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Norwegian teachers' understandings of conspiracy theories

Abstract

Throughout the autumn semester of 2021, 24 teachers from lower and upper secondary schools in Norway (year 8-13) participated in the continuing education course *Conspiracy Theories in School and Online*, developed by the Department of Teacher Education at the Norwegian University of Science and Technology (NTNU). Seven teachers who had signed up for the course were interviewed before it started to find out about their pre-understandings and knowledge of conspiracy theories (CTs) and thoughts about countering them in school. Semi-structured online interviews lasting about 35-60 minutes were transcribed and coded using attribute, descriptive and structural coding (Saldaña, 2021), gradually constructing themes for a thematic analysis (Castleberry & Nolens, 2018). Results show the teachers conceptualized CTs as *problematic explanations*, not even having to be about conspiracies, and that belief in CTs was always considered potentially harmful. Their understanding mirrors the layman's understanding described by Walker (2019) influenced by the negative views on CTs from the social sciences (Thalmann, 2019). All CTs could therefore be countered by general means in school (critical thinking, skills, knowledge). But lacking resources (time, skills, knowledge), the teachers end up using the same criteria described by Krekó (2020), countering specific CTs that are popular, more likely to be harmful, and very unlikely to be true. CTs were often seen as *anti-democratic*, but possible democratic challenges in countering CTs in school (e.g., human rights, see Rääkkä & Basham, 2019; Smallpage, 2019) were not highlighted by the teachers.

Keywords: conspiracy theories, conspiracy theories and education, teacher conceptualizations, countering conspiracy theories

Norske læreres forståelser av konspirasjonsteorier

Sammendrag

Gjennom høstsemesteret 2021 deltok 24 lærere fra ungdoms- og videregående skoler i Norge på videreutdanningskurset *Konspirasjonsteorier i skole og på nett*, utviklet av Institutt for lærerutdanning ved Norges teknisk-naturvitenskapelige universitet (NTNU). Sju lærere som hadde meldt seg på kurset ble intervjuet før det begynte for å finne ut av deres forforståelser og kunnskap om konspirasjonsteorier (KT-er), og tanker om å imøtegå dem i skolen. Semistrukturerte nettintervjuer som varte i omtrent 35-60 minutter ble transkribert og kodet ved hjelp av attributt-, deskriptiv og strukturell koding (Saldaña, 2021), og kodene ble deretter brukt til å konstruere temaer for en tematisk

analyse (Castleberry & Nolens, 2018). Resultatene viser at lærerne konseptualiserte KT-er som *problematiske forklaringer* som ikke nødvendigvis trengte å handle om konspirasjoner, og at troen på KT-er alltid ble ansett som potensielt skadelig. Forståelsen deres speiler lekmannsforståelsen beskrevet av Walker (2019) påvirket av det negative synet på KT-er fra samfunnsvitenskapene (Thalmann, 2019). Alle KT-er kan derfor imøtegås med generelle midler i skolen (kritisk tenkning, ferdigheter, kunnskaper). Men grunnet manglende ressurser (tid, ferdigheter, kunnskap) ender lærerne opp med å bruke de samme kriteriene beskrevet av Krekó (2020), og imøtegår spesifikke KT-er som er populære, mer sannsynlig skadelige og svært usannsynlig sanne. KT-er ble ofte sett som *anti-demokratiske*, men mulige demokratiske utfordringer ved å imøtegå KT-er i skolen (f.eks. knyttet til menneskerettigheter, se Rääkkä & Basham, 2019; Smallpage, 2019) ble ikke tatt opp av lærerne.

Nøkkelord: konspirasjonsteorier, konspirasjonsteorier og utdanning, læreres konseptualiseringer, imøtegåelse av konspirasjonsteorier

Introduction

The term ‘conspiracy theory’ (CT) went mainstream in Norway following al-Qaeda’s’ terrorist attacks against the United States, September 11, 2001 (Færseth, 2017). Usage of the term in Norwegian media then rose markedly starting in 2016¹, often in articles about Donald Trump or the 2020 American presidential election, climate change, immigration, radicalization/extremism and the COVID pandemic. CTs were simultaneously described as challenging for Norwegian classrooms in articles (Dyrendal, 2018; Dyrendal & Jolley, 2020; Dahle & Helgesen, 2021), books (Færseth, 2017; Strømmen, 2021; Dyrendal & Emberland, 2019), master theses (Lilleskare, 2021; Bergseth, 2020) and by active teachers in multiple news articles and reader contributions. Nationally and internationally, didactic resources and teacher guides are spread to teachers wanting to counter or prevent at least some CTs². Less is known, however, about these teachers’ own understanding of what they evidently consider a problem, with a focus group survey amongst Norwegian upper secondary school teachers (Dyrendal & Jolley, 2020) as the notable exception. The main question guiding this article can therefore be summarized as: “How do teachers wanting to counter or prevent CTs understand them?”

Throughout the autumn semester of 2021, 24 teachers from lower and upper secondary schools in Norway (year 8-13) participated in the continuing education course *Conspiracy Theories in School and Online*, at the Norwegian University

¹ A search for the word ‘konspirasjonsteori’ in all Norwegian newspapers using the The National Library of Norway’s [website](#), shows the word was used 751 times between 2005-2009; 750 times between 2010-2014; then 1072 times between 2015-2019; and 854 times between 2020 and December 2022.

² Nationally [Faktisk](#), [NRK](#), [NDLA](#) and [DEMBRA](#), internationally [Expo](#), [Radicalisation Awareness Network \(RAN\)](#), [Anne Frank Stichting/SSV](#), [UKRI/ACT](#), [OSCE/ODIHR](#) and [UNESCO](#).

of Science and Technology (NTNU), to learn about potentially harmful CTs. I was the subject manager for this course. Through a thematic analysis (Castleberry & Nolens, 2018) of semi-structured interviews with seven of these teachers conducted before the course started, the goal of this article is to answer a number of research questions (RQ):

- RQ1: How do the teachers explicitly and implicitly define CTs?
- RQ2: Why do people believe in CTs, according to the teachers?
- RQ3: Why are (at least some) CTs problematic, according to the teachers?
- RQ4: Which CTs should be countered or prevented in school, according to the teachers?
- RQ5: How should CTs be countered or prevented in school, according to the teachers?

Some of these RQs are partly answered by Dyrendal & Jolley (2020) writing about a sample of Norwegian teachers, and their article is a natural point of comparison. Nevertheless, the limitation of the survey format makes interviews advantageous in providing more information about the teachers' understandings of CTs. Since there is no 'correct' way to define CTs, and even with the same definition people still argue whether something is or is not a CT, there is a need to know exactly what teachers consider problematic in a school context, and how they imagine this problem being solved. Otherwise, there can be no success criteria in their work preventing or countering CTs. A first step is looking to the literature for guidance.

