a legitimate service. The term "phishing" is derived from fishing based on the similarity of action: the fisher (attacker) throws a hook with a bait that the fish (victim)

	fails to recognise as such.
Platform	A service that connects suppliers and consumers of certain resources. Communication platforms (including social media such as Facebook, Instagram, and TikTok) connect various parties involved in information and communication activities, such as journalism media, politicians, and advertisers on the one hand and their audiences on the other. Likewise, platforms connect individuals who want to find each other, maintain contacts, and exchange information. In a broader sense, a platform is any infrastructure that allows third parties to spread messages or offer something to others. For example, mass media outlets are platforms that may allow certain people and organisations to promote themselves (for example, to advertise or express opinions) under certain circumstances. Marketplaces are platforms that enable sellers and buyers to meet. Computer operating systems (Windows, Linux) are platforms that can run software from various independent developers and users can run these.
Podcast	An audio recording that is centred on spoken words and can be listened to or downloaded on the Internet. Podcasts can be in a variety of genres and formats. For example, a podcast can be based on interviews, discussions, or stories regularly produced by an author or a group of authors. Podcasts usually are published on websites or music streaming services (such as Spotify). For the audience, the experience of listening to podcasts is similar to that of the radio.
Propaganda	Messages are designed to present a topic or issue in a way that is beneficial to one party and influences the views of an audience. Propaganda uses various manipulation techniques to create a specific impression. It can also include actual facts, but the use of facts is subject to the interests of the propagandist. To achieve the desired effect, other facts may be omitted, thereby changing the message, and certain interpretations may be emphasised. False information, faulty reasoning, and words or images that evoke a particular emotional response in the target audience may also be used.

Pseudoscience	Explanations or claims passed as being based on scientific evidence and theories, but do not rely on scientific evidence or are not obtained by improperly applying the scientific method. An example of pseudoscience is astrology, which claims that the position of celestial bodies can be used as a source of information about individuals and events on Earth. Testing such a theory would require systematic studies in which the life events of many people living in a given area would be measured simultaneously regardless of their belief in astrology and compared with the positions of the celestial bodies. Some theories used to be considered scientific but later turned out not to be consistent with scientific explanations of how the world works. An example of such a theory is phrenology, which was developed in the 18th century and draws conclusions about a person's character based on the shape of his or her skull. Since the 19th century, it has been recognised as pseudoscience. This process of reconsideration and reclassification of theories illustrates a core feature of science: scientific conclusions are constantly being tested, and knowledge is continuously being developed further. If something was considered scientifically accurate in the past, it does not mean that it will continue to be the most accurate and realistic explanation in the future. As new evidence emerges, science may change its explanations of relevant processes and phenomena to align theories with the data that researchers have.
Social media	A type of interactive online media where users can post content and interact with other users based on said content. Today, social media such as Facebook, Instagram, TikTok, and X (formerly Twitter) have become essential venues where people follow the news, discuss current events, maintain interpersonal relationships, and are exposed to persuasive communication (such as advertising or political campaigning).
Social networks	Acquaintance and interaction relationships. Every person who is known by an individual and in interaction with him or her is part of that individual's social network. Social networking can mean both maintaining existing social ties and establishing new ones. Sites like Facebook, Instagram, or TikTok are often colloquially called social networks. However, this is a misnomer. Social networking is not limited to these online sites, and individuals create their social networks in many other settings, including at home, work, and social events. Each individual creates his or her own social network - a social network is not something that can be developed by programmers who build online services. These sites host many social networks that overlap with or complement users' networks in the physical world. These sites are not social networks more than a company or a city, in the sense that these also bring together different people who interact and exchange information. The correct term for the respective online services is social networking sites (online sites where social networking takes place). These sites can also be called social media. However, social media are a broader category of media that includes not only social networking sites but

