

Tools Available to Develop Critical Thinking to Combat Hoaxes, Disinformation, and Conspiracy Theories at Secondary Education Level

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The Southeast Asian Conference on Education 2025
Official Conference Proceedings

Abstract

Hoaxes, disinformation, conspiracy theories... are not only a matter of the adult world, but thanks to the digital era, the skills of the youngest, and, last but not least, the influence of the home environment or the immediate surroundings, they are also becoming part of the world of children and adolescents. What tools does the teacher, as one of the dominant agents influencing the learners and their critical thinking, have in his or her hand to direct them correctly against deceptive, conspiratorial content? The present study focuses on the available material in the field, which could be used as companion material at the secondary education level in German-speaking and Slovak-speaking countries, and its comparison. The aim is to summarize such documents and at the same time to point out possible resources for the development of critical thinking that are applicable in different phases of the teaching process and can sensitize the learner's mindset to the subject content in a step-by-step manner.

Keywords: hoaxes, disinformation, conspiracy theories, critical thinking, secondary education level, German-speaking area, Slovak-speaking area

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Introduction

The increasing tendency to spread hoaxes, disinformation, and conspiracy theories is undoubtedly linked to the possibilities of using and abusing the digital world. Although fake and conspiratorial content is not new on the scene, their impact is incomparably greater than in the past, precisely because this happens much faster and more cleverly in the online world. This is not only a quantitative perspective (number of convinced addressees), but also an impact from a qualitative perspective (the addressees do not have constant values for certain socio-demographic criteria such as gender, age, level of education, standard of living, etc.).

The present study focuses on a group of addressees aged 10–18/19, i.e. pupils of the secondary level of education.¹ We can assume that this group of addressees has a varying but at least basic level of mastery of online tools and active use of online social networks (the level of digital skills may vary depending on many factors, such as gender, socio-economic background, level of education, etc.). This current standard is already linked to the general availability of the internet and the availability of digital technologies at an early age, but also to the targeted investments made in recent years in society's digital competence as one of the prerequisites for active participation in a multicultural society, in democratic processes and the productivity and economic growth of the country (in the context of digital transformation).

The COVID-19 pandemic is seen as a driving force behind the digital transformation process, as a result of which the digital space has become an integral and unavoidable part of the everyday lives of children, young people, and adults. However, the results of the survey *How children (10-18) experienced online risks during the Covid-19 lockdown - Spring 2020* (11 EU countries) showed that while the digital space offers many new possibilities and opportunities, it also harbors many risks, such as cyberbullying and cyber-hate, misinformation, misuse of personal data, etc. (Lobe et al., 2021, p. 6). A more narrowly defined measure, measuring belief in conspiracy theories among young people (Jolley et al., 2021a), which was one of the first of its kind to be conducted in the UK, also revealed worrying results. The phenomenon of conspiracy theories is becoming increasingly prevalent among young people, even those as young as 14 years old (Jolley et al., 2021b). Similar conclusions can be found in *Vertrauensstudie 2022* (Trust Study/ *Vertrauensstudie 2022. Angst vor der Zukunft. Jugendliche zwischen gesunder Skepsis und gefährlicher Verschwörungsneigung*, Germany), which was preceded by a survey across different age groups (6-11, 12-16, adults) (Bepanthen-Kinderförderung, 2022). In particular, the second group (12-16 years) tended to show a positive attitude towards conspiracies, which is closely related to distrust of the media, official institutions, and the search for information in social networks (pp. 26–28). Finally, the results of the HoDeKoProM surveys (research of hoaxes, disinformation, conspiracies, and propaganda among young people aged 13–25; Slovakia, Czech Republic) offer a relatively optimistic view of the consumption of untrustworthy content (e.g. awareness of the risks associated with the spread of fake or conspiratorial content for individuals and society, etc.), but this is not a phenomenon to which young people are completely immune, or one to which they react with indifference (Belovičová et al., 2024, pp. 9–27).

¹ From the developmental psychology point of view, puberty, and adolescence are involved (e.g. Končėková, 2014); according to the ISCED educational scale, these are the ISCED 2 and ISCED 3 levels (UNESCO, 2012).