Factors likely influencing teachers' understandings of CTs

What are CTs?

What is referred to as CTs have most likely existed throughout human history (Yablokov et al., 2020), but the name of the concept is first found in 19th century USA as a neutral hypothesis about a *criminal conspiracy* (McKenzie-McHarg, 2019; McKenzie-McHarg, 2020): a secret agreement between at least two people to commit a future crime. *Unwarranted speculations about people conspiring* were soon named CTs or similar terms by social scientists, and these CTs were linked to negative outcomes for society and individuals believing in them (Butter & Knight, 2019). CTs were seen as both irrational and dangerous narratives by most researchers following World War II and the Red Scare, and people believing in them were thought to have cognitive, social, emotional or existential problems (Thalman, 2019). Karl Popper's term 'conspiracy theory of society' (1945, see Popper, 1962) and Richard Hofstadter's 'paranoid style in American politics' (1964, see Hofstadter, 2008) were both important in mainstreaming and delegitimizing 'CTs', and well-read journalists spread this negative understanding of CTs as irrational and dangerous in Western media (Thalman, 2019).

Consequently, Norwegian media and researchers have always used ‘konspirasjonsteorier’ (CTs) about unwarranted or untrue narratives.

Scholars in cultural and literary studies started *normalizing* the belief in CTs from the 90s, pointing out that CTs are everywhere, most people believe in at least one, and belief can be ‘rational’ (e.g. useful for the individual or a group) in different historical and cultural contexts, even if the CTs are still seen as epistemically wrong (Butter & Knight, 2020). Here, CTs are often understood as collective narratives made by and for groups to make sense of a complex world. Some philosophers (mainly social epistemologists) argue in favor of a ‘neutral’ minimum definition of CTs: CT understood as any explanation in which conspiracy is a salient cause. An example would be Dentith (2014), who writes that for something to be a CT, the only necessary requirements are conspirators (agents with a plan); secrecy (steps taken by the agents to minimize public awareness); and a goal (desired by the agents). Consequently, there are a lot more CTs than most people would call CTs, and a proven conspiracy would be a true CT, even if the majority of CTs might still be untrue.

Most researchers with other backgrounds, however, (psychology, history, sociology, political science, etc.) have seemingly not considered the philosophers’ suggestions very useful for what they are studying (the unwarranted or untrue CTs and their effects on individuals and society), and many of them include the CT being unwarranted, untrue, illogical, or not evidence based as part of their definition. Many would also add that conspirators must have a malevolent goal. Actual conspiracies do happen everywhere, but they are not CTs. If belief in a conspiracy is warranted by the evidence, it is no longer a CT. And benevolent CTs are not CTs. Unsurprisingly, researchers across the board often find multiple reasons to be negative of CTs and their effects on individuals and societies.

Adverse effects of CTs

Using definitions in which CTs are always unwarranted, belief in CTs has been connected to a range of negative outcomes for individuals and society at large. CTs can increase feelings of powerlessness, insecurity, general mistrust (in others, institutions, and democracy), and feelings of lawlessness or normlessness (anomie) (Butter, 2020; Moore, 2019). Believing in CTs can lead to social stigma, and believers often fear being socially excluded and feel like outsiders (Jolley et al. 2020: 233-4). Belief in specific CTs also lead to science denial, ignoring or even attacking conventionally recognized science (Cullen, 2019; Lewandowsky, 2019; Pasek, 2019). Exposure to CTs about climate change decreases the likelihood that individuals will take steps to reduce their climate footprint; exposure to CTs about vaccines decreases the willingness of those exposed to vaccinate themselves or their children; and CTs about the pharmaceutical industry correlates with mistrust in science and belief in alternative practitioners (Jolley et al., 2020: 236-7).

On a societal level, CTs polarize the debate climate, developing, reenforcing, and strengthening echo chambers (Enders & Smallpage, 2019). Consequently, those believing in CTs are more likely to belong to the political extremes, and in Norway, especially on the right (Imhoff et al. 2022). CTs contribute to the spreading of prejudice against ethnic, cultural, and religious minorities (Zia-Ebrahimi, 2018), politicians, the media, and others, and can sometimes work as radicalization accelerators or -multipliers, as the world is considered scary and full of enemies (Dyrendal & Emberland, 2019: 122-127). Being exposed to CTs increases the likelihood of committing a crime (Jolley et al., 2019), some believers spread CTs with the explicit goal of breaking down what they see as a corrupt status quo (Ravndal et al., 2020), and in a few cases believers turn violent, in a desperate attempt to change the direction of what they see as an amoral society (Uscinski, 2019). “Made up problems” also take up resources better used to combat real problems (Dyrendal & Emberland, 2019: 129), and even if CTs can disrupt and overturn corrupt governments, it is unclear how they could be the basis for something better (Atkinson & Dewitt, 2019: 131).

Some studies do find CT belief to correlate with greater support for democratic principles (Swami et al., 2010; Swami et al., 2011) or direct democracy and stealth democracy, with reduced support for representative democracy (Pantazi et al., 2022). But this can be explained by CTs connection with populism (Thórisdóttir et al., 2020; Bergmann & Butter, 2020), and the belief that ‘the people’ would vote with the CT believers if only they could get rid of ‘the elites’. Populists therefore

...dismiss the once universal values of liberal democracies: rule of law, diversity, openness, free cross border trade, human rights, free press, etc. Indeed, they tend to base their very claims to power precisely on a disrespect for established democratic norms – against the establishment they claim is manipulating the innocent public [...] quite often by way of CTs [...] (Bergmann, 2018: 172).

As CT belief correlates with reduced institutional and interpersonal trust (van Prooijen et al., 2022), exposure to CTs also correlates with reduced trust in democratic institutions and reduced willingness to follow democratic norms (Albertson & Guiler, 2020), and multiple studies link CT belief to authoritarianism (e.g. Đorđević et al., 2021; Grzesiak-Feldman & Irzycka, 2009) and even support for autocracy (Papaioannou et al., 2023)³. CT belief is also connected to less political, societal and civic engagement (Thórisdóttir et al., 2020), and a common consequence is political apathy (Jolley et al., 2020: 234-5), mediated by feelings of political powerlessness. If immensely powerful hidden forces control everything, why bother voting? With several adverse effects of CTs, it seems inevitable that education would be offered as a solution.