	also other services that allow users to post their content and interact based on it (including blogs, online forums, and user collaboration platforms for joint projects).
Spyware	Software that collects certain types of information from the user's device and sends it to third parties over the Internet. Such programs are diverse and may track the use of the Internet and other services, collect private data, passwords or other login information, information about the device's technical parameters and vulnerabilities, etc. Spyware is sometimes installed on a device without the device owner's knowledge. However, the surveillance may be done by a program that the user has installed knowingly because it provides useful functionality. Free apps that display ads tend to collect user-related data, which are either used to deliver targeted ads or resold.
Trolls	Individuals who deliberately behave in provocative, non-constructive, and aggressive ways in the online environment, promoting particular messages and opposing messages they disagree with. Trolls may act this way on their own, but trolling is also one of the techniques used in organised manipulation campaigns. In such cases, trolls are tasked by the client to spread certain information or messages and target specific people or opinions. Trolls may use bots to scale their activities. Such actions do not necessarily persuade other social media users to favour a particular opinion or position. Still, they can hamper the expression of certain views in public spaces, as the authors of those opinions may refrain from expressing their views in the face of the possibility that they would be harassed.
Truth	Compliance with reality. Truth can be considered at the level of individual facts and the level of a collection of facts and judgments made on them and knowledge created. A fact is true if there is credible evidence that supports it. For example, a given fact is true if it is consistently observed through scientific methods. However, various claims often rely on more than one discrete fact, and this can make it difficult to judge the truth of those claims. Not all combinations of true facts lead to true statements. For example, by selecting only a few facts or highlighting certain facts, it is possible to change the message significantly, and a misleading impression can potentially be created. Facts can be interpreted differently (i.e., different meanings can be assigned to them) according to the interpreter's worldview. Human knowledge and facts about the world constantly expand, and previous knowledge is continuously tested and reevaluated. This means that our current knowledge of various topics may still be incomplete. Consequently, what is currently held to be true is not necessarily true in a universal, absolute sense. In the context of this problem, by truth, we should understand the best, most complete, accurate, and up-to-date knowledge currently available that is based on verifiable facts.

Viral content	Content that becomes popular and is widely shared in an information environment, particularly on social media. The concept is based on the analogy of the rapid spread of a viral infection from one person to another. Viral content, too, spreads among people – those who have been exposed to it want to share it. Content creators often have an interest that their content reaches the largest possible audience and therefore try to give it the qualities that might make the audience want to share it. Virality can also be unplanned and sometimes even unwanted: the audience can grow larger than the content creator or publisher expected. For example, people who do not belong to the originally intended audience may perceive the particular piece of content differently than intended, which may also have undesirable consequences.
Vlog	Video blog or regular updates on a specific topic in video format. Usually, the author is seen or heard in the videos. The thematic range of vlogs is unlimited. Many vlogs are on social media where you can upload videos, such as YouTube, TikTok, and Instagram.
Web browser	A program that allows the user of a device (computer, phone, tablet) to visit web pages. There are many different browsers - their basic functionality is similar, but they differ in appearance, some features, and the level of security and privacy provided. Since the browser processes information about the web pages that the user visits and parses the information published on these pages, including their code, the privacy and security aspects are of great importance. Popular browsers include Mozilla Firefox, Google Chrome, and Microsoft Edge.
World wide web	An information system that allows publishing documents - web pages - on the Internet and accessing them based on a shared protocol. Web pages are hypertext documents - they contain references (hyperlinks or simply links) to other such documents. Hyperlinks allow users to move from one document to another on the web. Hypertextuality, which refers to the connectivity of documents, is one of the fundamental principles of the World Wide Web. To access the World Wide Web, a browser is needed (see the corresponding explanation in this dictionary).

2.4.2. INTEGRATING MEDIA LITERACY INTO SUBJECT LESSONS

Since (digital) media and information literacy are closely tied to language and texts, there are numerous opportunities to integrate them into Estonian language and literature lessons. A media-literate individual should be able to, among other things, understand the objectives of news and other media content; distinguish between fact and opinion; recognise bias in stories/sources, potential author and personal biases; engage critically with media content; and be a motivated user of media for deeper analysis. While using newspapers in the classroom is perhaps the most common approach, there are certainly many other valuable ideas to explore. Two examples:

1. **Assignment Objective:** The goal of this task is to develop students' critical thinking skills and their ability to help a friend question or abandon a conspiracy theory they believe in and share on social media. For each strategy, you need to justify your choice and discuss the potential risks involved. All claims should be supported with examples and/or academic references.

    a. **Preparation:** 1. Watch this video illustrating successful communication with a conspiracy theorist – BBC video. 2. Read recommendations on how to talk to a conspiracy theorist – European Commission guide.

    b. **Select three different approaches** that you could use in your communication with a friend who believes in a conspiracy theory. For each strategy, explain why you chose it and how it might help your friend critically evaluate their beliefs.

    c. **Discuss the potential risks** associated with using these strategies. For example, consider how your friend might react or what possible consequences could arise for your relationship. Provide examples or references that support your discussion.