In this context, reference is made to the European Union's *European Declaration on Digital Rights and Principles for the Digital Decade*, which explicitly refers to the need to acquire digital skills and competencies, including media literacy and critical thinking (European Union, 2023). The latter competencies can play an important role in managing risky situations in the online space, as well as in recognizing distorted facts and fake news (information with conspiratorial content) and their subsequent perception. The development of digital skills, media literacy, and critical thinking represents some of the most significant challenges in today's educational process and can be considered key tools in the fight against online threats. However, their development requires appropriate conditions, which certainly include the availability of supporting educational materials for teachers, regarded as effective tools in the educational process aimed at overcoming the aforementioned challenges.

Fake and Conspiratorial Content – A Threat to the World of Young People

False and conspiratorial content is one of the greatest threats and risks to society and democracy. There are several types of such content, and a distinction is not always made between them (disinformation, hoaxes, fake news, conspiracy theories). The instrumentalization of lies can be seen as the unifying element. The distinction is primarily based on the claim to the truth of the statement. The purveyors of hoaxes or fake news are primarily concerned with disinformation and defamation. There is often a political, economic, or personal goal behind the dissemination of false news. Conspiracy theories seem to be more dangerous (Dubóczy, 2023). Most conspiracy theorists are convinced that they have exclusive knowledge and the only true reality. They see themselves as insiders and feel called to share their knowledge. The urge to convince others goes hand in hand with beliefs about themselves and their alternative explanations for events. Because these are based on assumptions about hidden conspiracies, their dissemination leads to unconfirmed assumptions taking precedence over science, verified facts, and confirmed evidence. The importance of such an approach has led to a great deal of attention being paid to conspiracy theories from a few different perspectives, and as a result, we now have a relatively detailed description of them, which will be followed up below.

Given the nature of conspiracy theories, they are regarded as alternative models of explanation and interpretation of events that generally have the character of crises with social relevance. Their main characteristics include dualism (a binary view of the world against the background of the friend-enemy or perpetrator-victim schema); personalization of power in the form of conspirators (conspirators are elites, government officials, certain institutions, transnational organizations, secret societies, etc.); determinism (absence of random events linked to planned actions subject to the specific interests of the powerful); concealment of the actual plans by the powerful and the need for them to be revealed by the "awakened/conscious"; reduction of the complexity of an event to a single essential cause that is revealed (Barkun, 2003; Butter, 2023; Fuchs, 2022; Lutter, 2001; Nocun & Lamberty, 2020). Notwithstanding the objections to the scientific nature of conspiracy theories based on the concept of "theory" and its characteristics (Götz-Votteler & Hespers, 2019; Nocun & Lamberty, 2020; Schmiede et al., 2023), the presence of elements of scientific style in the content shared can often be observed as a supporting component to establish their credibility (Demčíšák, 2024).

It is also crucial to consider the perspective of the individual who may be inclined to subscribe to conspiracy theories. Douglas et al. (2017, pp. 538–540) have demonstrated the correlation between the addressee's need satisfaction and their belief in the conspiratorial

content through three categories of motives: epistemic, social, and existential. The epistemic motives relate to the need to identify the origin of the problem (adverse events such as social or economic crises, stressful events, etc.). The social motives relate to the need for recognition of the self and the group, and the existential motives follow the need to regain a sense of security and control (Douglas, 2021; Douglas et al., 2017). The need to feel safe in one's environment, to have a sense of control over oneself and one's surroundings, is paramount. Consequently, individuals often seek a cause or an explanation for phenomena that elude their control. In a related study, Douglas et al. (2019) explored additional factors that contribute to the comprehension of conspiracy theories and the adoption of positive attitudes toward them. These factors encompass demographic characteristics (e.g. age, gender, education, social circumstances), as well as political influences (e.g. political preferences).

Lack of security or the need to cope with feelings of fear and isolation were also identified in the Spring 2020 survey as possible factors influencing young people's positive perceptions of conspiracy theories. Of course, this must be seen in the context of the measures taken during the COVID-19 pandemic and the uncertainty and lack of clear information in its early stages. Equally important, however, is the life stage of the group studied (10–18/19 years) – a period encompassing puberty, adolescence, and the transition to adulthood, with puberty being seen as a transitional period of crisis accompanied by a sense of loss of control. Thus, a possible link can also be found between frustration and uncertainty about the future and greater susceptibility to conspiracy theories to "stabilize oneself" (the view of the social psychologist Clara Schliesser in Heigl & Lang, 2024). The views favored in the family environment and the current influx of diverse information "from outside" make it necessary to seek answers to the questions that arise. The Internet space is usually one of the first choices, also because of the rapid availability of information and the possibility of unlimited communication with a wide audience. Although young people's preference for the online space tends towards social networks (e.g. Eurostat, 2022; Go4Insight, 2024), fake or conspiratorial content can also be found there, given its openness and interconnectedness with other sources.