³ Surprisingly, a *negative* correlation was found in a sample of young people (Baier & Manzoni, 2020).

Education and CTs

The relationship between education, democracy and CTs has been noted by many. There are, of course, CTs about education as policy: CTs about governments can often include their attempts to brainwash the population, often using the educational system to target children, creating future puppets for the regime. Similarly, there are CTs about educators: well-educated, often politically left-leaning teachers can be seen as conspirators fighting for communism, against religion, against the nation, etc. In other words, CTs can pose a challenge to education and democracies. Understanding CTs as unwarranted, untrue, and dangerous *a priori* legitimizes countering them, but this is complicated by the fact that not everyone agrees on what should be called a CT in the first place (Butter, 2020: 25-6).

Some ways of countering CTs might also conflict with human rights such as freedom of thought, conscience, and religion, and even freedom of speech. Teaching *against* CTs might therefore be a democratic challenge for liberal democracies (Räikkä & Basham, 2019; Krekó, 2020; Smallpage, 2019; Walker, 2019). But education in general also seem to limit the belief in CTs (Douglas et al., 2019; Van Prooijen, 2017; Vetenskap och Folkbildning, 2021), as highly educated people are less likely to believe in simple solutions for complex problems and feel more in control of their social environment (Van Prooijen, 2017)⁴. The findings are correlational, but experimental studies also support the idea that training or priming the use of analytical thinking skills (Caroti et al., 2022; Adam-Troian et al., 2019; Swami et al., 2014; Orosz et al., 2016) and using empowerment strategies (Van Prooijen & Acker, 2015; Van Prooijen, 2019) reduce belief in CTs.

Both educational researchers (Hobbs, 2017; Bullough, 2021; Kahne & Bowyer, 2017) and teachers (Hansen & Vollmond, 2019) have written about CTs and misinformation challenging democratic education, being inherently anti-democratic. Specifically, CTs challenge the kind of democracy dominating democracy education in Norway and internationally, based on leading figures such as Dewey, Habermas, and Biesta: *the deliberative democracy* (Borgebund & Børhaug, 2023). It is important that *everyone* gets to share their point of view, including the CT believers, but that is also true for the so-called conspirators, and responding to evidence is essential for any fruitful deliberation (Mittendorf, 2023; Achour, 2021). Bezalel claims a solution could be letting the students produce their own knowledge through a high degree of student activity, debunking CTs themselves or collectively, but that virtue theory is just as important, learning to exercise certain character traits “...in pursuit of discernment, truth, ethics, citizenship and contributing to the common good” (2022: 273).

⁴ Giry & Tika complicates this, claiming CTs and education might correlate in an inverted U-shape, as uneducated people who might show less or no political interest, also show less belief in CTs (2020: 112).

As noted, CT believers could support some kind of illiberal majority rule, but CTs also challenge *liberal* democracy. The human rights mentioned earlier, important for any liberal democracy, could lead us to believe we should let everyone believe whatever they want to believe, but as Bullough (2021) points out, this is misguided: CTs stands in the way of Dewey's concept of growth and happiness (eudaimonia) and undermines democracy. Bullough is, however, critical of curricular changes and schools offered as a universal solution to anything and everything seen as a problem. He considers teaching democratic practices, habits, attitudes, ethical commitments, and participation a solution, as the belief in CTs, according to him, has systemic (e.g., political, economic, social, cultural) rather than individual root causes. Teachers need to be trustworthy, give students a chance to feel successful and important, and be part of a community. Individual critical thinking skills are necessary, but so is hope, trust, respect, tolerance, and kindness, which should be explicit goals of education. And in Norway, they *are* (Kunnskapsdepartementet, 2017), with democracy and citizenship as an interdisciplinary topic in the core curriculum. This might influence how teachers want to deal with CTs.

Teachers and CTs

Teachers are typically not trained in dealing with CTs, and Dyrendal & Jolley (2020) found that Norwegian teachers in upper secondary school were no better at conceptualizing CTs than their students. Teachers connected the belief in CTs to a lack of media literacy, source criticism, and especially, critical thinking, making it likely they have mostly been exposed to the social scientists' and media's negative understanding of CTs. The teachers argued CTs should be countered, but that this was time consuming and required competence or knowledge they lacked, and therefore they rarely brought any of them up in class. There was also the fear of spreading CTs when trying to counter them, and how this could lead to radicalization, again showing the negative view of CTs as normalized. When asked which CTs were the most problematic, the most popular answers can be summarized as those leading to group prejudices against minorities (Dyrendal & Jolley, 2020), being in conflict with liberal democratic values and the core curriculum.

Contrary to popular belief, believing in CTs is not a fringe phenomenon, but widespread across society (Smallpage et al., 2020). This is true in Scandinavia as well (Vetenskap och Folkbildning, 2021; Petersen & Osmundsen, 2018; Astapova et al., 2021). As teachers are normal people, there should be no surprise that both actively working and future teachers sometimes believe in CTs (Mikušková, 2018; Gkinopoulos et al., 2021; Adam-Troian et al., 2019). The sample interviewed for this study most likely have a skeptical or negative view of most things being called CTs, but that, of course, does not necessarily mean they have no CT beliefs at all. It depends on their conceptualization and understanding of CTs.

Methods:

Participants and Data Collection

Teachers voluntarily signed up for the course *Conspiracy Theories in School and Online*, giving 7.5 course credits (ECTS). The only requirement for participating was actively working as teachers during the the autumn semester of 2021. Invitation to participants in this study was posted as an announcement on the learning management system *BlackBoard* in July 2021, automatically sending emails to every teacher with online access to the course. The interviews were completely voluntary and did not affect grading. 10 teachers were willing to be interviewed before the course started on September 1 and received information about the study and their rights as participants. Seven participants were deemed enough to reach data saturation, partly as a consequence of it being harder to schedule interviews at optimal times for some of the participants (Bremborg, 2014).

The self-selected sample consisted of one lower secondary and six upper secondary school teachers⁵. They were given aliases: Oline, Per, Ida, Eva, Kevin, Jenny and Liv. They work in different schools with <200-1000 students (650 on average); they have 5-18 years of teaching experience (9 on average); and are from 5 different counties. They teach social studies (5), history (4), religion and ethics/religious education (RE) (4), English (4), Norwegian (2), Spanish (1) and media studies (1). The sample was quite representative of the teachers participating in the course⁶, but the lack of science and math teachers is notable. Detailed characteristics of participants are not included; all materials have been handled anonymously, and all translations are my own. The Norwegian Agency for Shared Services in Education and Research (Sikt)⁷ approved the study.