1. **Assignment Objective:** Understanding the various genres of social media helps develop students' media and digital literacy skills. Genres like "That Girl," mukbang, ASMR, and vlogging are just a few examples of trends where exploring their background and associated "rules" provides students with a broader understanding of how social media functions.

a. **Group Work Example (3-4 people): Teach Us Something New About Digital Literacy!** In this assignment, you will explore a popular social media genre to enhance your media and digital literacy. You'll start by researching the genre using academic sources and preparing an introduction that covers its origins, rules, and impact. Then, you'll investigate why people create content in this genre and its effects on different audiences. Consider its future and how it might be used in your career or current role. Finally, present your findings creatively. You can use internet examples and create your own content, such as a video or written report. Make sure to choose a unique genre, as each group must cover a different one. This assignment can also be linked with other subjects, such as presenting historical topics through social media formats.

b. This assignment can be integrated with other subjects. For example, 17th-century Enlightenment inventions could be presented as a vlog-style video, while ASMR videos might offer English language practice.

The examples listed above, alongside numerous other ideas regarding MIL education, can be found in Estonian [at this link](#).

Additionally, we want to share four more resources that are ready to use and take little time and effort from the facilitators. Try them out and contact us – we would love to answer any additional questions and hear how it worked out!

- [Analysing the content of content creators in the classroom](#) - This educational resource offers a comprehensive guide for educators and youth workers to critically engage students with the content produced by influencers and social media personalities. It can be seamlessly integrated into various subjects, such as media studies, social studies, or language arts, enabling discussions on media influence, digital literacy, and the dynamics of online communities. By using this resource, educators can help students explore how influencers impact public opinion, cultural norms, and consumer behaviour.

- [Teacher's resource – scam deconstruction aid materials](#) - This resource is crafted to equip educators with the tools needed to help students identify and analyse scams

and disinformation they may encounter daily. Suitable for integration into subjects like social studies, computer science, or ethics, the materials offer a clear framework for understanding the methods behind online scams and the broader issues related to information disorder. With this resource, teachers can foster critical thinking and digital literacy in their students, empowering them to recognise and avoid deceptive practices and misleading information.

- Using Pracademic Approaches to Advance Digital Media Literacies - This resource is designed for educators and practitioners seeking to enhance digital media literacy through practical, research-informed approaches. Drawing from the experiences of BECID's media literacy experts, this material outlines how pracademic methods—blending practical application with academic research—can be effectively utilised in educational settings. It is particularly suitable for those working on initiatives aimed at younger audiences, such as interactive games or physical space interventions. By following the detailed planning steps shared by experts, educators can create impactful media literacy programs that resonate with today's digital landscape.

- Teaching Media Literacy Through Podcasting - This resource is aimed at educators looking to integrate media literacy into their teaching through innovative and practical methods. Drawing from the University of Tartu's "Media in the Era of Disinformation" course, this material highlights the use of podcasting as a dynamic tool for deepening students' understanding of media literacy. By engaging in the creation of the "CTRL+ALT+MEDIA" podcast, students not only explore media-related topics but also develop essential skills such as research, critical thinking, and communication. This hands-on approach offers educators a fresh perspective on how to make media literacy education more relevant and impactful in today's digital age.

3. BEST PRACTICES TO SHARE

To showcase the diverse activities of our partners within T4.1, we will highlight seven distinct media literacy interventions from across the three Baltic countries. These examples demonstrate how both digital and physical spaces can effectively engage various target groups, enhancing their media literacy and digital literacy skills. They offer valuable insights for professionals both within and beyond the field of education, presenting effective strategies for reaching different audiences.

Many of these interventions were developed in collaboration with other organisations in our regions, highlighting the benefits of aligning goals with partners across the Baltic countries.

Notably, examples such as Digikäkk and the TikTok House were made accessible to the general public, allowing the materials to be adapted for specific target groups in media literacy education. Additionally, BECID's activities gained public attention (all of our media appearances are listed in our yearly reports), further promoting media literacy development and accessibility.

3.1 DIGIÄKK AND PRACADEMIC APPROACH IN HIGHER EDUCATION

As described in chapter 1.3, UTARTU launched a new course, "Playful Development of Media Literacies", in the spring semester of 2024. The course explored the media world of children and youth and aims to provide practical skills for teaching media literacy through games, ending with a big digital literacies event, DigiÄKK. The digiÄKK format entails a series of rapid-learning sessions in which participants transition to a new learning station every 10 minutes. At each station, they are introduced to new content.