It is almost impossible to completely prevent access to online space and social networks. This is also directly related to the constantly evolving digital society and the need to be an active part of it. While we can control the content that is shared, viewed, and commented on, and we can limit the flow of unwanted content up to a certain age of the child, we cannot act as a "guardian" around the clock. Therefore, it is important to guide children and young people to think about individual content, to teach them to evaluate and judge that content based on credible sources of relevant information that are available, and to teach them how to engage in appropriate debate, i.e. to engage in constructive debate and avoid aggressive clashes of different opinions.

Media Literate and Critically Thinking People Can Combat Fake and Conspiratorial Content

Media-literate people are able to make informed choices, understand the nature of content and services and take advantage of the full range of opportunities offered by different communication technologies. They are better able to protect themselves and their families from harmful or illegal content. (European Commission, 2023, p. 1)

Not only in the Media Literacy Guidelines (see above), but also in most official documents on education, the development of media literacy is one of the strategic objectives. Media

literacy is a promising tool for people to effectively manage and critically evaluate all media content. Its key competencies are considered to be: the ability to seek out and use media and to share appropriate and valuable information with others; the ability to understand the news and to use critical thinking and understanding to analyze its quality, truthfulness, and credibility; the ability to create media content taking into account purpose, audience, and other factors; the ability to apply social responsibility and ethical principles to one's own identity, communication and behavior; and the ability to act and engage in citizenship through the media, to become part of a democratic society (McDougall et al., 2018, p. 5).

The importance of media literacy was highlighted by Thoman and Jolls (2003) at the beginning of the 21st century. The following five aspects (p. 9) have been highlighted:

1. The influence of media in our central democratic processes.
2. The high rate of media consumption and the saturation of society by media.
3. The media's influence on shaping perceptions, beliefs and attitudes.
4. The increasing importance of visual communication and information.
5. The importance of information in society and the need for lifelong learning.

It is clear from the above that media literacy is not about memorizing facts about media, nor is it about being able to produce a video, for example; media literacy has a much broader dimension. It is about thinking about the questions we ask when we critically engage with media content. Thoman and Jolls (2004) see this activity as a set of sub-activities that correspond to the core skills defined in the Media Literacy Guidelines: "It involves posing problems that exercise higher order thinking skills - learning how to identify key concepts, make connections between multiple ideas, ask pertinent questions, identify fallacies, and formulate a response" (p. 23). Although media literacy consists of a set of competencies that are not age-specific and can be acquired and developed throughout life, there has been a growing emphasis in recent years on integrating its development into the formal education system. Introducing these skills gradually from an early age promises to establish a solid foundation on which to build, expand, and shape a media-literate individual as an active member of society (McDougall et al., 2018, p. 7).

Critical thinking is considered one of the key competencies of media literacy. A guide to critical thinking summarizes it as self-directed, self-disciplined, self-monitored, and self-correcting thinking (Paul & Edler, 2003, p. 1). This aspirational goal is much better captured in terms of acquired competencies, which are also presented in the guide. According to this, a person who has well-developed critical thinking skills, poses precise questions for discussion; gathers and analyses relevant information; draws sound conclusions using logical rules and objective criteria, norms, and standards of evidence; remains open to divergent perspectives, and assesses their assumptions, implications and consequences appropriately. It also communicates effectively to facilitate solutions to complex problems. Pfister (2020, p. 7) also includes other attributes such as careful, purposeful consideration and reflective, rational, and enlightened thinking. The concept of reflective thinking, as the author explains elsewhere, goes back to the American philosopher John Dewey. According to him, reflective thinking is defined as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the reasons which support it and the further conclusions to which it tends", which is very close to the above-mentioned competencies (pp. 13–14; see also Hitchcock, n.d.). If some of the sub-skills of critical thinking were used when dealing with misleading or conspiratorial information, the level of trust could be quite different. However, this requires their development and encouragement.

