

RESEARCH REPORT

Czech teachers in the world of media



Czech teachers in the world of media (Research report)

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1. Introduction

Today, media literacy is a very important skill, allowing us to move around safely in the vast world of media, and to actively participate in creating it. The Covid19 has proved how important it is to be able to deal with information in the virtual space, and how virtual space can significantly affect the non-virtual space.

In our new research called **Czech teachers in the world of media**, we focus on media literacy and media education, a cross-subject topic within the Curriculum framework for primary (and higher) education which is, in various forms, taught in primary/lower secondary schools in the Czech Republic. We focus on several key aspects: Which media the Czech teachers perceive as trusted and non-trusted and which media they follow in a regular basis, where they get information for lessons from, and whether and how they use YouTube. We also wanted to know whether they are able to identify publicly funded media in the Czech Republic.

Another part focuses on disinformation – we explored whether Czech teachers are able to identify disinformation content which is commonly present in the on-line space. For our analysis, we picked 34 widely known statements from 3 topics and we asked teachers to choose which of those they perceive as true or false, and teachers were also given the option to say that based on information available, they cannot make an informed decision.

A separate part of the research is focused on media education in schools – we wanted to know whether teachers perceive media education as important, what form, topics and number of lessons they prefer, whether they have completed any professional training in media education, and whether they keep learning today in this area.

The authors

2. About the research

The **Czech teachers in the world of media** research has been conducted by the Centre for the Prevention of Risky Virtual Communication at the Faculty of Education of Palacký University in Olomouc, in cooperation with O2 Czech Republic.

The research was funded by O2 Czech Republic under contractual research and by internal funds of the Faculty of Education of Palacký University in Olomouc. No state funding or EU funding has been drawn.

3. Methods

3.1. Procedure

We chose anonymous on-line questionnaire as the primary research tool. It was distributed to all regions within the Czech Republic,

Data collection was conducted from 1st February 2021 to 15th June 2021. Evaluation and interpretation of partial outputs were completed in the following weeks. We used the Statistica software for a detailed evaluation.

3.2. Participants

The total of **2155** Czech teachers aged 21-82 participated in the research. Average age is 47,21 (median 47, modus 56). The sample consists of 77.82 % female and 22.18 % male respondents.

A vast majority of teachers participating in the research have a degree in teaching (78.10 %) while 8.72 % respondents confirm another degree with an additional teaching course.

64.17 % respondents teach at primary/lower secondary schools (22.69 % primary and 41.48 % lower secondary), and 24.73 % are upper secondary teachers.

Most respondents come from the Moravskoslezský region (13.64 %), the Olomoucký region (10.72 %), Prague (9.33 %) and the Jihomoravský region (8.68 %).

4. Results

We have divided the research into several chapters.

4.1. Czech teachers in the world of technologies

The first part is focused on teachers as consumers of media. We mapped what media teachers read/watch, how they use them in teaching and what media they would (not) recommend to students. We work with two types of frequency in the results. For a media title regularly followed by a teacher, we indicate the total frequency, taking into account the total number of questionnaires completed. With other questions, we use relative frequency where the percentage of teachers is calculated from questionnaires with the given question answered. Such calculation method was chosen because it is not possible for a teacher to be familiar with all available media and information sources. If teachers were not familiar with a certain media title, they left the question without answer.

4.1.1. Printed media

Printed media were represented by daily or weekly papers focused on news or commentaries on current affairs. We left out several magazines focused on a specific topic. The most frequented printed media among teachers is Mladá fronta DNES daily, where 14.01 % respondents confirmed that they read it on a regular basis. The following are Respekt weekly (11.46 %) and Deník daily with all its regional versions (9.23 %). Interestingly, the least followed daily papers are Aha! (0.60 %) and Blesk (1.07 %) although Blesk is generally the most popular newspaper in the Czech Republic.¹

Most teachers trust Hospodářské noviny – perceived as a trusted title by 75 % respondents, while the lowest number of teachers (6.80 %) perceive Hospodářské noviny as non-trusted. This newspaper is also the most recommended (49.51 % teachers would recommend it to students). Aha! and Blesk are at the opposite end. Aha! daily is not trusted by 36.57 % respondents and Blesk daily by 38.61 %.

4.1.2. Electronic media

Most teachers (40.14 %) follow, on a regular basis, the iDNES.cz news portal (an electronic version of Mladá fronta DNES), followed by Aktuálně.cz (33.46 %) and Novinky.cz (30.44 %). The most trusted are internet portals of publicly funded media – where respondents provided a rating, **they perceived as trusted the Czech Press Agency website (ctk.cz), (75.82 %), followed by iRozhlas (75.58 %) and ČT24 (71.90 %). Teachers would also recommend these three portals to students as a source of information.** On the other hand, the least trusted news portals are Aeronet (89.87 %), Sputniknews (89.73 %) or Nová republika (87.32 %).

Only 2 respondents from the entire sample group listed Parlamentní listy as a relevant information source for students.

¹ <https://www.ceskenoviny.cz/zpravy/nejctenejsi-byl-v-1-ctvrtletí-blesek-s-rustem-na-703-000-ctenaru/2036457>

4.1.3. Radio and TV

The most frequently watched are the channels of Czech television (75.03 %), also perceived as the most trusted by teachers. Where teachers rated trustfulness, **67.71 % stated that the Czech Television is trusted.** TV Barrandov (79.84 %) is perceived as the least trusted by Czech teachers. TV channels most recommended to students as a source of information include CS History (67.46 %), Animal Planet (62.71 %) and the Czech Television channels (61.42 %).

When asked about TV channels for entertainment purposes, the most recommended one was Óčko, a music channel (77.90 %)

Radio channels are dominated by the Czech Radio channels. Most respondents (41.44 %), listen to these and perceive them as the most trusted (79.65 % perceive them as trusted and only 2.18 % as on-trusted). Other broadcasts most listened to by teachers, include Impuls (16.06 %) and Evropa 2 (14.85 %) while the second most trusted is Radio Proglas, a Christian broadcast (52.44 %). However, this broadcast also has a relatively large number of respondents who perceive it as non-trusted (20.33 %).

4.1.4. Media used by teachers in lessons

Printed textbooks are the most popular resource, preferred by 87.66 % of all teachers. However, digital technologies are a becoming new competitor to printed media – for instance, 85.66 % respondents use Youtube as a source of information for teaching. The others include Wikipedia (71 %), electronic versions of textbooks (63.20 %) and digital learning resources from the Curriculum framework (58.38 %). Printed textbooks still represent a guarantee of trusted information, recommended by 86.22 % teachers, not recommended by 1.39 %.

Table 1. Media used by teachers in lessons

Media title	Used in lessons
Printed textbooks for a particular subject	87.66 %
YouTube	85.66 %
Wikipedia	71.00 %
Electronic textbooks for a particular subject	63.20 %
DUMy	58.38 %
Online dictionaries	53.13 %
Printed encyclopaedias	46.03 %
Documentaries (DVD, Netflix etc.)	43.02 %
Whatever comes out from Google search (i.e. random websites)	42.41 %
Pinterest	38.28 %
Online news	38.10 %
Printed dictionaries	34.20 %
Khan academy	16.10 %
Printed news	14.01 %
Facebook	13.41 %
Educational portals (Coursera, FutureLearn, Udemy)	10.72 %

(n=2155)

4.1.5. Teachers and YouTube

YouTube is used by over 2 billion users and, as our research shows, it becomes a part of most teachers' lessons. The research results prove that YouTube channels most followed by teachers for lesson purposes are those of university groups or scientific institutions. 45.67 % stated that they use the Otevřená věda channel for teaching, followed by various university projects (such as Mluvící hlavy, videos by E-bezpečí etc.) (38.95 %), as well as the Petr Čurko's channel (38,07 %) and Na potítku (29,61 %). For entertainment purposes, teachers recommend the channel of youtuber Kovy (51.68 % of those who commented on this question), Honest Guide (41.85 %) and the channels of youtuber Martin Rota (38.35 %).