Two-course leaders represented different spheres and built on the pracademic approach – Maria Murumaa-Mengel from the theoretical-academic and Inger Klesment from the practical-educational. Pracademic approaches are described as collaborative and research-oriented relationships between academics interested in practice concerns and practitioners who are reflexive and seek to implement based on research (Powell et al., 2018). That also includes bringing together people from various backgrounds. Posner (2009: 16) describes individual pracademics as adaptable, boundary-spanning brokers and cross-pressured actors who "breathe life into networks, and through their relationships serve as the glue that

holds networks together and sustains them over time." In this course, we primarily sought pracademic solutions, too – ones that would serve as translation between the research community and the practical field. The course began with theories of play and learning and an overview of children's media worlds. Then, students were asked to develop ideas for games in physical spaces that would help the kids learn something about digital media.

After a training day at a local kindergarten where students could still work on the details of their games and get feedback from teachers and fellow students, the course concluded on May 13, 2024, with Estonia's First Internet Safety Drill for Preschoolers, as we called it, "DigiÄKK", where students taught preschoolers from Tartu kindergartens to navigate the internet safely through playful activities. Ten groups from different kindergartens in Tartu gathered to play ten games designed to teach them how to behave safely on the internet. Around 200 children and 50 university students played games like "Viruses and Hackers", "Advertisement Detectives" and "Little Red Riding Hood in Digital World." Although the focus of the event was on the internet and screens, there were no screens present. Learning took place through age-appropriate games that encouraged discussion and movement. For instance, children had to decide whether a sentence read by the game facilitator was related to harmful or beneficial online content and indicate their answer with an agreed-upon gesture. Additionally, preschoolers learned about different types of advertisements, the work of a web police officer, cyberbullying, and the risks of sharing personal information. Read a [blog post about the event through participating student's eyes](). Or some of the media coverage of the event: [Õhtuleht](), [Tartu Postimees](), [Õpetajate Leht](), [Estonian Association of Youth Workers webpage]().

We recommend organising similar events, as the necessity and interest in such an event were evident from the registration for the rehearsal day and DigiÄKK – both filled up within an hour and a half. Children are independent media users from a very early age, and thus, digital media literacies should be a crucial part of formal and non-formal education. In addition to students and preschoolers, the event excited teachers. They viewed the students as future colleagues and were a bit envious that they didn't have such opportunities during their studies. The event also allowed teachers to expand their repertoire of games and knowledge. Airi Koorberg, a Tartu Karlova Kindergarten teacher who attended the event with the Tähepärlite group, mentioned that children are increasingly exposed to digital devices. "They all have phones, they have tablets. Some even have two

phones – when one is charging, and they use the other. When they go home from kindergarten, they dive into these devices," described Koorberg.

Kristiina Ess, a teacher with long-term experience who attended the event with the Fairies group from Tartu Hellik Kindergarten, agreed that the internet and digital devices interest children. Reviewing critical concepts before the event, it became clear that children's digital security knowledge varied greatly. Ess mentioned that their group had previously discussed digital topics, based on the worksheet provided by BECID experts, in the context of playing computer games and sharing usernames and passwords. "Such events are important because the digital age is advancing rapidly, and it's good for children to be aware of these topics, especially cyberbullying and other issues they will face in school," said Ess.

Figure 7. Tartu pre-schoolers playing internet-related games at DigiÄKK in May 2024.

In conclusion, the DigiRapid format provides a tailored learning experience for teachers from various media generations, recognising the influence of generational identity on media habits and attitudes. It acknowledges how shared experiences with technology shape generational identities, often leading to a divide between younger and older generations. The format also addresses concerns fueled by sensationalist media coverage, which tends to exaggerate the negative impact of technology on well-being, especially among younger

people. By offering this balanced perspective, DigiRapid promotes a more nuanced understanding of media use across generations.

Meanwhile, BECID experts from the University of Tartu are developing an academic research paper on creative media literacy interventions, action research, and playful approaches, with the DigiRapid and many of the following examples featured as case studies from BECID.

3.2 DIGIKÄKK AND LEARNING FROM OTHERS' MISTAKES

An Estonian proverb states that a fool learns from their own mistakes, and a wise person learns from others' mistakes. To facilitate learning from others' errors made in digital space, we aimed to create engaging educational material in an unexpected physical space. Digikäkk is a follow-up wordplay, building on the previous example of DigiÄKK. Translated, Digikäkk means "Digital Blunder."

Figure 8. A group of teenagers reading about others' digital blunders and adding their own phone case wall was set up in the city centre of Tartu in May 2024.