Critical thinking is now one of the generally accepted educational goals, but it is not equally integrated into the curricula of the individual educational levels everywhere. For example, differences between Germany and the USA are pointed out; in contrast to the USA, a lack of curricular consideration of critical thinking in schools is observed in Germany (Kohnen, 2023, pp. 327–328; in the context of science education in Germany, Austria, and Switzerland, also Rafolt et al., 2019, p. 4). There is also a lack of task types that specifically promote aspects of critical thinking, or these tend to be assigned to university teaching (Kohnen & Rott, 2023; Rott, 2024).² A similar situation can be observed in Slovakia. Although there are methodological recommendations for specific subjects or subject types, including modeling tasks (Bederková, 2021), they tend to focus on upper secondary subjects (grammar school, middle school); however, there is a lack of feedback on their use in the classroom, including their shortcomings and advantages in terms of their suitability and effectiveness, as well as suggestions for improvement. Any development of critical thinking, be it at different levels and in different school subjects, is of course a good starting point for understanding the dangerous content consumed, but it would still be appropriate to start much earlier with a targeted and continuous development of this competence. The appropriate inclusion of fake or conspiratorial content in teaching and learning is just another desirable step in developing awareness of deliberately misleading and false content in posts. The next chapter deals with the types of materials (tools) available to teachers to develop and support pupils' critical thinking and its sub-skills concerning hoaxes, disinformation, and especially conspiracy theories.

Tools for Developing Pupils' Critical Thinking About Fake and Conspiratorial Content

Developing critical thinking in the context of disinformation and conspiracy content requires space and thorough preparation. One way in which such content can be integrated, are areas of formal education that have been introduced based on the recommendations of official EU documents in the context of digital transformation, but also the new challenges of an ever-changing online world, such as media education (Slovakia), basic digital education and therein media education/media literacy (Austria), or media literacy and its component media education (Germany). Not all of these areas are implemented as a separate subject (Slovakia, Germany), and differences can also be observed within the countries themselves (e.g. the teaching of media education in the second stage of primary school in Slovakia - the differences in Slovakia concerned the teaching of media education in general, the teaching of this area as a separate subject, the allocation of hours for teaching, etc.) (Bielčíková, 2021). In addition to this most effective way, it is possible to develop media literacy and critical thinking towards fake and conspiratorial content as a cross-cutting theme in different subjects or within the framework of selection seminars or voluntary school activities. As hoaxes, disinformation, and conspiracy theories affect different areas of life today, it is possible to address them in a range of subjects (e.g. history, natural history, physics, geography, civics, and others, depending on the focus of the middle school). To this end, methodological guidelines have been developed at the level of relevant ministries and state institutions, focusing primarily on the development of media literacy, some of them mainly at a theoretical level (an example of more practically oriented educational material is Viki (2022); Viki is the Slovak educational and information platform of the Ministry of Education, Science, Research and Sport of the Slovak Republic), others with references to practical materials that also take into account the risks of the online world and that can be used at

² There are current publications by these authors in which the task formats for corresponding educational levels are also presented, for example in Rott (2024) task formats in grade I/primary school (dilemmas, decision stories, modeling), in Kohnen & Rott (2023) secondary level I/grammar schools (sustainability dilemmas).

different levels of education, including secondary education (see e.g. Austrian Federal Ministry of Education, Science and Research, n. d.; at the level of the German federal states, e.g. Bildungsportal Niedersachsen, n. d.).

At the supranational level, the European Commission has developed guidelines on disinformation and critical thinking, two of which are particularly relevant to the secondary school age group: *Guidelines for teachers and educators on tackling disinformation and promoting digital literacy through education and training* (European Commission, 2022) and *How to spot and fight disinformation. Toolkit for teachers* (European Commission, 2024), both materials are in the languages of the Member States EU. In both cases, the documents have the character of a handbook and contain, in addition to the theoretical background on disinformation, suggestions for activities that can be implemented in formal education, methodological recommendations for implementation (practical application requires a link to real empirical material/concrete examples), practical demonstrations with concrete examples (practical application allows for variation of concrete examples) and additional tips and recommendations for teachers that should be taken into account. The Awareness Centre Klicksafe works as part of the European Union's CEF Telecom programme, producing various educational materials, infographics, info cards, and online games, including on topics such as fake vs. fact, deepfakes, disinformation, conspiracy theories, etc. As a theoretical starting point and also as methodological material for teachers, the publications of the international organizations UNESCO (United Nations Educational, Scientific and Cultural Organisation) and OSCE (Organisation for Security and Co-operation in Europe) can be used; under the auspices of the former, a publication in the form of a handbook entitled *Umgang mit Verschwörungstheorien – Was Lehrkräfte wissen müssen* (available in English, French, German, and Spanish) (UNESCO, 2024) has been produced to provide methodological support for teachers in their efforts to sensitize pupils and students to conspiracy theories and to encourage them to think critically so that they are not easily deceived. In this context, the OSCE organization published the German publication *Verschwörungstheorien hinterfragen, Lehrhilfe 4* (OSCE, 2019) which offers a clear combination of theoretical background on conspiracy theories and methodological recommendations for dealing with the topic in the classroom but does not contain a practical demonstration of a teaching unit.