Teachers in the final sample are likely more interested in or concerned with CTs than the average teacher in Norway. CTs are only mentioned explicitly in a single subject's curricula⁸, and asked about their motivations for joining the course, Eva, Liv and Oline say they consider CTs a threat. Evidently, they all considered CTs a serious enough problem for them to spend time learning about CTs and best practices, many while doing their full-time job. The teachers also answered that the course was exciting (5), important, interesting (2) or a lot of fun (1), and that it was very relevant to their subjects (3). Even if CTs are seen as problematic by many Norwegian teachers, the sample is not representative. But finding out how *teachers wanting to counter or prevent CTs* understand them is

⁵ This is representative of the course participants: the vast majority was upper secondary school teachers (19/22 who answered an in-course survey). There was no obvious difference in answers given by the lower secondary and upper secondary school teachers, so they are analyzed collectively.

⁶ Based on the above-mentioned in-course survey of 22 course participants. Their schools had 650 students on average (<200-1800<); they had 13 years of teaching experience on average; and represented 7 counties (fylker). They taught social studies (12), RE (12), English (11), Norwegian (9) and history (8). (Subjects taught by <5 teachers not included).

⁷ Formerly The Norwegian Centre for Research Data, NSD

⁸ Optional course in upper secondary school, History and philosophy 2 (Utdanningsdirektoratet, 2021).

the goal of this study, and there should be a decent degree of transferability to similar teachers in similar school settings (especially Norwegian upper secondary school teachers with backgrounds in humanities and social science).

The entire interview process was guided by Schensul & LeCompte (2013), Bremborg (2014) and Clark et al. (2021), based on the main question: “How do teachers relate to CTs?”. Some research questions were formulated as open questions and put in the interview guide, others functioned as themes to be discussed. Semi-structured interviews were chosen allowing for follow-up questions (Kvale & Brinkmann, 2015) (interview guide in appendix). Because of distances and the ongoing pandemic, every interview was conducted digitally using *Zoom*. Taking place in August 2021, they lasted 35-60 minutes. Audio was recorded to be transcribed verbatim later. Video was only turned on before and after recording the interviews, greeting the participants and saying goodbye. This makes it impossible to interpret body language, but there is no reason to think that is decisive in such expert interviews (Clark et al., 2021: 438-40). Initial coding was presented to the teachers at their first course gathering, September 1, and with no negative feedback, was followed by attribute, descriptive and structural coding (Saldaña, 2021). This later evolved into a thematic analysis.

Thematic analysis

Thematic analysis is an ontologically, epistemologically, and theoretically flexible method of analysis, which makes it especially important to say something about the researcher’s framework (Terry et al., 2017; Braun & Clarke, 2019: 591-2). With an academic background in the study of religion (mostly the history and sociology of religion), and educational studies, I am prone to being skeptical of CTs, while interpreting the interviews as a constructionist (Clark et al., 2021: 24-8). I adhere to contextual constructionism (Best, 1993) or Hacking’s (1999) reformist or unmasking constructionism. Meaning, and therefore themes, are not just found, even if I do consider them connected to an external reality, but are partly constructed by me (Maguire & Delahunt, 2017).

According to Castleberry & Nolen (2018), thematic analysis has five steps or phases in which the researcher moves back and forth, refining codes and themes repeatedly. First step, *compiling* (1), is gathering data, and thoroughly getting to know them. I interviewed and transcribed everything myself (in Norwegian), and have revisited the transcriptions multiple times, always writing memos on noteworthy quotes, possible codes or themes, taking Saldaña’s advice (2021: 31).

Disassembling (2) happens when codes, concept and ideas are constructed from patterned data. Preliminary coding criteria is suggested, elaborated, and developed. I used a mix of attribute, descriptive, and structural coding (Saldaña, 2021), guided by the research questions. E.g., for RQ1 (how do the teachers explicitly and implicitly define CTs?), I coded *explicit* answers to the question “How would you define a CT?” and similar questions into a great number of codes (untrue; wrong; false; unlikely; unproven; unprovable; narrative; explanation;

about a conspiracy; about people conspiring; involving secrecy, etc.), including what effects the CTs had (challenge for democracy; explaining evil; create feelings of community; functions as religions; lead to radicalization; fun; scary; dangerous; entertaining; etc.). I also coded *implicit* understandings from the way the teachers talked about CTs, those who believe in them, and examples of “CTs” mentioned by the teacher (e.g. Jenny states at 24:39: “Whenever I lose faith in the world, CTs are definitely part of the reason for that”, and I coded this as “scary; makes you lose faith in the world”; multiple teachers mentions myths and urban legends as examples of CTs, and I coded this as “myths and urban legends are CTs”).

Reassembling (3) is fusing or splitting up codes into themes and subthemes, always keeping research questions in mind. E.g., as the teachers all agreed CTs were untrue, false or in other ways (empirically) problematic narratives, that could be a subtheme or even a main theme. I have chosen to use in vivo-subthemes to visualize some of what the teachers were actually saying. Inclusion and exclusion criteria were updated multiple times, and the relation between themes and subthemes visualized using matrices and thematic mapping (Figure 1, page 14).

Interpreting (4) really starts when gathering the data (interviewing), but as the fourth step in thematic analysis, it is used to find and construct answers to research questions, always trying to be open about what and how something was interpreted. It should be noted that the number of initial RQs (five) does not correspond to the final number of themes (three), as some themes answered multiple RQs. For the sake of transparency, I chose to keep the initial/guiding RQs in this article and use them in combination with the themes in the discussion to answer the main question. The final step is *concluding* (5), in which the researcher should connect the dots, so to speak, and present their newly constructed knowledge. I finally translated the interview guide, codes, themes, and sub-themes into English for presentation.

Results

Main theme 1: Problematic explanations.

This theme is directly connected to the teachers’ understanding of what CTs are, and is partly summarized by the first in vivo subtheme taken from Ida’s outburst when asked whether CTs necessarily had to be fake or if they could be true: “I think they *must* be fake... I haven’t thought about that before! I’ve always thought they must be fake!” (5:59). Throughout every teacher interview, when asked about their explicit definition, they regarded CTs as untrue, false, fake or unwarranted explanations. There was actually greater agreement on this than on whether CTs had to contain conspiracies (5/7), and most, if not all the teachers shared myths, urban legends, and unwarranted explanations without conspiracies as examples of

CTs (e.g. Jenny at 4:30: “[rumors about...] Queen Elisabeth [being] a hermaphrodite”; and Liv at 8:15 “Bigfoot”)⁹.