We hoped that people would anonymously share some of their biggest digital faux pas in a public space and, in this participative act, would find cathartic use of confessional spaces, all the while providing cautious tales for others. We were inspired by projects such as

PostSecret, where intimacy is built on affective identification (Berlant, 2009), as the act of sharing personal publicly and also developing people's emotional literacies (Poletti, 2011).

Very quickly, we saw an "affective scene of identification" formed among strangers and promising a certain experience of belonging, a reassurance and discussion about identities and practices (Berlant, 2017), a sort of intimate public (Michaelsen, 2017) constituted through imaginary relations. What we mean by that is – people shared embarrassing moments from their personal histories, such as sending a message to the unintended audience, being under the influence of alcohol and sharing nudes, etc. In doing so, they formed a cultural intimacy about the „recognition of those aspects of a cultural identity that are considered a source of external embarrassment but that nevertheless provide insiders with their assurance of common sociality" (Herzfeld, 2016: 3).

To engage Tartu residents and visitors of the 2024 European Capital of Culture in co-creating educational material that is quick to contribute to, environmentally friendly, scalable, eye-catching, portable, and reusable, we developed the concept of utilising discarded phone cases to create a writable wall. We contacted Foxway, a company that provides a comprehensive electronic device reuse program, and requested the phone cases. We then attached these cases individually to a metal grid.

The wall's main goal was to invite people to share their digital missteps, the most embarrassing and funny stories from which others could learn.

Over the course of two days, the phone case wall attracted over **10,000 visitors** (we timed the phone case wall to be accessible during the annual meeting of UT alumni and other beginning-of-summer events). Attendees paused to read the thoughts and experiences of others and to share their reflections with companions. The installation provided material for contemplation, reading, and initiating discussions, even for those who preferred not to contribute in writing.

Observations of the activity around the wall revealed that it fostered intergenerational conversations and interactions among strangers. Families with children were often drawn to the colourful display, with children eagerly pulling their parents to explore the wall. After some persuasion, parents engaged with the writings, smiled, and added their own stories.

Figure 9. Examples of writings on phone cases.

Elderly visitors also stopped by, gaining a unique and accessible glimpse into the digital world of younger generations. Many took photographs in front of the phone case wall and shared the best bits or most relatable blunders on their social media.

3.3 PUTTING TIKTOK INSIDE A HOUSE TO TEACH ALGORITHMIC LITERACIES

Since "TikTok" and "House" are not often found in the same sentence, let's start with defining the project. The TikTok House is a physical space media literacy intervention that brings TikTok to life in a cosy room, ideally situated in a highly visited location, such as part of a larger event. Visitors can quickly learn about the TikTok algorithm, its workings, and the data it collects by reading information circles hanging from the ceiling. This creates an engaging pathway, with each circle delivering concise content limited to two sentences. Our decision to implement this intervention in a physical space was inspired by the findings of Literat et al. (2021), who highlighted youth awareness of information disorders on social media, especially TikTok. This underscores the importance of such interventions. However, it also suggests that interventions may be influenced by the prevalence of misinformation on platforms like TikTok.

The main goal of the TikTok House is to provide brief, understandable descriptions that demonstrate how the algorithm reflects users themselves and to highlight the possible risks associated with using the platform. However, the aim is not to scare people away from the platform. As algorithmic literacy is fundamental for safe social media usage (Siles et al.,

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2022; Digital Moment, 2023), we aimed to empower everyday media users with information to manage their TikTok experience and make informed decisions about platform usage.