Table 2. Which youtubers would you recommend?

YouTube channel/influencer	Used in lessons	Would recommend as a source of information	Would recommend as a source of entertainment
Otevřená věda	45.67 %	61.26 %	21.21 %
Various university channels	38.95 %	63,04 %	13.77 %
Petr Čurko	38.07 %	43.12 %	19.72 %
Na potítku	29.61 %	47.49 %	19.55 %
Tedx - Talks	28.71 %	46.13 %	28.71 %
TED-Ed	25.71 %	45.71 %	24.29 %
Broňa Sobotka	25.29 %	68.68 %	29.93 %
Martin Rota	23.68 %	42.11 %	38.35 %
Kovy	23.29 %	43.03 %	51.48 %
Marek Valášek	22.97 %	67.14 %	10.95 %

(n=2155)

Conclusion

The research results have revealed teachers as being specific consumers of media. The most significant characteristics can be seen with printed media: while Blesk (a tabloid daily)

is the most popular newspaper in the Czech Republic, only 0.60 % teachers read it on a regular basis.

Teachers have strong trust in publicly funded media – whether television, radio or online. The dominance of trusted media is most strongly presented in online space. The top three electronic media, in terms of trustworthiness, are the Czech Press Agency, the Czech Radio and the Czech Television.

Statistics on teaching resources show that paper textbooks are still dominant, although having a strong competition in digital media, particularly YouTube and Wikipedia. Most teachers recommend textbooks as a source of information. This suggests that for textbooks, trustworthiness is an advantage over internet resources. When exploring YouTube in detail, we can see the important role of universities and educational institutions, providing teachers with information and inspiration for lessons.

4.2. Czech teachers in the world of information

An important part of our research is focused on information and disinformation, encountered by a large part of population, including teachers.

We offered our respondent teachers the option to assess the trueness of selected statements while **none of these was presented as false, disinformation, hoax or fake news.** Teachers could decide whether a statement is true or false, or state that they are not completely certain or they are not able to critically assess the information (because they don't have enough details available or are not familiar with the topic).

We selected the following topics for our research:

- A. Information and disinformation related to the European Union
- B. Information and disinformation related to the Covid19 pandemics
- C. Other information and disinformation from the world.

4.2.1. Teachers and the European Union

The first topic included 9 EU-related statements that circulate the global information space:

A. EU wants to ban “Ř”.

This satiric story was correctly recognised and marked as false by 80.79 % teachers. 9.33 % stated that they don't know and cannot assess the trueness of the statement. 2 % teachers marked the story as true.

B. The EU has prohibited us from producing rum.

This story is a typical hoax and disinformation, appearing in the Czech media in connection with EU regulations. Of course, the EU regulates only the product name – it can only be used for a drink made from distilled sugar cane (Czech rum was made from white spirit and rum flavouring). After becoming an EU member state, the product was re-labelled to Tuzemský or Tuzemák. This myth also concerns a problem of flavourings used to make rum as they include carcinogen substances. The EU highlighted it and the Czech Republic was granted an exception. Therefore, Czech Tuzemák has not disappeared from the market.

The claim about prohibiting rum was correctly assessed by 64.5 % teachers while 10.86 % marked this statement as true. 10.02 % teachers stated that they cannot assess the statement as they don't have sufficient information available.

C. EU ordered that curved bananas must not be sold.

Indeed, the EU does not regulate the shape of bananas. It only specifies the required parameters of goods in a particular quality class.

This statement was correctly assessed by 76.47 % teachers while 11 % were not able to judge. Only 2.88 % teachers assessed the statement incorrectly.

D. Based on EU regulations, products labelled as “spreadable butter” had to be renamed.

This is a true statement, related to EU product labelling regulations - the EU has never banned spreadable butter, but required product names to be unified - on the common European market, “butter” can only be used for products containing at least 80 % dairy fat, which was not met in spreadable butter.

56.29 % teachers correctly detected it as a true statement. 21.67 % assessed the statement as false (the high error rate could be down to the fact that respondents confused a labelling regulation with banning the product itself), while 8 % stated that they are not able to assess the statement.

E. Based on an EU regulation, it was decided that donuts must be wrapped in plastic bags in order to “rule out the risk of contamination and to maintain food safety and quality when on sale.”

This is one of the EU related myths – known as “the Donut Decree”. It appeared in 2002 at the Czech Health ministry and it was not based on any European regulations. It was terminated a few years later. However, the myth still lives.

The statement was correctly assessed by 54.29 % teachers as false. 10.95 % teachers marked this myth as true. 12.85 % could not decide and 16.75 % stated that they are not qualified to judge. A higher number of respondents feeling not qualified to judge suggests that they are not familiar with the statement.

F. As a result of the Czech Republic accessing the EU, a new legislation practically prohibits traditional pig slaughter feasts.

Again, this is a false statement. Organising home pig slaughter feasts is regulated directly by Czech law and the EU accession and membership did not result in any legislation changes in terms of home slaughtering.

The statement was correctly marked by 51.04 % respondents as false and by 13.09 % as true (i.e. incorrectly). 18.61 % stated that they are not qualified to judge (perhaps this is also one of the less popular myths).

G. The EU ordered classic filament light bulbs to be gradually phased out.

Yes, the EU ordered classic filament light bulbs to be gradually phased out. This was agreed by representatives of member countries and members of the European parliament (including those from the Czech Republic).

The statement was correctly marked as true by 53.13 % teachers. 14.76 % incorrectly marked it as false and 14 % stated that they are not qualified to judge.

H. Refugee quotas introduced by the EU oblige us to accept a certain number of refugees from war countries (Syria, Eritrea, Iraq).

This is a more complex statement: Refugee quotas oblige us to accept a certain number of refugees into the country, however the Czech Republic refused and did not abide by the Regulation. The statement can be viewed from several perspectives – an obligation from the EU perspective, and refusal by the Czech government. This resulted in various approaches to assessing the statement.

36.06 % teachers assessed the statement as true and 33.78 % as false, 14.66 % couldn't decide and 11.09 % stated that they don't feel qualified to judge. We don't include this statement and its assessment into the overall score.

I. The Czech Republic pays more into the EU than it receives back.

The Czech Republic is so called “net recipient” – one of the countries that receive significantly more from the EU budget than they contribute. This myth is often linked to another issue such as channelling money from the country (e.g. corporation profits) or EU funding frauds – this, however, is not down to the EU, but rather to our national legislation and our own funding recipients (and their potential frauds).