In other words, it was more important that a narrative was unwarranted than whether it contained conspiracies, when judging whether it was a CT. When challenged by me or themselves thinking about narratives formerly called CTs turning out to be true, they argued those are no longer CTs. A CT is always untrue, false, or at least unwarranted at that time. However, the teachers also shared an understanding that CTs have different degrees of credibility, and that one can believe in them to a greater or lesser extent: some CTs are easier to accept, “... and I think, perhaps, there are more people who accept them than... [those who] accept the most extreme”, as Liv put it (8:15).

Being unwarranted do not automatically make CTs problematic in a school context, but the vital connection repeatedly being made by the teachers are summarized in the second subtheme: “It’s pretty much everywhere in the information channels the students use” (Kevin, 10:43). The teachers all agreed that students could come across CTs almost anywhere, although ‘the internet’, and ‘social media’ were mentioned as the most likely sources (especially TikTok and YouTube, with Facebook and Snapchat being less relevant for their students today). CTs could also be shared among peers, friends, and fellow students in and out of school, in popular culture, as well as by a former US president. The teachers all agreed that CTs could sometimes come from family, but to a lesser degree. What was making CTs as explanations problematic in the eyes of the teachers, was not just that they were wrong or unwarranted, but that they were widespread. Students will come across them, and consequently, some might start believing in them. This is directly connected to the second main theme.

Main theme 2: Belief in CTs is harmful.

The teachers had a complex understanding of why some people believe in CTs, summed up by the first in vivo subtheme, “I think it is quite complex, actually, why anyone believes!” (Oline, 22:00), but they heavily favored a negative understanding of the consequences. CTs were described by all teachers as excellent at grabbing attention, being *exciting, funny, spectacular, fascinating, and entertaining*. Having your attention, they continue to appeal because they give *satisfying* explanations that *simplifies the complex reality*, and they can be *forming or affirming individual and group identities*. But the teachers also connected individuals believing in CTs with different types of defects, *a lack of cognitive abilities* being by far the most cited (believers are *worse at source criticism, fail to think critically, and are easily duped*). Every teacher also thought *social motives* were sometimes important (a wish for a community or fellowship, being part of a group or milieu), and all but one of them mentioned *emotional or existential reasons* (believers are alienated, may have understandable mistrust of

⁹ The teachers mentioned in total 40 different examples of ‘CTs’. Mostly named was QAnon (17 times), different antisemitic CTs (14 times) and Islamophobic CTs (incl. Eurabia) (14 times).

society/fellow human beings/the public). Ending up believing in CTs can therefore often be perfectly understandable. But according to the teachers, you should not do it.

Every teacher interviewed saw some CTs as challenging society and specifically democracy, Eva's quote being a fitting second subtheme: "I think that is one of the largest threats against society, [...] the build-up of this distrust!" (19:55). They all mentioned mistrust in institutions, polarization, and the splitting up of society, racism, discrimination and extremism as potential and sometimes likely dangers of the belief in CTs. The fear of such consequences was stated as the prime motivation for attending the continuing education course.

The final subtheme is about negative individual consequences of CTs, summarized by two quotes from Jenny: "I don't think you end up as a very good human being [believing in CTs]" (10:53) and "... it gets really difficult to get out of that mindset" (18:11). Five teachers had been worried for students believing in CTs at least once. Asked why or whether CTs can be a problem for the individual, Per and Jenny thought believing in CTs could make you a worse person or give you bad attitudes and values; Kevin thought it could make it harder for the individual to uncover real conspiracies; and most teachers mentioned increased vaccine hesitancy. Every teacher also mentioned how hard it could be to get out of the rabbit hole once you were in it. Even if the belief in CTs was understandable, the teachers found them harmful for both individuals and especially for society. Their conclusion was, unsurprisingly, that schools should do something.

Main theme 3: General and specific countering and prevention.

Asked about their views on education and school policies, the teachers unanimously agreed that schools should provide students with social competence, socialize them into communities and the society, be an arena in which skills and useful knowledge can be gained, and an arena in which attitudes and values for positive personal growth can develop. Similarly, they all stated somewhere during the interviews that CTs could stand directly in the way of all this. Summarized by Jenny (11:28): "[CT] is the antithesis of what you should learn in school!"

Still, every CT could not be countered in school, because "... they spring up like mushrooms!" (Liv, 21:40), and there is not enough time. This is a point every teacher agreed on. Sometimes they lacked the competence to counter a CT without reading a lot first, and they had a curriculum to get through. Also, every CT is not equally dangerous. The teachers wanted to instead counter or prevent CTs or conspiratorial thinking on a general basis, although some CTs, based on criteria, should be given more time. Notably, every teacher argued *antidemocratic* and *antiscientific* CTs should be countered. Eva, Ida and Oline specifically mentioned *CTs blaming one group of people* and CTs that were *especially popular* (in the present); and Kevin, Jenny and Per wanted to counter CTs that were *especially harmful*. There is obviously an overlap between some of these criteria.

The third subtheme is summarized by Eva's (17:40) reflection on generalized countering or prevention of the belief in CTs: "[importantly, deal...] with the general stuff about conspiracy theories, that they are real, and teach students about source criticism and critical thinking, [...] and some of the psychological mechanisms behind [them]." According to the teachers, general countering or prevention should be done in most, if not all subjects taught in school, especially where there are relevant themes being touched upon by the CT, with social studies, Norwegian, English and RE most frequently mentioned¹⁰. Ida, Kevin and Per even argued it should be done interdisciplinary. Most teachers argued general (5/7), or specific (5/7) knowledge should be provided to prevent belief in CTs, but all but one also argued creating safe environments or communities for every student is equally important, proving they considered the social motives of belief in CTs critical, at least in some cases. The teachers also favored teaching skills against CTs, be that rhetoric and the use or doing of history (5/7)¹¹; source criticism (7/7); and critical/analytic thinking (5/7); Kevin, Ida and Oline even specifically mentioned fostering *socially critical citizens* as a solution.

Asked how specific CTs should or could potentially be countered or prevented in school, Kevin delivered an idealistic answer agreed upon by every teacher: "The best thing would be if they really took the time to weigh the conflicting narratives and their credibility against each other, and that the school came out on top. That's the goal, after all!" (40:15). Similarly, all but one mentioned discussion and debate within a good debate climate as useful in countering CTs, as students are forced to take other opinions into considerations, but most teachers also thought some kind of student-centered approach with teacher-guidance (similar to problem-based learning) on specific CTs with clear boundaries was the most effectful (Eva, Ida, Kevin, Liv, Jenny). The point, in any case, was that the teachers did not want to outright tell the students what was right and wrong, but give them the opportunity (knowledge and skills) to be able to see this for themselves. Critical thinking was the key.