The TikTok House has been set up in different seasons and cities in Estonia, showing its ability to adapt to various formats and times. Our first TikTok House, at the end of 2022, was located in a small glasshouse in Tartu's Christmas village. For the second exhibition in the summer of 2023, during the Estonian Opinion Festival, we collaborated with the local vocational education centre, Järvamaa Kutsehariduskeskus, to build the house.
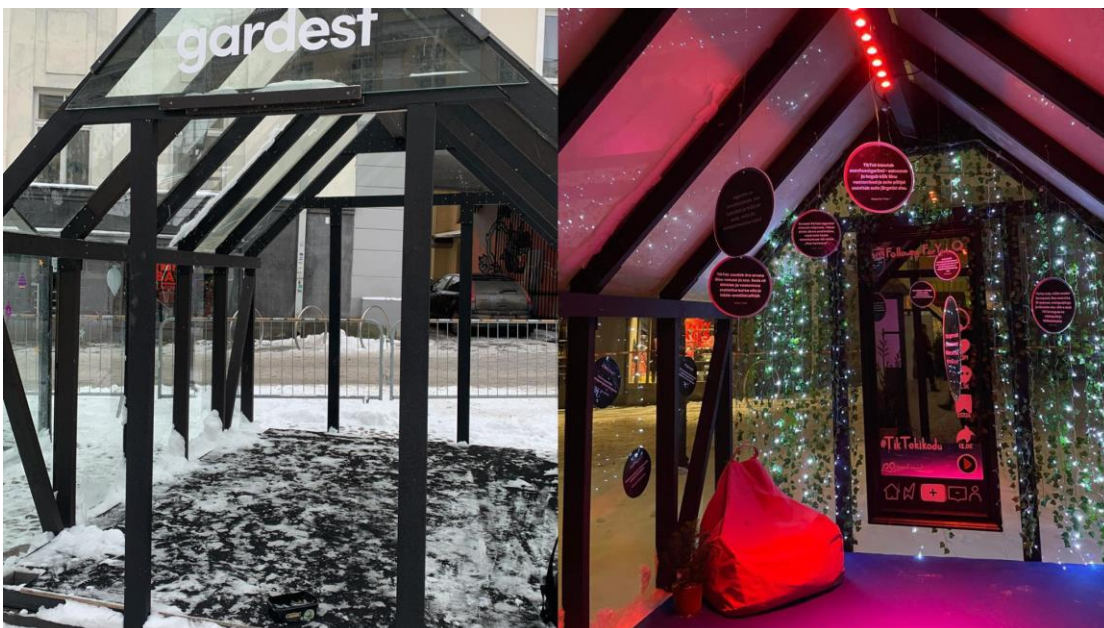

Figure 10. The process of building the first TikTok house.

Each iteration of the TikTok House has been customised to suit the specific event and audience. For instance, the winter edition in Tartu was situated in the heart of town for nearly two months, attracting a diverse range of age groups in a cold climate. To fit this setting, the exterior of the house was covered with various facts about TikTok, such as where the platform has been banned and Estonia's regulations regarding the social media app. These facts were laminated to endure the weather and handling.

On the other hand, the summer edition of the Opinion Festival had a shorter duration, allowing for more experimental elements. Consequently, the intervention focused on exposing sneaky advertisements on TikTok, which can be amplified by the recommendation algorithm. A significant aspect of identifying relevant examples for TikTok users involved active engagement with the app itself, as well as reading youth opinion articles and

participating in overall discourse on TikTok. This approach helped us find what topics and trends were capturing the interest of users at the time, ensuring that our examples resonated with the audience. To enhance engagement with visitors, physical items were employed to illustrate examples, making the intervention interactive and impactful.

Key examples included:

- Companies making TikToks seem like real people (Maheshwari, 2021).
- Beige homes and romanticised living, potentially monetised by influencers (Manavis, 2023).
- The trend of searching for cheaper alternatives to expensive products (Das, 2023).

Figure 11. TikTok House presented at Paide Opinion Festival (Aug 2023).

To attract visitors, both TikTok Houses were designed to scream "TIKTOK!" with colours matching the TikTok logo and decor reminiscent of a Gen-Z TikTok creator's room. The highlight was a mirror painted to resemble the TikTok For You Page, encouraging selfies and social media shares. With elements such as pink and blue LED lights and a large mirror, we aimed to captivate visitors familiar with TikTok as well as those intrigued by the bold design and curious to learn something new. Across both TikTok House exhibitions, the project has attracted over 50,000 visitors.

Based on our experiences, we can confidently conclude that the TikTok House can be adapted for any location and time. All the designs and instructions necessary for building a TikTok House are available on the BECID website. By offering open access to the key steps of this project, we hope to inspire more innovative, "out of the box" ideas for media literacy education worldwide.

3.4 MEDIA CLUB AS A PROJECT MANAGEMENT CRASH COURSE

BECID was an official partner of the Media Club project, which was launched in March 2024 and funded by the Embassy of the Federal Republic of Germany. As part of this project, University of Tartu students organised 140 workshops over three months to develop digital media skills in kindergartens and grades 1–9 across Estonia, focusing on rural areas.

The Media Club experience highlights the importance of making project funding available to students and allowing them to coordinate projects. One of the two project coordinators, Gretel Juhansoo, was a bachelor's student at the University of Tartu during the project application and most of the implementation period. This demonstrates how offering students the chance to lead projects can be instrumental not only in their personal development, especially regarding their studies and project management, but also in ensuring that new ideas and perspectives relevant to younger generations – one of the main target groups in media literacy initiatives – can be effectively executed.