In addition to the above sources of educational and other support materials for fake and conspiratorial content, we can also refer to resources that may or may not be exclusively related to the field of education in general. There are various impulses behind the creation of educational and other support materials, most often an awareness of the topicality and relevance of a particular issue, a request from educational institutions to develop educational material or even the realization of various projects dealing with conspiracy theories. A prime example of educational material for teachers in German is *Trollwerkstatt. Verschwörungsmythen als Thema im Unterricht. Theorie und Praxis*, produced by the non-profit organization Wiener Bildungsserver (Amon et al., 2021). This package of teaching materials, designed for lower and upper secondary schools (ages 10/11–19), combines the theoretical level of thematic content with its practical application through five practical modules on specific aspects of conspiracy theories and the development of critical thinking skills concerning them. The modules represent a chronological sequence of activities that build on each other and are complemented by accompanying materials and real-life examples. At the same time, it is possible to customize the teaching materials by selecting your practical examples. Bundeszentrale für politische Bildung also deals with disinformation and conspiracy content under the auspices of the Federal Ministry of the Interior (Germany).

Its website provides a range of free materials that can be used to prepare lessons, but also as theoretical background material, especially for older pupils (15-19 years), or to give to pupils as a learning aid (see Learning). During the pandemic (2020), a collection of materials was compiled that can be used to integrate the content of disinformation and conspiracy theories into the classroom. There are thematic dossiers such as *Digitale Desinformation* (Bundeszentrale für politische Bildung, 2019), infographics such as *Ist diese Meldung ein Fake?* (GrafStat, 2023), *Gib Fake News keine Chance!* (Bundeszentrale für politische Bildung, 2023), the collection of teaching materials *Fakten gegen Fake News oder Der Kampf um die Demokratie* (Gensing, 2020), the collection of studies entitled *Wahrheit* (Bundeszentrale für politische Bildung, 2017), the leaflet *Flyer – Was tun gegen Verschwörungsideologien?* (Bundeszentrale für politische Bildung, 2020), and the online game *Fake It To Make It*, which deals with the social consequences of fake news. The seriousness and topicality of these issues are still palpable, which can also be observed in other available articles that link the topic of disinformation, conspiracy theories, hoaxes, etc. with current trends, i.e. their anchoring in various social networks, such as *Fake News, Misinformation, Desinformation* (Hoffmann, 2023), *Falsche Informationen, Kriegspropaganda und wie man sie erkennt* (Bösch, 2023), *Hass for you. Antisemitismus und der Nahostkonflikt bei TikTok* (Berendsen & Schnabel, 2024). In most of the sources listed, either within the texts or at the end of the texts, additional sources are mentioned that discuss the topic of disinformation and conspiracy content. Finally, the non-profit organization Das Anne Frank Zentrum, based in Berlin, should be mentioned for use in the classroom. Although the online game *Das Kurierkomplott* was originally developed for a different target group (eLearning in the prison system), it can also be used as a (self-)educational tool for pupils aged 14 and over to sensitize them to conspiracy theories and antisemitism.