Finally, the teachers were aware of multiple challenges of countering CTs in school, best summarized by Oline (41:38) claiming: "[CT] is a difficult topic, both for students and myself. And it's a *hot* topic, so it can create strong debate and conflict... heated discussion! And some [students] can be positioned as social outcasts." Teaching against CTs was seen as a potential challenge for teacher-student or student-student relations (6/7); it would sometimes make no difference (4/7); or even have a negative effect, spreading a CT to formerly ignorant students or pressuring them further down the rabbit hole (5/7). Everyone agreed there are practical challenges like a lack of time, (didactic) resources and competence; and Liv and Oline even mentioned epistemological challenges, namely that the teacher

¹⁰ On the contrary, 4/7 teachers saw mathematics as an exception, with some naming vocational education subjects (1); practical-aesthetic subjects (1); physical education (1); and even Norwegian (1, because there was already too much content in this subject).

¹¹ "Doing history" in the classroom is using historical methods and inquiry to construct historical interpretations.

does not always know what is true and not, and even if they read up on something, how could they know for sure that the information they found was true?

Beneath is a figure (1) showing themes and subthemes and how they relate to each other. I advise taking another look before going on to the discussion.

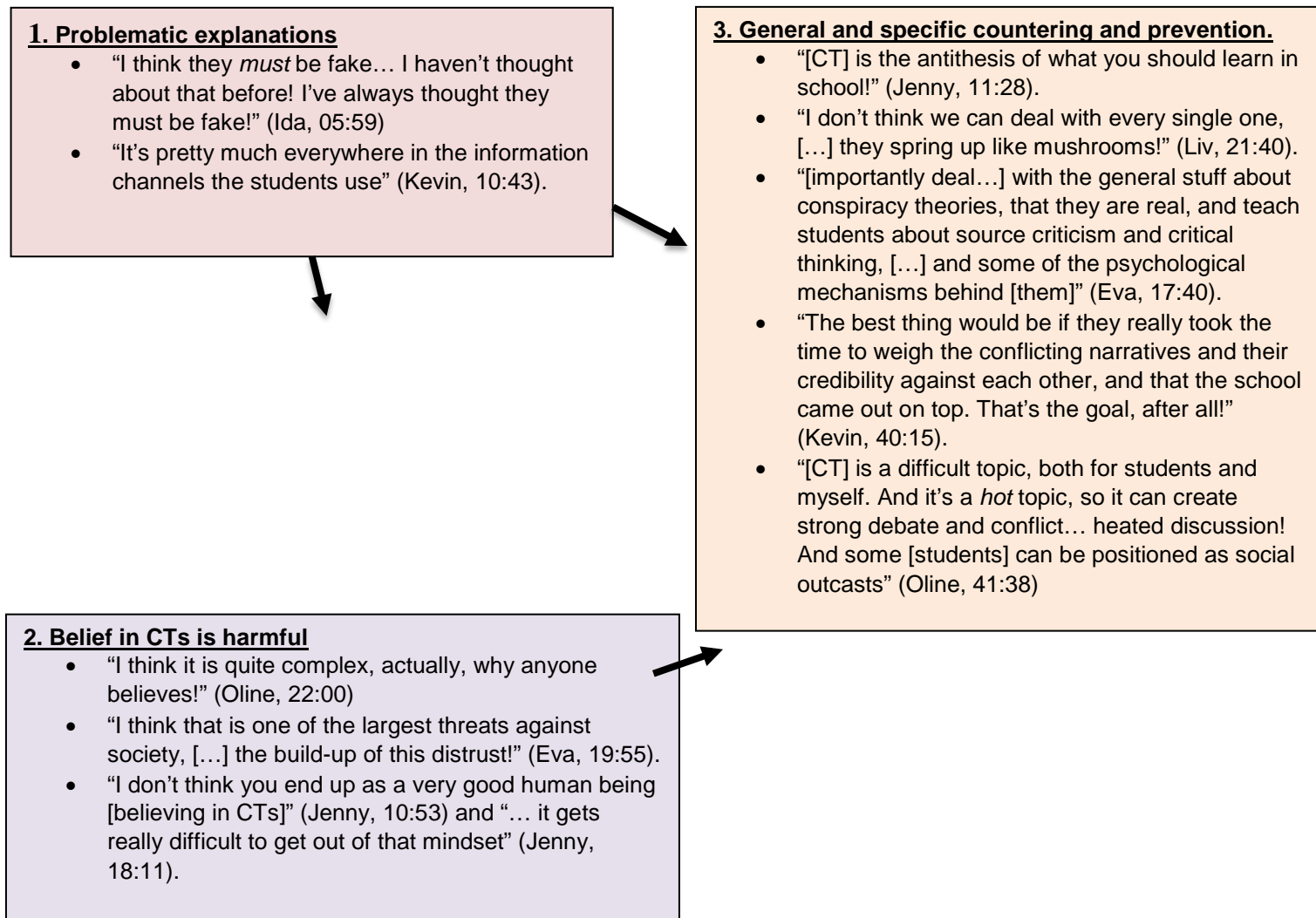


Figure 1. Thematic mapping. Main themes with in vivo-subthemes

Discussion

Answering research questions

In this section, I will use the initial RQs and final themes to summarize the findings, starting with RQ1-3, answered by main themes 1 and 2: *How do the teachers explicitly and implicitly define CTs; why do people believe in CTs, according to the teachers; and why are (at least some) CTs problematic, according to the teachers?* The teachers defined CTs as *untrue or at least unwarranted narratives, easily stumbled upon* by students, and *appealing* for reasons pertaining to both inherent qualities in CTs and individual personal traits (cognitive, social, existential, and emotional). All CTs are therefore *problematic*

explanations (first main theme) and *harmful to believers or the society in general* (second main theme). The teachers' use of the term and examples they gave of what they believe to be CTs, showed they implicitly equated CTs with '*wrong explanations*', in some cases *not even needing to be about a conspiracy*. But the teachers' implicit definitions of CTs also showed *there were no definite way to say whether a given narrative constituted a CT*, as CTs were seen as *more or less likely to be true*, and the teachers sometimes felt they lacked the knowledge to judge. It is then important to note that the teachers did not want to spend time countering everything called a CT in school, leading to the next RQs.