Securing project funding can often feel daunting and unfamiliar, especially for students who may not have prior experience navigating the application process. However, if you have a compelling idea and have conducted a thorough analysis to ensure its workability within your field, rest assured that enthusiastic individuals are eager to support you in turning your vision into reality. For instance, Erasmus+ and the European Union offer avenues for funding and support for projects aimed towards younger generations.

More importantly, the workshops were conducted by University of Tartu undergraduate students Karmen Laur, Kerttu Kuku, Merilin Miks, Raili Randmäe, and Katriin Kersen. The five students' fields of study range widely, from biology and political science to youth and social work. The multifaceted student network proved crucial for conducting the workshops and ensuring the sustainability of media education. The members of the Media Club are truly enthusiastic young people who were united by either a personal or professional

interest in media. Hopefully, through mutual communication and mentor support, students will find the motivation to cultivate the knowledge and skills acquired during the project in the future as well.

Figure 12. Members of the Media Club during a workshop.

As a result of the project, both children's and teachers' media literacy improved. Teachers were exposed to innovative methods for teaching media literacy, gaining valuable insights by observing how students responded to various internet safety and media literacy topics. This hands-on experience allowed teachers to understand students' knowledge and reactions better, providing a practical foundation for future media literacy education.

Educational institutions consider this topic extremely important. All 140 workshops were booked within the first five hours after the registration link was sent out. Thus, during this academic year, the Media Club reached classes in 19 different schools across six counties and one kindergarten, training over a thousand children and young people.

Schools that were visited during the project:

- Viluste Põhikool

- Jõgeva Põhikool
- Kõrveküla Põhikool
- Osula Põhikool
- Vastseliina Gümnaasium
- Väätsa Põhikool
- Räpina Ühisgümnaasium
- Põlva Kool
- Krootuse Põhikool
- Saverna Põhikool
- Elva Gümnaasium
- Tõrva Gümnaasium
- Mehikoorma Põhikool
- Juhan Liivi nimeline Alatskivi kool
- Valga Põhikool
- C. R. Jakobsoni nimeline Torma Põhikool
- Suure-Jaani lasteaia Traksiku ja Sipsiku majad
- Nõo Põhikool
- Luunja Keskkool

Figure 13. Students during a workshop.

3.5 MINDFUL MEDIA MASTERY (MEDIA-*WALKSHOP*)

"Mindful Media Mastery" is a *media-walkshop* that utilises activities for media literacy training. Its goal is to increase public awareness and vigilance towards digitalisation, media dominance, and the rising digital harms.

"Mindful Media Mastery" is a hands-on media literacy-focused methodology that employs a variety of active and engaging practical exercises to immerse participants in the information-rich reality that surrounds them. The training approach incorporates various teaching methods, such as focused exploration, active listening, attentive reading, and critical thinking, and relies heavily on user participation and active engagement. It is adaptable for individuals of all ages.

VMU professor Auksė Balčytienė and the DIGIRES team, representing the Baltic Research Foundation for Digital Resilience (http://digires.lt), initiated, developed, and practically implemented the method multiple times. Professor Balčytienė is the primary author of the methodology, having developed and tested it within the socio-constructivist paradigm and action research approaches aimed at responsible and dialogic communication. The methodology is based on a human-centred (agentive) approach and aims to develop a higher level of awareness of dialogic, attentive, and caring communication in media-saturated environments.

The methodology has been tested in media literacy sessions with university students, teachers, and high school students. While developed as a collaborative initiative of academic, media, and civic groups, DIGIRES teams have applied methodology with librarians, youth trainers, and other stakeholders.

"Mindful Media Mastery" is a *media-walkshop*, which is built on an *active walking*, observing, discussing, and exploring experience. *Walkshop* is designed with the clear purpose of becoming a more sensitive learner capable of interpreting media "signs". *Walkshop* aims to develop participants' skills for observing and understanding media and information in their surrounding physical environment. This environment could be an urban space, a street, a building, or even a classroom. The approach is versatile and can be used in various physical settings as well as online spaces. In the latter case, participants are

encouraged to actively explore the online realm: in those cases, the practice resembles an active information verification process.

Walkshop methods are incredibly beneficial. Through participation in the *walkshop*, individuals shift from passively observing to actively engaging. They employ active methods to document media-related instances, interpret clues and meanings in the environment, and engage with various forms of information.

It is a method based on the "slow learning" strategy. This means using tasks and processes that enable participants to spend more time exploring, observing, and reflecting on the media-rich environment, its phenomena, and objects. This learning strategy enables participants to pause and comprehend the emotions, thoughts, and contemplations provoked by the current environment or media and information-related items within it.