In the Slovak language area, the required materials can also be found, including those of an educational nature. The civil association called Inštitút ľudských práv (Human Rights Institute) offers the publication *Dôveruj, ale preveruj. Informovanosťou proti extrémizmu na internete* (Krempaská & Weisenbacher, 2015), where the second chapter is dedicated to hoaxes, conspiracy theories, and trolls and the fourth chapter contains recommendations for teachers. As in the German-speaking area, an example of the combination of theoretical principles and practical application of knowledge in the field of education can be found in the Slovak-speaking area, namely in the publication *(Ne)bezpečne v sieti. Manuál rozvoja kritického myslenia v online priestore* (eNef, 2021) designed for non-formal education, for which there is also an online web application. The title of the publication already acknowledges the effort to provide material that simultaneously develops critical thinking and media literacy in direct relation to the digital world and its dangers. The publication has been produced as part of the project *(Ne)bezpečne v sieti* and, in addition to 5 introductory chapters, contains 37 educational activities on media literacy, critical thinking, staying safe online, digital citizenship (see table of contents), with a timetable of successive steps, recommendations for their implementation and also suggestions for variations of the activities. The recommended age groups for the 10+ and 15+ activities are for secondary education. In 2017, the magazine Denník N produced two materials on the topic in question - commissioned by teachers: *Kritické myslenie. Ako rozlíšiť pravdu od lži. Ako nenaletieť. Ako nepodľahnúť konšpiračným teóriám. Ako sa nebáť rozmýšľať samostatne, ale pritom dôverovať aj iným* (Denník N, 2017a) and *Klamstvá a konšpirácie. Príručka pre stredné školy* (Denník N, 2017b). Both materials develop the theoretical background and explain various concepts related to the topics covered engagingly, and the materials also include practical exercises and guidance for students with concrete examples. The fact that the topics are covered by a collective of authors from different fields (political science, journalism,

journalism studies, formal education, critical thinking classes, and others) makes the way they are treated popular and instructive, with an emphasis on practical examples and broad comprehensibility.

In addition to classroom support materials (both formal and informal), it is important to remind students to check the veracity of the information they consume outside of school. Given the age range in secondary education, older students in particular should be able to check the veracity of information without much difficulty. To this end, there are several international and national fact-checking online services, such as *Snopes*, *Correctiv*, *Mimikama*, *APA-Faktencheck*, *dpa-Faktencheck*, *ARD-Faktenfinder*, *Faktenfuchs*, *Volksverpetzer*, *AFP Österreich*, *Faktiv* in Austria and Germany, *Konšpirátori.sk*, *AFP Fakty* in Slovakia, *Demagog* in Czechia and others.

Conclusion

The present study focused on disinformation and conspiratorial content in the context of education. The aim was to focus on the availability of tools to develop critical thinking concerning disinformation and conspiracy content. The tools were considered as (ideally educational) materials that can be used by teachers to develop critical thinking in the defined context for secondary school students, i.e. in the age group 10–18/19 years. We were particularly interested because of the worrying results of several surveys focusing on young people's perceptions of issues such as hoaxes, disinformation, conspiracy theories, etc. One of the questions that arose in the context of these findings was the extent to which critical thinking about disinformation and conspiracy content is developed in the classroom, which requires appropriate conditions, including the availability of educational materials for teachers. In this regard, the following observations can be made:

- Teachers in both language areas have at their disposal different types of support materials for the needs of secondary level of education, namely methodological guidelines and recommendations of a more general nature, publications containing mainly theoretical knowledge, usually written in a popular science style to be understood by the widest possible audience, handbooks combining theoretical knowledge with practical demonstrations and activities applicable in the educational context, infographics, brochures, web applications, online games, fact-checking portals; the sources mentioned in the previous part of the study do not represent an exhaustive selection of available educational materials, but represent their general availability;
- Relevant ministries (Austria, Germany, Slovakia), relevant EU institutions, international organizations, official institutions under the responsibility and support of other ministries, project teams with grant funding support, civil associations, NGOs, and online media have participated in the development of supporting (educational) materials, which proves the particular relevance and necessity of integrating content such as hoaxes, disinformation, and conspiracy theories into education; and
- The ways of integrating the above-mentioned content into education are different in Slovak and German-speaking countries; the most common option is to integrate the content as cross-curricular topics and thus within the standard subjects (Germany, Slovakia); the most effective way of targeted development of critical thinking towards hoaxes, disinformation and conspiracy theories is to implement media education (some parts of Slovakia) and basic digital education (Austria) as separate subjects, which gives teachers more time to gradually sensitize students to such serious content.

If we take into account the first two statements, i.e. the good availability of (educational) materials for the development of critical thinking concerning disinformation and conspiratorial content, the interest in their preparation, and also their updating with changing trends in the online world, then the question arises as to where the problem lies in their effective use in pedagogical practice – whether it is the lack of methodological support for teachers, time constraints in the teaching process or the still low integration of these topics in the curricula. However, several cross-national surveys are needed to answer this question before recommendations can be discussed.

Acknowledgments

This work was supported by the Slovak Research and Development Agency under the Contract no. APVV-22-0221.

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