The third main theme answered RQ4-5: *Which CTs should be countered in school, according to the teachers; and how should CTs be countered or prevented in school, according to the teachers?* Mirroring Krekó (2020), only those CTs that were (1) popular, (2) more likely to be harmful, and (3) very unlikely to be true should be targeted. The teachers already seemed to subconsciously use these criteria to make decisions about whether to counter or try to prevent belief in a specific CT in their classroom, something best done with student-centered approaches where the teacher was acting more like the 'guide on the side' than the 'sage on the stage', even though clear boundaries and sometimes correcting students was necessary. But belief in CTs could also be prevented or reduced by teaching facts or knowledge and 'critical thinking'¹². Some school subjects might be better fit to counter some CTs, but skills such as source criticism, logical-analytical thinking and argumentation theory are interdisciplinary, and the teachers therefore argued most subjects could be useful in the fight against harmful CTs.

The teachers also found CTs to go against the schools' stated attitudes and values but did not explicitly mention teaching attitudes or values to combat CTs, instead wanting to create safe classrooms with good debate climate as a solution. Outright rejecting or ridiculing students' beliefs was seen as potentially pressuring them further down the rabbit hole, and should therefore be avoided, whereas creating a good environment for discussion, respect and trust could limit beliefs in CTs. Finally, none of the teachers explicitly mentioned changing anything in the way the school is organized to combat belief in harmful CTs, such as creating more or better opportunities for democratic engagement, or more transparency about different decisions affecting the students (e.g., grading). The closest they came to arguing such a point was the idea of bettering classroom environments, which takes organizing at a class level, but does not necessitate larger organizational changes.

Summarized, the teachers argued that *they* must make the decision about when to counter a given CT, and that they were already reducing the chance of students believing in CTs through other means. They saw their role as teachers as supplying students with skills and knowledge to combat harmful CTs, whereas

¹² The teachers seem to argue mostly for *disciplinary, general, and moral* criticality (in that order), with Kevin, Ida and Oline also mentioning *ideological* criticality (Ledman, 2019).

‘good’ attitudes and values could be modeled and given an environment in which to grow, but not as easily used as tools. This is in line with the Norwegian core curriculum and democratic education for a deliberative, liberal democracy. As noted above, changing the organization of their school was not mentioned. Consequently, the solutions favored by the teachers were targeting individuals (students) rather than the social setting.

Answering the main question. How do teachers wanting to counter or prevent CTs understand them?

The teachers’ understandings of CTs are quite similar to those of social scientists and psychologists (CTs being *unwarranted narratives* about someone conspiring to reach a malevolent goal), and dissimilar to social epistemologists (any narrative containing a conspiracy). Asked where they would find information about CTs, they all favored sources skeptical of the CTs in question¹³. This could be connected to their academic backgrounds or what subjects they teach and fits their favored solutions, mainly targeting epistemic, but also social, emotional, and existential reasons for believing in these *problematic* narratives or explanations.

The teachers agreed on seeing CTs as a kind of *narrative* or *explanation*, like most researchers. It is, however, not the only way to understand them. Borenstein (2019) claims conspiratorial thoughts exist on a spectrum from Barkun’s (2013) *super CTs* on one side (being a worldview with multiple narratives intertwined), to a temporary *conspiracy mode* or *paranoid subject position*, adopted and dropped at will or unconsciously, exemplified in conspiratorial cultural memes or conspiratorial utterances on the other. Dahle & Helgesen (2021) similarly sees CTs not only as a type of structured knowledge, but as bodily experience. These ways of understanding CTs or similar concepts are often useful in *normalizing* the belief, perhaps leading to more empathy with the believer. Normalization of CT belief is also possible with definitions stating that CTs are narratives, but it depends on whether you normalize the reasons for believing in those kinds of narratives. As noted, the teachers seemed more inclined to believe there must be something ‘wrong’ with those believing in CTs (like psychologists), even if they are not to blame (e.g., the system has failed them).

There are inconsistencies in the teacher’s conceptualizations, mirroring Dyrendal and Jolley (2020). It is not weird given the sample, however, that all the teachers interviewed saw CTs as synonymous with *erroneous*, *unwarranted*, or even *bad* explanations. As Walker points out (2019: 59): “... people started using the phrase *conspiracy theory* to mean ‘implausible conspiracy theory’, then ‘implausible theory, whether or not it involves a conspiracy’”. This was the case for the teachers interviewed, and they were therefore in conflict with some philosophers defining ‘CTs’ in a way that has the logical consequence of saying a lot of CTs are true (Hagen, 2020; Dentith, 2019), and those who seem to argue

¹³ Established media, scientific publications, researchers, and didactic resources (including the course they participated in). When challenged, 5/7 say they *could* look up primary sources afterwards.

spreading CTs can be legitimized (Wepfer, 2021). The teachers' understanding of CTs as *problematic*, especially for society, is influenced by historians and political scientists also wanting to counter or prevent them.

Similarly, the teachers understand CTs as *a threat to democracy*, without specifying what kind of democracy. Given their proposed solutions, however, it is fair to assume the teachers are talking about the kind of participatory, deliberative, liberal democracy promoted by many of the mentioned educationalists and in the Norwegian core curriculum (Kunnskapsdepartementet, 2017). Democracy might be understood by the teachers as a formal system with political parties and separation of powers; a system of individual rights and duties; participation or deliberation; a culture, way of life or lived experience (Lenz & Andersen, n.d.), but illiberal democracies are not seen as democracies at all¹⁴. In other words, the teachers understand CTs as *a threat to the society in which they live*, characterized by high levels of trust in collective institutions and strong democratic traditions. The Nordic countries are usually found towards the top of international economic, social, and other social progress indices, like the Human Development Index, Global Gender Gap, Democracy Index and Global Peace Index (Astapova et al., 2021: 5-6). Political use of CTs in Norway is frowned upon in the mainstream society, and there are examples of political parties locally and nationally apologizing for party members spreading CTs, and even politicians forced to resign their positions when caught spreading them (the most famous example being Sylvi Listhaug, Minister of Justice, Public Security and Immigration in 2018). And of course the terror attacks in Norway in 2011, widely described as 'an attack on democracy', could come to mind whenever CTs are mentioned, contributing to this anti-CT stance. Lastly, CTs about education and educators, and the fact education in general seems to decrease belief in CTs, could also nudge the teachers in this direction.