In small groups, participants choose a route and search for various media-related objects, messages, and information in the environment. Once the participants discover a "sign," they take the time to "read" and deconstruct its meanings and relation to their surroundings: they discuss, record (take photographs or draw), explain, and perform a search or interview. After the *walkshop*, participants meet again in their small groups to create a narrative story based on their experience and share it with other groups. On that occasion, they discuss data and information-rich spaces, silent and loud spaces.

Media-walkshop is performed in groups of 3-5; the time of walking varies between 60-120 min. The duration of the entire **"Mindful Media Mastery"** class is 4-5 academic hours.

Detailed instructions on how to master this method can be found here.

3.6 BREAKING OUT OF THE SOCIAL MEDIA JUNGLE (BREAKOUT GAME)

The Baltic Centre for Media Excellence (BCME), in collaboration with the BECID, has developed an innovative digital breakout game titled "[Breaking out of the Social Media Jungle](Jungle)". Created by media literacy expert Klinta Ločmele and developed by the eLearning specialists at Novitus, the game aims to enhance media literacy and promote critical thinking, particularly on social media.

The game was meticulously designed over several months to ensure it was both engaging and educational. It features a series of tasks and materials that challenge players to think critically about the content they encounter on social media platforms. The game was officially introduced at the conversation festival "Lampa" 2024 (July 5-6, Cēsis, Latvia), where it was met with enthusiasm by more than 200 participants, including families with children. The positive reception at the festival underscored the game's potential for long-term success and its ability to foster media literacy.

"Breaking out of the Social Media Jungle" will be made available to Latvian schools through the BECID platform. Teachers will be provided with a guide to help facilitate the game in classroom settings. The game can be played individually or in teams and does not require participants to have social media profiles. Instead, it focuses on scenarios commonly found on social media, testing players' critical thinking, attention to detail, and other key skills.

While there is no specific age requirement to play the game, it is recommended for children who are already independent social media users, with a primary school age being a suitable starting point. Basic computer literacy and reading and writing skills are necessary to navigate the game effectively.

Figure 14. A screenshot of the game.

The Lampa festival, where the game was launched, is a two-day event that brings together over 300 organisations and individuals to discuss important societal issues. It is an open

platform for exchanging ideas and opinions in a respectful and free atmosphere, where anyone can apply to host an event. The festival provided an ideal setting for showcasing the game, which aligns with Lampa's mission to foster dialogue and education on critical issues facing Latvia and the world.

Figure 15.The Lampa Festival.

3.7. FLEXIBLE LESSON FORMAT ON SOCIAL MEDIA-RELATED ISSUES

Educators from ViA, who, in collaboration with the University of Latvia and the Latvian Ministry of Culture, taught media literacy classes in Latvian schools, utilised a flexible lesson format based on three topicalities.

The classes were centred around issues related to media literacy that adolescents are likely to experience on social media. These choices of the issues covered in the class can be adjusted according to what is currently topical.

This approach is illustrated in the class that was developed by Klinta Ločmele, a media literacy expert from the University of Latvia, and conducted by Liene Ločmele, a lecturer from ViA, at Rūjiena high school: https://www.youtube.com/watch?v=0YAYVrI5Rj8 (English

subtitles are available). This class was about the following topics: 1) searching for information on TikTok, 2) celeb bait, and 3) AI-generated images and videos. At the moment, these are some of the phenomena that may pose a challenge to those who use social and other digital media. For example, TikTok is a very popular platform, and young people increasingly use it not only for entertainment but for all sorts of other needs, too, including advice. However, it is very important to understand how to judge the information on TikTok critically. Celeb bait refers to the fraudulent tactic of using the images of celebrities for false advertising purposes – awareness of such techniques reduces the possibility that people will fall for them. Lastly, AI-generated visuals occupy a large part of the contemporary information environment. The videos and images generated by AI can look real, but they do not refer to something that has actually happened. This creates new challenges in evaluating information. However, a set of skills can be acquired that may help people to spot fake materials.

Since these classes include the topics that adolescents may encounter online, they are able to talk about what they have encountered. This helps to connect the topics covered in the class with their own experiences and highlights the meaningfulness of such information in their daily life. Since students are able to reflect on what is being talked about in the class, the lecturer can incorporate feedback into how he or she explains the topic. Equally important is that this format avoids a situation where only the lecturer speaks, and the students can only listen.

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