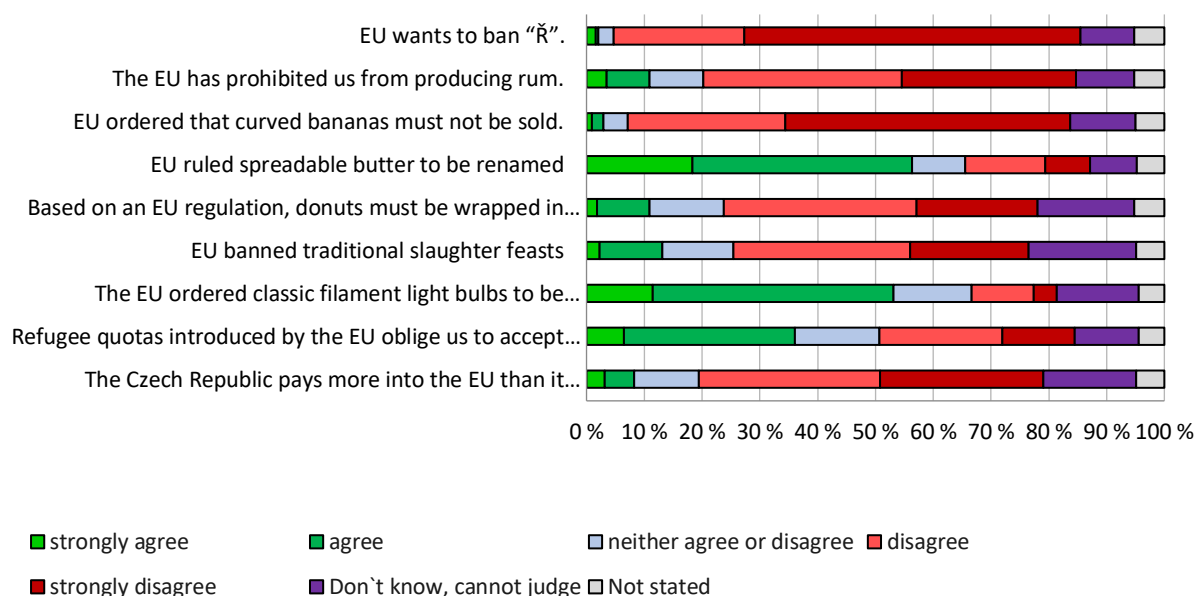
59.58 % teachers correctly marked the statement as false and only 8.26 % agreed with the statement. 11.09 % stated that they are not qualified to judge.

Total results (assessing trueness by teachers)

Based on analysing the above EU related statements, it can be concluded that 62 % respondent teachers can correctly assess trueness (average values based on 8 statements). 10.57 % participant teachers assessed the statements incorrectly (average values based on 8 statements).

As 3.02 % teachers stated that they are currently not qualified assess, it is possible that the resulting score could be better, but also worse. Media literacy skills involve the ability to admit that I don't have sufficient relevant information available to assess a certain statement.

Chart 1 Teachers and EU related information (assessing trueness by teachers)



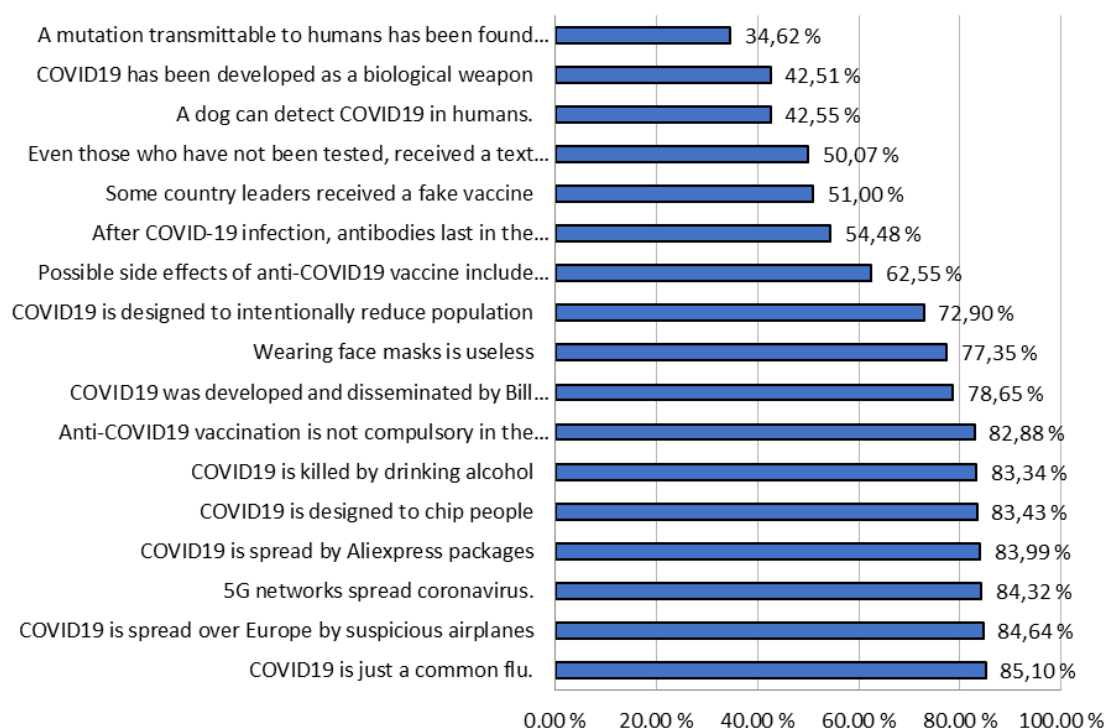
(n=2155)

4.2.2. Teachers and the coronavirus pandemics

The Covid19 pandemics has resonated in the global media space and generated a huge amount of information and also disinformation related to the origin of the disease, treatment, testing, preventive measures, vaccination, etc. Therefore, we dedicated the second section to this topic and asked teachers to assess 19 statements.

For the analysis, we selected a diverse range of statements related to the virus characteristics (Covid19 is simply a flu), its origin (Covid19 was developed and disseminated by Bill Gates' team), its spread (Covid19 is disseminated by suspicious air planes or by Aliexpress parcels), its goals (Covid19 is designed to reduce population, it is a biological weapon, Covid19 is spread by 5G networks), etc. With most questions, teachers correctly identified disinformation or conspiracy related to Covid19 and they were able to distinguish between false statements and unfounded conspiracies and speculations.

Chart 2 Teachers and Covid19 (correctly assessed statements)



(n=2155)

We also included statements that are difficult to verify so we did not include those in the final evaluation of this part. Namely:

The Covid19 death rate doesn't correspond with reality presented in the media.

28.12 % teachers assessed this statement as true, 27.70 %, as false, 16.29 % couldn't decide and further 23.94 % didn't feel qualified to judge.

The ambivalence among respondents is logical because many people died while being Covid19 positive, however the disease must not have necessarily been the primary cause of death. Data presented at www.mzcr.cz can be defined as deaths with Covid19. See more details [here](#). However, it can be speculated whether media lie to us and twist information deliberately.

Government measures to reduce the spread of coronavirus restrict freedom and democracy.

This statement was marked true by 29.88 % teachers, while 41.76 % marked it as false and 21.81 % couldn't decide.

Many institutions are trying to find out whether government measures to reduce the spread of coronavirus restrict freedom and democracy. This issue has also been flagged out by the [European parliament](#). It is obvious that the Covid19 pandemics affect human lives and that it was necessary to restrict certain human rights and freedoms. It has to be said that even the Charter of fundamental rights and freedoms allows restrictions if these are necessary in

a democratic society to protect the rights and freedoms of others, the public order, **health**, morals, property or national security. The question is whether rights were restricted adequately to circumstances.

Even those who have not been tested, received a text message with a positive result.

The story that those who have not been tested, received a text message with a positive result, has taken an interesting turn. This story was originally a hoax and false alarm, however online fraudsters imitated it and used it for phishing. The original false alarm was therefore exploited for committing crime.