At the same time, the teachers did not problematize human rights when talking about how to counter or prevent belief in CTs, and no one explicitly addressed the issue of *what is called a 'CT' by whom*. CTs were instead seen as often or always antidemocratic and antiscientific, and combatting at least some of them always legitimate, giving established scientists and journalists 'the power of definition'. Being unaware of this influence can be problematic, as both philosophers and educationalists such as Peters & Johannesen (2020) and Zembylas (2021) have legitimate concerns over teachers 'debunking' potentially true conspiracies, sometimes guided by the authoritarian states in which they work (Radnitz, 2019). However, the teachers did not want to counter everything called a CT, and they live in Norway, a liberal democracy with a highly educated population, top scores on Press Freedom Index (Reporters without borders, 2023), and with easy access to information. If the teachers, trying to counter or prevent what they see as a highly unlikely CT, are in the wrong, they would likely be immediately

¹⁴ E.g. CTs about minorities were considered anti-democratic.

challenged by concerned parents, colleagues, the press or even the state. Teachers, of course, make mistakes, but there is no reason to believe these teachers would eat everything the government feeds them. On the contrary, that sounds like a conspiracy theory!

The teachers favored general prevention because of practical challenges (time, resources, competence), but concurred some CTs must be specifically targeted. They implicitly put most weight on epistemic motives for belief in CTs, therefore arguing supplying skills and knowledge was the most effectful in countering and preventing them, although they were aware of social, existential, and emotional motives as well (like Douglas et al., 2017). They consequently also showed an understanding of how important it is to be part of the class community, being taken seriously and in different ways empowered, learning to trust those around you while being able to agree to disagree without waging war against the system. Still, they favored relatively small interventions. That is understandable, as trying to change someone's attitudes and values can more easily be seen as brainwashing, playing into aforementioned CTs about school and education, whilst changing the school culture is harder than changing their own teaching strategies and relationships with individual students. The solutions given by the teachers are also largely supported by researchers, even though both social/collective and individual interventions are possible and recommended.

Conclusion

The teachers had *a layman's negative understanding* of CTs, affected by most of Western media and researchers from the 60s onward (Thalmann, 2019). And where every researcher would say CTs must be connected to a conspiracy in some way, this was not the case for them. The teachers knew many reasons why people believe in CTs and were aware of multiple potential (mostly negative) consequences of that. They largely offered similar educational solutions as those posited by researchers, even if they took on more personal responsibility where some researchers would claim systemic changes are (additionally) needed. Here it is worth repeating that the interviews were conducted before the continuing education course started, and their conceptualizations of CTs were much improved in their final papers. CTs as phenomenon could advantageously be taught for everyone in teacher education programs.

Importantly though, we now also know teachers with the best intentions can be very much 'anti-CT' while seemingly not reflecting too much upon what the consequences of that might be. Reflection upon different understandings of CTs and how those shape proposed solutions is not just advantageous, but necessary if wanting to 'counter' CTs. This *might* not be a huge issue in Norway but could easily be a problem in societies with state-controlled press, in which critics of the government are called conspiracy theorists, and where it is difficult to get

epistemically sound sources. It would be interesting to know what is called CTs (or similar terms) in different national and cultural contexts, and whether teachers mostly agree with their rulers on what should be countered in a school setting. Current affairs in Russia, where at least some teachers seem to willingly spread Russian state-propaganda, delegitimizing critics as pushers of Western CTs, makes this point especially relevant. Teaching strategies fitting a deliberative, liberal democracy might not be as popular everywhere.

Even though I approve of the teachers' proposed solutions, I agree with Bullough (2021) in that teaching democratic practices, habits, attitudes, ethical commitments, and participation should be a larger part of the solution, as belief in CTs not only have individual, but systemic root causes. Finding out whether different ways to organize schools (changing the level of school democracy and transparency) lead to different levels of CT beliefs could prove fruitful. We also need empirical data on what teachers actually end up doing to counter or prevent belief in CTs, not just what they say they want to do. And we need to know whether their efforts really make a difference to their students' belief in CTs, like scientists would expect, hopefully without challenging human rights, instead empowering democratic citizens.

About the author

Jean Bergane is a PhD student in didactics of social sciences. His PhD project aims at mapping knowledge, skills, and challenges relevant for countering harmful conspiracy theories in school.

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Appendix

Interview guide (original in Norwegian).

1. Introductory questions:
 - a) How many pupils attend the school you work for?
 - b) What kind of school is it? (Lower/upper secondary education, etc.).
 - c) For how many years have you been a teacher?

Theme 1: Attitudes towards school/education

2. What do you think should be the purpose of school or education?
 - a) What is the most important thing pupils should learn in school?
3. What do you hope your pupils see as the most important thing they get out of your classes?

Theme 2: Conspiracy theories and society

4. There are many understandings and definitions of the term 'conspiracy theory, so I am not looking for a definite answer, but what does the term mean to you?
 - a) Where in society do you think one can find conspiracy theories?
 - b) How widespread are conspiracy theories in society?
5. Do you have any knowledge about any specific conspiracy theory? Which one(s)?
 - a) Where would you say you got this knowledge from?
 - b) How and where would you seek knowledge about conspiracy theories?

Theme 3: Conspiracy theories and pupils

6. Do your pupils ever talk about conspiracy theories in class?
 - a) Why do you think your pupils talk about conspiracy theories in class?
 - a. How does other pupils react if someone shares a conspiracy theory?
 - b. Have you ever been worried about/for pupils because for their belief in or interest for conspiracy theories?
 - b) Where do you think the pupils first heard about these conspiracy theories?
7. Are there reasons for why pupils who do believe in conspiracy theories, might not share this in class?
 - a) What reasons?
8. In which school subjects are pupils most likely to share conspiracy theories?

a) Why?

9. What do you think are the reason(s) why pupils can start believing in conspiracy theories?

Theme 4: Conspiracy theories and school/education

10. Which conspiracy theories do you think schools should try to prevent or reduce belief in?

a) Why should these be countered?

b) In which school subjects should conspiracy theories be countered?

a. Are there any school subjects that should not counter conspiracy theories?

11. Should teachers familiarize themselves with conspiracy theories? – Which ones?

a) How?

b) Have you ever discussed conspiracy theories with colleagues?

12. Have you ever taught about conspiracy theories in class?

a) In which school subjects?

b) How?

13. Have you ever had other teaching lessons that you think may have contributed to reducing or preventing belief in conspiracy theories?

a) How, and in which school subject(s)?

14. Do you see any challenges teaching about conspiracy theories in school?

a) Which ones/why?

b) Are there any challenges in **not** teaching about conspiracy theories?

15. Do you see any important teaching opportunities (not already mentioned) by bringing up conspiracy theories in class?

a) Which ones/why?

16. Why did you choose to sign up for this continuing education course?

a) Are there any personal motivations or societal reasons?

b) What do you hope to learn?

17. Do you have anything to add about conspiracy theories in school/education?