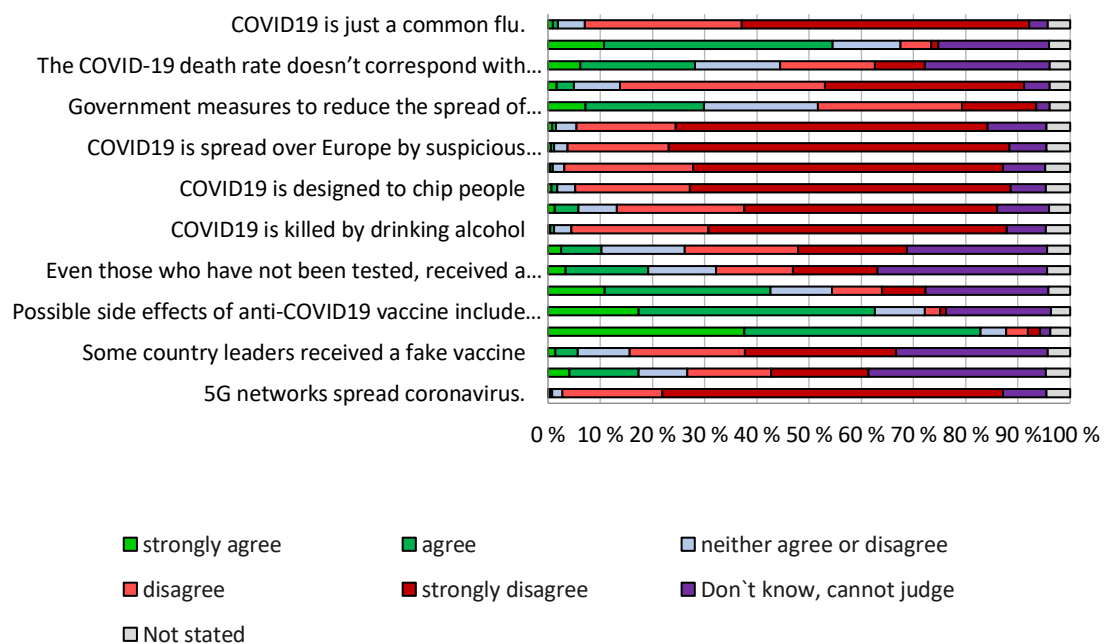
This story was assessed by 19.16 % respondents as true, 30.90 % as false. However, the conclusion is ambivalent due to hyped cases of phishing so we rate both responses as acceptable and exclude this question from the resulting score.

Conclusion

Based on analysing the above Covid19 related statements, it can be concluded that 67.91 % respondent teachers can correctly assess the trueness (average values based on 17 statements). 4.56 % participant teachers assessed the statements incorrectly (average values based on 17 statements).

As 15.09 % teachers stated that they are currently not qualified to assess, it is possible that the resulting score could be better, but also worse. Media literacy skills involve the ability to admit that I don't have sufficient relevant information available to assess a certain statement. However, it is important to find a relevant source when verifying information.

Chart 3 Total results (assessing trueness by teachers)



(n=2155)

4.2.3. Teachers and information from the world around us

In this part, we presented teachers with a set of 17 statements that include several types of information. First, teachers were asked to assess statements that can be categorised as conspiracies (chemtrails, NWO, etc.), then statements in the category of hoax a disinformation, as well as some historical myths that still live today and that we still believe (such as Napoleon's height, the Viking helmets, etc). We complemented the statements by a few true historic events that require some knowledge of history to be assessed (such as photos of death people, tea in the British army tanks, dictators as nominees of the Nobel peace Prize, etc.).

Now let's focus on assessing some of the statements:

A. *Conspiracy statements*

U.S. astronauts didn't land on the Moon in 1969, it is a huge deception.

74.8 % teachers determined correctly that this is a false statement. U.S. astronauts really did land on the Moon. Only 1.67 % marked the statement as true.

Air planes deliberately spread chemicals designed to reduce population.

So called chemtrails theories are popular and widespread, however 80.7 % correctly determined that this is a false statement. Only 1.16 % marked the statement as true.

The attack on U.S. World Trade Centre on 11th December 2001 was planned and carried out by U.S. secret services.

This statement was marked as false by 64.13 %. This doesn't mean, however, that the rest of all teachers believe in the WTC conspiracy – this is believed by mere 4.59 % responded teachers. 17.26 % stated that they are not qualified to assess the statement (for instance, due to a lack of information).

The World is ruled by elites who want to establish a New World Order.

Conspiracies involving a group of powerful people trying to establish a New World Order are common in chain e-mails and various websites. 57.12 % teachers assessed this statement as false, and NWO conspiracies are believed by 7.01 % respondent teachers. 18.75 % stated that they are not qualified to assess the statement.

U.S. elections in 2020 were purposely rigged in favour of J. Biden.

We included this statement in reaction to a massive wave of disinformation and conspiracies disseminated by ex-president Trump and others in connection with U.S. elections. We wanted to find out how Czech teachers react to this statement.

64.87 % marked the statement as false as they don't believe in conspiracies about rigged U.S. elections. Only 4.92 % teachers supported this conspiracy. 17.68 % teachers remained cautious and stated that they don't feel qualified to assess the statement.

B. Hoaxes and other disinformation (hoax classics)

We complemented the statement set by a few well-known hoaxes:

If you put an egg between two cell phones calling each other, the egg will boil in an hour.

This is a classic hoax, over 20 years old. 58.79 % marked the statement as false. Only 1.62 % believe this hoax. Over a quarter of teachers (28.26 %) stated, however, that they are not able to assess the statement and that they are not sure whether an egg can really be boiled this way.

If I have to withdraw money from ATM in an emergency (someone blackmails me), I can call in the Police by entering my PIN backwards.

Again, this is a known hoax, detected correctly by 59.49 %. Only 2.8 % respondent teachers got fooled by this statement. A large part of teachers (26.50 %) stated that they are not able to assess the statement as they don't have sufficient information available.

C. Historic myths still living today

Here, we included statements based on historic misinterpretation or period propaganda, yet still living today. Teachers were often wrong in this part.

Napoleon suffered from inferiority complex due to his height, below average for his times. This has given rise to "Napoleon complex," a term used in psychology.

It is one of the most known and widespread myths. In fact, Napoleon was unusually tall and the myth that he was short originates in a wrong conversion of English and French units (different size of an inch) as well as in period propaganda.

65.94 % teachers assessed the statement as true and they believe that Napoleon was really short. Only 13.32 % marked the statement as false.

Vikings wore helmets with horns.

Another myth says that the Vikings wore horn-fitted helmets (often seen in cartoons, movies, adverts, etc.) In fact, Vikings didn't wear horns on their helmets (that would be hampering in a battle, the helmet could be easily torn down, etc). Such myth originates in *The Ring of the Nibelung*, an opera by Richard Wagner from the 19th century.

52.95 % teachers agree that Vikings really wore horn-fitted helmet so they assessed the statement incorrectly. 21.21 % were right when they marked the statement as false. 12.58 % stated that they are not able to assess the statement.

D. Historic facts

We also included a few historic facts that, however, require some knowledge of history to be assessed. Therefore, we don't include these in the final evaluation of success in detecting false statements.

In the 19th century in England, it was common to take photographs of deceased family members in a position as if they were alive (seating, for example).

This is a fact, correctly assessed by 21.25 % teachers. 10.90 % assessed the statement as false and 50.39 % stated that they are not qualified to judge. This proves our assumption that with this type of statement, knowledge of the topic and historical context is necessary.

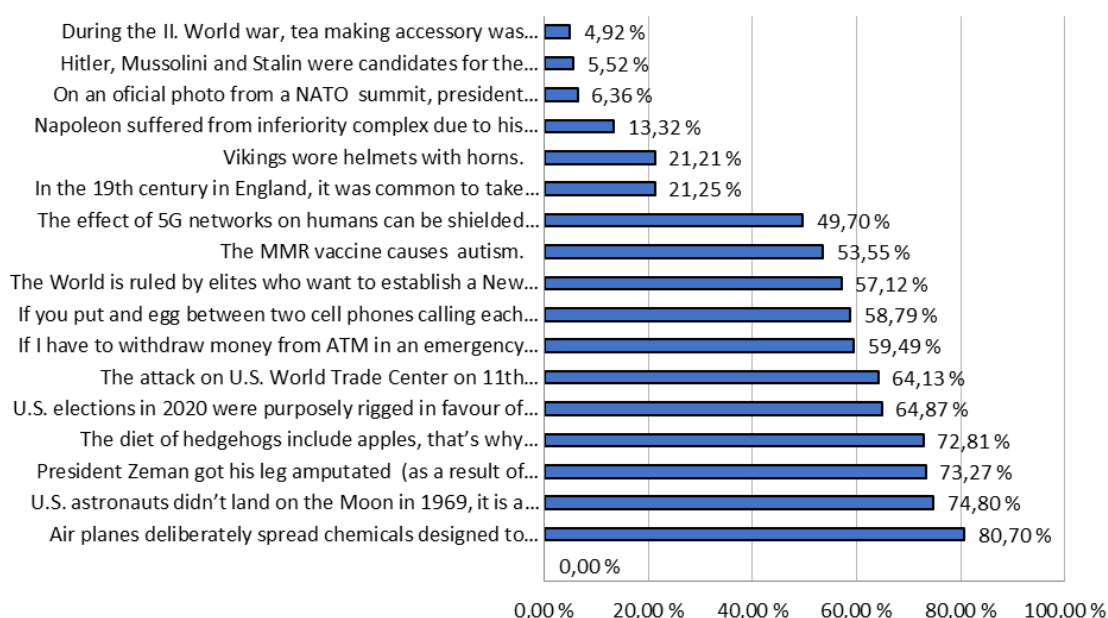
During the II. World war, tea making accessory was installed in all British tanks.

Again, this is a fact, correctly identified by mere 4.92 % teachers while 17.45 % marked the statement as false. Importantly - 58,93 % teachers stated that they are not qualified to judge.

Hitler, Mussolini and Stalin were candidates for the Nobel Peace Prize.

Again, this is a historical fact. The dictators named above were really candidates for the Nobel Peace Prize. This statement was correctly assessed by 5.52 % teachers, 72,16 % marked it as false and 12,85 % respondents didn't feel qualified to judge.

Chart 4 Teachers and information from the world around (correctly assessed statements)



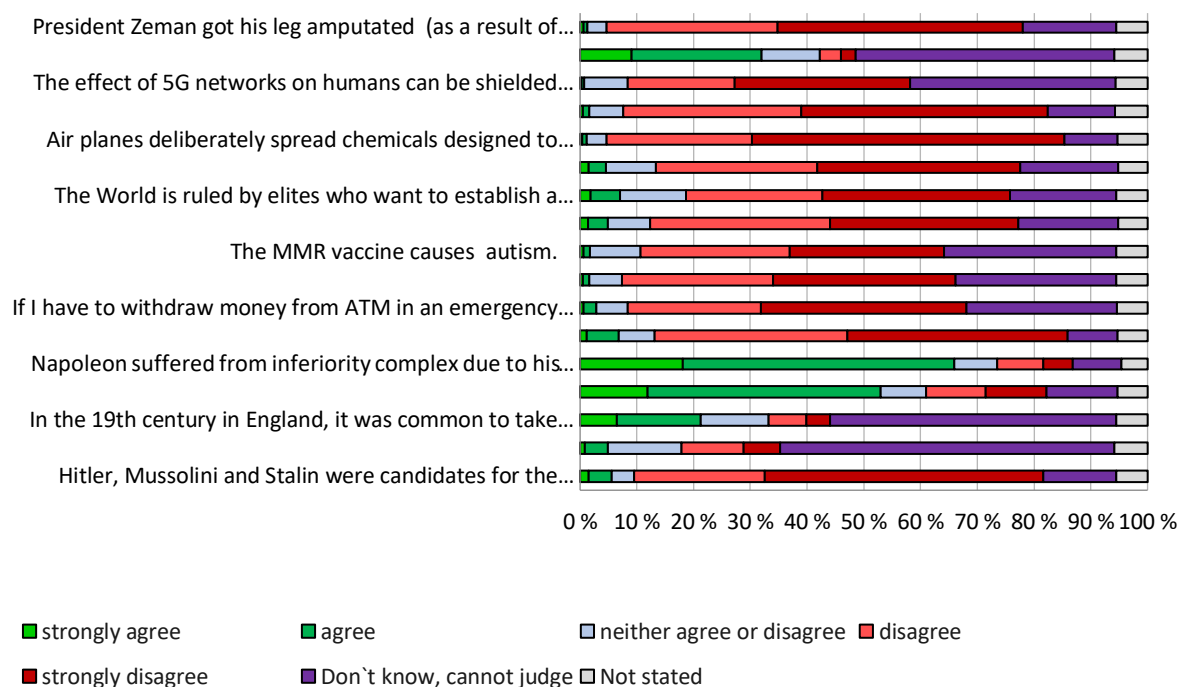
(n=2155)

Conclusion

Based on analysing the above statements, it can be concluded that **53.53 % respondent teachers can correctly assess the trueness** (average values based on 14 statements). **16.79 % participant teachers assessed the statements incorrectly** (average values based on 14 statements). We excluded 4 statements that require specific knowledge in history and where the number of teachers who didn't feel qualified to judge exceeded 45 %.

As 18.67 % teachers stated that they are currently not qualified to assess, it is possible that the resulting score could be better, but also worse. Media literacy skills involve the ability to admit that I don't have sufficient relevant information available to assess a certain statement. However, it is important to find a relevant source when verifying information.

Chart 5 Total results (assessing trueness by teachers)



(n=2155)

Final conclusion

Based on verifying the trueness of 38 statements containing false information (hoaxes, conspiracies, disinformation, but also facts, divided into 3 topics and excluding statements where more than 45 % teachers were not able to assess the statements for various reasons), it can be concluded than in average:

61.14 % Czech teachers are able to correctly assess the trueness of a statement (66.78 % teachers in EU related disinformation).

15,59 % Czech teachers admit that they are not able to assess the statement (not having the facts available or being unfamiliar with the topic). This is a relatively positive finding – teachers are aware of their limits and lack of knowledge and they are able to work on it.

10,41 % Czech teachers assess the trueness of the statements incorrectly, they believe in false content, disinformation, conspiracies, hoaxes and myths.

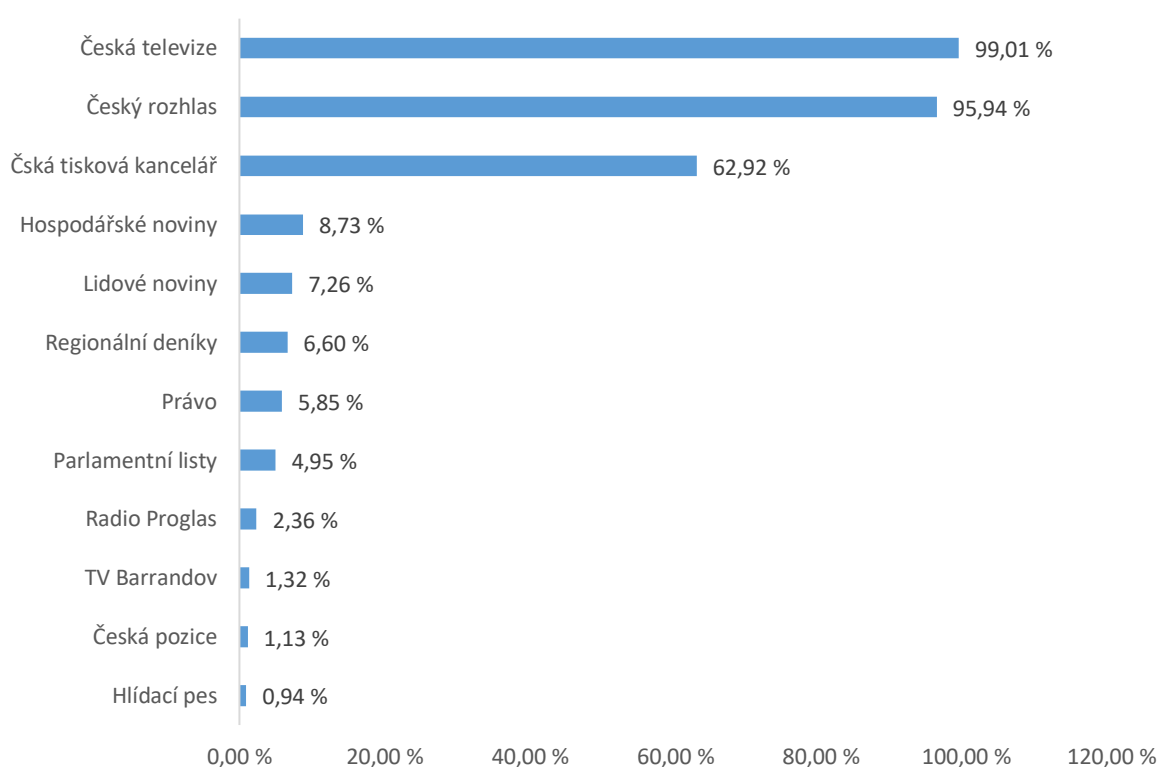
4.3. Czech teachers and the media content

In this part, we focused on whether teachers can identify publicly funded media, whether they can distinguish a satiric profile from a real one on social networks and whether they engage in forwarding e-mails with various content.

4.3.1. Czech teachers and publicly funded media

Publicly funded media include the Czech Television, the Czech Radio and the Czech Press Agency. A vast majority of teachers correctly identified the Czech Television (99.01 %) and the Czech Radio (95.94 %) as publicly funded. A lower number of teachers (62.92 %) correctly identified the Czech Press Agency as publicly funded. These results can be seen as very positive as almost all teachers can identify at least some publicly funded media. The difference from private media is the fact that they must follow the Czech Television Codex, meet requirements in terms of impartiality, balance, political neutrality and independence and their main purpose is public service, not financial gain.

Chart 6 Czech teachers identifying publicly funded media



(n=2155)

4.3.2. Can teachers distinguish a satirical profile from a real one in social networks?

We wanted to find out whether teachers are able, from a samples of actual twitter profiles, distinguish an official (real) profile from a satirical one. An official profile shows so called verified button (a blue dot with check mark inside) beside the profile name. **This was**

recognised by a relatively small percentage (19.44 %) of teachers. 72.02 % teachers perceive a satirical profile as a real one. We believe that the reason behind a high number of incorrect answers could be the fact that teachers don't realise that profiles of publicly known persons contain a "verified" symbol.



Miroslav Kalousek

@mkalousek



To, co se momentálně děje v poslanecké sněmovně, jsem za více než 20 let své politické kariéry neviděl. Říkám to zase a znovu: Pane premiére, prosím, odstupte.

12:00 PM · Apr 6, 2019

128 Retweets 45 Quote Tweets 1.5K Likes



Miroslav Kalousek ✓

@kalousekm



Dnes je Boží hod... V rámci vánočního rozjímání jsem si si vzpomněl na 25.5. 1996, kdy v Jeně Jan Železný hodil oštěpem dosud nepřekonaný světový rekord 98,48 m. To byl taky Boží hod.

1:18 PM · Jan 11, 2021

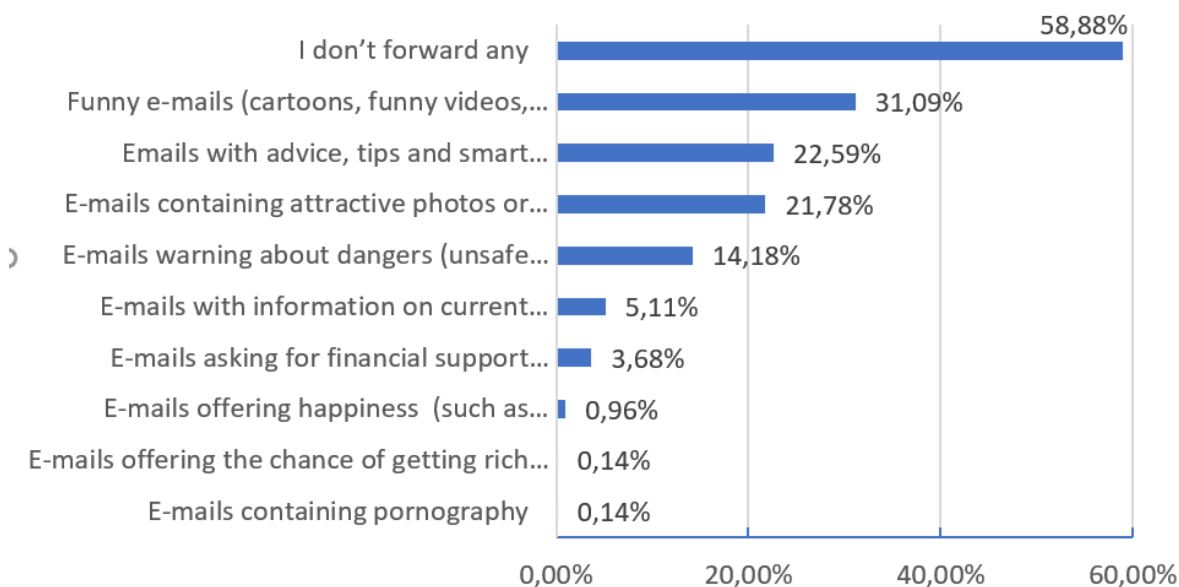
47 Retweets 3 Quote Tweets 2.9K Likes



4.3.3. Teachers and e-mail forwarding

Over a half of teachers (58.88 %) never forward e-mails with various content. If teachers decide to forward a certain e-mail, it usually contains jokes (31.09 %), advice, tips and smart recommendations (22.59 %) or photos/videos (21.78 %). Almost no teachers (0.14 %) send e-mails containing pornography or offering opportunities to get rich.

Chart 7 What e-mails teachers forward



(n=2094)

4.4. Czech teachers and media education

The next part of our research focuses on delivering media education in schools. We wanted to know, in particular, whether teachers are equipped for media education, what media education topics they teach, how they perceive the importance of media literacy and how is media education taught in their school.

4.4.1. Professional qualification of teachers for media education

Almost **80 %** (79.95 %) teachers **stated** that they **did not complete any media literacy related subjects** during their teaching studies/courses. Only 18 % teachers stated that they completed such subjects. Various courses or seminars present another option for teachers to improve their qualification for media education. Again, the prevailing part of teachers have never completed such a seminar or training (61.48 %). The completion of courses or seminars outside university studies was confirmed by 36.89 % respondents.

4.4.2. What is taught in media education and what should be taught

Media education includes a range of topics teachers can explore with their students. Within this research, we asked teachers whether such topics are taught in their school. The most frequent answer was that working with the Internet, including search for information, is surely taught at their school (59.26 %), followed by computer safety, such as how to set up

a password, how to protect personal details or how to avoid frauds (51.23 %). School also teach how to use communication tools on the Internet (50.21 %).

As opposed to reality, we also explored what topics teachers wish to be taught in their school. In this case, the most frequent answer was the issue of hoaxes and fake news (35.50 %), recognising relevant sources of information (34.06 %) and finding the way in the media world, such as distinguishing public funded media from a private ones (32.20 % respondents).

Table 3 Media education topics

Topics	Taught in my school	I wish it to be taught
Using the Internet – search for information	59.26%	18.75%
Computer safety (passwords, personal details, frauds, cyber-crime...)	51.23%	26.26%
Using the Internet – communication tools (chat, Skype, e-mail...)	50.21%	12.99%
Activities focused on supporting media literacy in schools (work sheets etc.)	37.91%	25.75%
Using the Internet – social networks	35.78%	13.83%
Creating media content in school (a school magazine, web, blog...)	32.58%	28.40%
Disinformation, hoaxes and fake news (examples, samples, detecting)	30.58%	35.50%
Recognising relevant sources of information	28.45%	34.06%
Finding the way through the world of media, public, private, government media...	23.16%	32.20%
Working with media products (advertisement, reality shows...)	22.23%	22.00%

(n=2155)

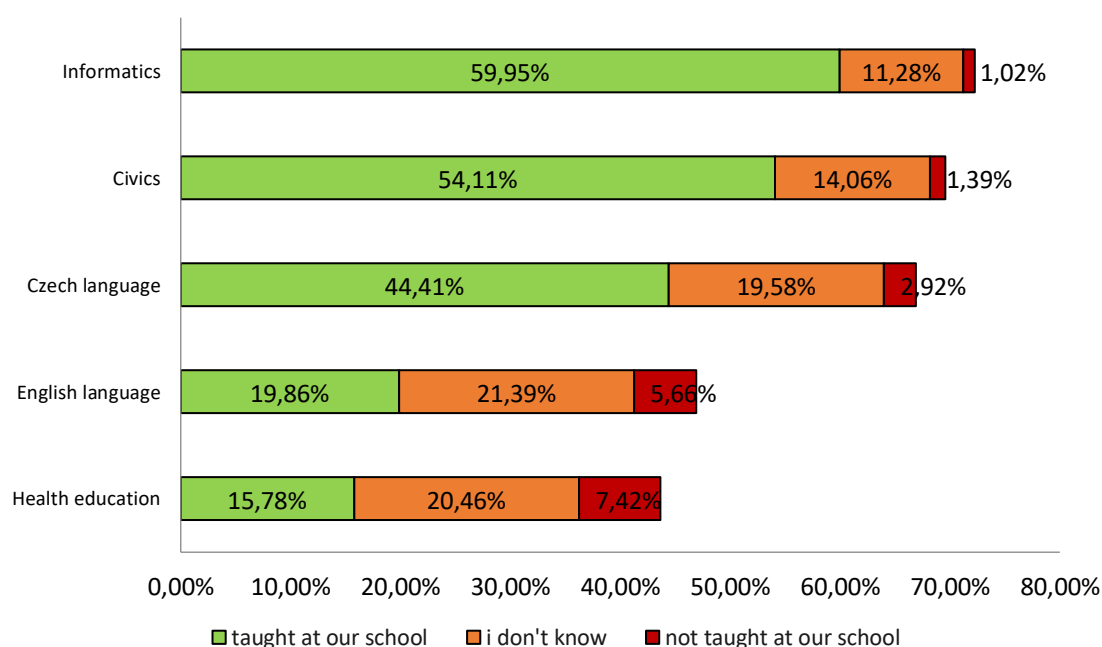
4.4.3. Teachers and the importance of media education

We also focused on how teachers perceive the importance of media education. A vast majority (91.6 %) teachers agree that media education is important (55.7 % completely agree, 36.6 % rather agree). Under 2 percent teachers don't agree (1.1 % rather disagree and 0,5 completely disagree). On the other hand, teachers don't feel that the number of media education lessons should be increased. 21.1 % teachers agree that time spent with media education should be increased to the detriment of other subjects, while only 6.4 % agree completely. Most teachers rather disagreed (38.3 %), 9.7 % completely disagreed and 30,9 % didn't know or didn't answer.

4.4.4. Subjects (not) involving media education

As media education is a cross-subject discipline, it is delivered, apart from various talks or a separate subject, also within other subjects. From this perspective, Informatics is the most important subject - 59.95 % teachers stated that in their school, media education is taught within this subject. Other important subjects involving media education include Civics (54.11%) and Czech language (44.41 %). On the other hand, media education is rarely delivered in Physical education (1.90 %), Technical education (4.04 %) and Chemistry (4.32 %).

Chart 8 Subjects involving media education



(n=2155)

4.4.5. How many teachers teach media education and in what form?

The results suggest that approximately half of teachers teach media education. **47.01 % participant teachers answered that they teach media education across various subjects.** 3.02 % teachers teach media education as a separate subject – only 65 teachers from the sample of 2155 respondents. 45.38 % teachers don't teach media education either across subjects or as a separate subject. The data gathered include several responses (a few percent) by teachers who teach elements of media education in their subject randomly within certain topics or when they come across a topic, however they don't deliver media education systematically.

4.5. Conclusion

A. Czech teachers and mass media

Czech teachers actively use mass media in both printed and electronic form. The most frequented printed media among teachers is Mladá fronta DNES daily where 14.01 % respondents confirmed that they read it on a regular basis. The following are Respekt weekly (11.46 %) and Deník daily with all its regional versions (9.23 %). Teachers perceive Hospodářské noviny (75 %) as the most trusted newspaper. The least trusted ones are Aha! and Blesk.

As for the use of electronic media, the most frequented are iDNES.cz (40.14 %), Aktuálně.cz (33.46 %) and Novinky.cz (30.44 %). As for trustworthiness – teachers perceive the websites of the Czech Press Agency (75.82 %), iRozhlas.cz (75.58 %) and ČT24 (71.90 %) as the most trusted. Teachers also recommend these three portals to students as a source of information. On the other hand, the least trusted news portals are Aeronet (89.87 %), Sputniknews (89.73 %) or Nová republika (87.32 %). Only 2 respondents recommend Parlamentní listy to students as a source of information.

85.96 % teachers, on average, are able to identify publicly funded media – teachers correctly identified the Czech Television (99.01 %) and the Czech Radio (95.94 %) while struggling with the Czech Press Agency, identified as publicly funded by 62.92 %.

Teachers watch the Czech Television channels on a regular basis (75.03 %), while 67.71 % respondents perceive them as trusted. The least trusted television channel for teachers is TV Barrandov (perceived as not trusted by 79.84 % teachers). As for radio stations, channels of the Czech Radio dominate among teachers (41.44 % respondents). The following are Impuls and Evropa 2. Channels of the Czech Radio are the most trusted by teachers (79.65 %), followed by Rádio Proglas (52.44 %).

For most teachers, the primary source for lessons are printed textbooks (87.66 %), however many teachers also use YouTube (85.66 %), Wikipedia (71 %) or electronic textbooks (63.20 %) as a source of information.

As for YouTube channels, 45.67 % teachers use Otevřená věda, 38.95 % use university channels (Mluvící hlavy, E-Bezpečí), teacher Petr Čurko's channel (38.07 %) and Na potítku (29.61 %). Other favourite youtuber channels are those of Kovy, Honest Guide and Martin Rota.

B. Czech teachers and (dis)information

The next part of our research explored whether teachers are able to distinguish disinformation content from true, factually correct and verified content. Based on verifying the trueness of 38 disinformation and conspiracy related statements (divided into 3 topics), it can be concluded that on average:

61.14 % Czech teachers are able to distinguish true statements from false statements (66.78 % teachers in EU related disinformation).

15.59 % Czech teachers admit that they are not able to assess the statement (not having the facts available or being unfamiliar with the topic). This is a relatively positive finding – teachers are aware of their limits and lack of knowledge and they are able to work on it.

10.41 % Czech teachers assess the trueness of statements incorrectly, they believe in false content, disinformation, conspiracies, hoaxes and myths.

We have also tested teachers' ability to distinguish a real profile of a public person from a false profile – through the “verified” symbol used in most social networks. Only 19.44 % teachers were able to detect a real profile of a publicly known person.

C. Czech teachers and media education

Most respondents (80 %) from our sample have not completed subjects focused on media education during their studies. Therefore, they are not (have not been) systematically trained in this cross-subject topic. 36.89 % teacher respondents have completed additional seminars focused on media education.

Media education includes a range of topics teachers can explore with their students. Within this research, we asked teachers whether such topics are taught in their school. The most frequent answer was that working with the Internet, including search for information, is surely taught at their school (59.26 %), followed by computer safety, such as how to set up a password, how to protect personal details or how to avoid frauds (51.23 %). School also teach how to use communication tools on the Internet (50.21 %).

As opposed to reality, we also explored what topics teachers wish to be taught in their school. In this case, the most frequent answer was the issue of hoaxes and fake news (35.50 %), recognising relevant sources of information (34.06 %) and finding the way in the media world, such as distinguishing public funded media from a private ones (32.20 % respondents).

A vast majority (91.6 %) of teachers agree that media education is important. On the other hand, teachers don't feel that the number of media education lessons should be increased.

21.1 % teachers agree that time spent with media education should be increased to the detriment of other subjects.

Media education as a cross-subject topic is delivered within many subjects while Informatics is the most frequent one - 59.95 % teachers answered that in their school, media education is delivered within this subject. Other important subjects involving media education include Civics (54.11%) and Czech language (44.41 %). On the other hand, media education is rarely

delivered in Physical education (1.90 %), Technical education (4.04 %) and Chemistry (4,32 %).

The results suggest that approximately half of teachers teach media education in some form. **47.01 % participant teachers confirmed that they teach media education across various subjects. 3.02 % teachers teach media education as a separate subject.**

5. Quotes



Enhancing media literacy is a key for surviving in today's information-packed world and one of the ways to boost media literacy is media education as a cross-subject topic, included in the curriculum from primary schools. Teachers play the key role in making students familiar with mass media, presenting them with trustworthy sources and interesting educational content, teaching them how to critically assess and verify information (e.g. finding the original source). Not every teacher is equipped for teaching media education. A vast majority of teachers have not completed any media education course during their studies (and afterwards) and they include media education in their lessons in a very limited extend. On the positive note, most teachers perceive media education as an important and hot topic that should be given sufficient space in the Czech educational system. However, not by increasing the number of lessons or teaching media education as a separate subject.

*doc. Mgr. Kamil Kopecký, Ph.D.
manager of Centrum PRVoK, E-Bezpečí & Digidoupě
Faculty of Education of Palacký University Olomouc*



It is important for teachers to help students identify information sources that are reliable and based on verified facts or scientific knowledge. A teacher must not fall for so called alternative media full of anonymous stories, working with emotions and stereotypes rather than with truth. From this perspective, the research shows that teachers trust publicly funded media in particular, whether it being the Czech Television, the Czech Radio or the Czech Press Agency. Least, they trust Sputnik or Aeronet, often perceived as alternative or disinforming. It seems that Czech teachers do not particularly like tabloid media – from the generally most popular daily newspapers, Blesk and Aha! came up at the end of the list. With Blesk, teachers obviously rock the boat as this daily is generally one of the most popular papers in the country.

Mgr. Dominik Voráč

*Centrum PRVoK PdF UP + DSP Čtenářství a mediální výchova
Faculty of Education of Palacký University Olomouc*



Chytrá škola, an educational scheme by O2, helps teachers to develop and teach digital competences, and media literacy is an indivisible part of it. We all have got used to a huge amount of information overwhelming us every day, and particularly children consume content very quickly and on a mass scale. The presence of disinformation websites, perceived more and more as standard media, is alarming. Current affairs such as the pandemics, vaccination or elections are exploited for disinformation campaigns. Media education should therefore be among the substantial and core learning topics. Today, it is necessary to learn how to navigate in the media and information world. Being able to read is not enough. And if schools teach children how to read, it should be only natural to teach them how to read well and responsibly. And this is exactly what we strive to achieve in O2 Chytrá škola: permanently pull Czech schools into the 21st century. We motivate, we inspire and we support Czech teachers in their innovative approach to education. And we always provide them with suitable tools. The main one is www.o2chytraskola.cz, our portal offering a wide range of resources for teaching media literacy. Further, schools can draw funding from our yearly grant scheme. And again, we are happy to offer specific tools such as “Nekrm kachnu“, an educational card game by Fakescape. Or the development of Verifée, a new app that helps identifying fake news and also teaches how to distinguish trustworthy news from disinformation.

*PhDr. Marie Mališková
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About the Centre for the Prevention of Risky Virtual Communication

The Centre for the Prevention of Risky Virtual Communication by the Faculty of Education of Palacký University, Olomouc, (hereafter “PRVoK”) is a certified university department oriented on risky on-line communication of children and adults. It is focused particularly on cyberbullying, cyberstalking, cybergrooming, hoax and spam, sexting, on-line social engineering, the risks of sharing personal information on social networks, disinformation and fake news in the public domain and other dangerous communication phenomena.

In research, PRVoK conducts both fundamental and applied research (including contractual research). It looks, for instance, into risky communication of children and sexual abusers, risky sharing of personal information across communication platforms, specific forms of cyber attacks through web cameras (webcam trolling), it reveals fake profiles, identifies fraudulent e-shops and business proposals, identifies attackers, supports victims, etc.

In research, education and intervention, PRVoK cooperates with a range of companies, namely O2 Czech Republic, Google, Seznam.cz, Vodafone, Avast, but also with the Police, National Cyber and Information Security Agency, the CZ.NIC association and other institutions. The Centre is also supported by the Czech Ministry of Education, Youth and Sports and the Czech Ministry of the Interior.

Apart from research, the Centre also delivers E-Bezpečí (“e-safety”, www.e-bezpeci.cz), a nation-wide project on education and prevention in risky on-line behaviour. It also provides a counselling clinic for victims of Internet attacks (www.napisnam.cz), linked to Linka bezpečí (a helpline), the Czech Police, OSPOD (the National Child Protection Authority) and other specialised institutions.

As an important part, PRVoK also includes Digidoupě – a digital technology lab, focused on meaningful and effective use of modern technologies in teaching. More info at www.digidoupe.cz.

More details on the activities of Centrum PRVoK at www.prvok.upol.cz.

About O2 Chytrá škola

The O2 Chytrá škola programme is designed to help teachers, but also children and parents to find their way through the opportunities and threats of the digital world. The programme includes an educational portal and a funding scheme for primary & lower secondary schools. Detailed and useful information on using the Internet and digital technologies safely, as well as tips on how to discuss these with children, can be found at www.o2chytraskola.cz. It will guide you through all areas of the digital world, from data security to the ways of media manipulation and the use of technologies in education. It includes articles, videos and quizzes suitable for anyone as well as useful info sheets and methodology tips for teachers.

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