# Teachers' Challenges and Resilience-building Teaching Activities in Secondary Schools: Fundamentals of an Exploratory Research

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# Teachers' Challenges and Resilience-building Teaching Activities in Secondary Schools: Fundamentals of an Exploratory Research. Introduction to the Special Section

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Abstract: This article introduces the topic and the adopted methodology, within the framework of the H2020 Project named PARTICIPATION, to conduct explorative research on the main challenges and contentious topics teachers face in the classroom as part of their work with students in secondary schools, and the possible reactions teachers may adopt to dealing with these challenges. This research, conducted between 2021 and the beginning of 2022 in six EU Member States, started from the assumption that school can be seen as a microcosm of society, which brings together many worldviews, ways of thinking and living, thus becoming a place symbolising social difference, where various conflicts may arise. After having introduced the topic and provided the methodological notions underlying this research, this article presents an overview of teachers' challenges and resilience-building teaching activities in secondary school drawing from the existing literature, by relying on the relevant academic and grey literature on this topic. This article sets the scene for all the contributions of this monographic issue.

Keywords: teachers, contentious topics, challenges, practices

## Introduction

Data and analyses contained in the articles of this monographic issue are part of the activities of a Horizon 2020 project named *Analyzing and Preventing Extremism Via Participation*. This project aimed to analyse, through a participatory approach, different social contexts to develop a participatory analysis of the phenomena of the polarisation and radicalisation of young people. One of the activities of the project *PARTICIPATION* has been specifically designed to identify the main challenges, and the main polarising and contentious topics that teachers are confronted with as part of their work with pupils in secondary schools, as well as what responses and approaches teachers may put in place to address these issues.

This research started from the assumption that school can be seen as a microcosm of society (Haldane, 2004, p. 194) which brings together many worldviews, ways of thinking and living, thus becoming a place symbolising social difference, where various conflicts may arise. Indeed, during their adolescent years, young people are in the process of learning, exploring different worldviews, and developing opinions. This is a period of growth and development which is centred on a process of identity construction, particularly in terms of beliefs, values, motivations, and personalities (Branje, Spitzer, Becht, 2021). It is a phase of life full of challenges within an interconnected and complex world that can lead to difficulties in orientation, and the search for strong cultural and value models capable of guiding them within various social realities (Calaprice, 2004). A time in their lives that is often characterised by uncertainties, fears, guilt, and anxieties that can be exploited by extremist individuals and organisations, that offer the most vulnerable people divisive narratives based on an 'Us vs. Them' or a 'Them vs. Us' division of the world. These narratives frequently identify scapegoats for the hardships, suffering, and issues present in our societies, using stereotypes and conspiracy theories (Farinelli, 2021).

Teachers are at the forefront of intercepting these narratives, grasping the uneasiness of their pupils, and offering them an alliance to create constructive dialogue, helping them to cope with the complexities they experience by organising appropriate educational pathways. However, the toxicity and disinformation polluting the political discourse and societal issues may erupt into turmoil and chaos within the classroom and the school environment, requiring teachers to intervene in unexpected, provocative, or hate-filled diatribes that are extremely challenging to handle (Van Alstein, 2019, p. 3). Consequently, challenges relating to the de-escalation of harmful forms of polarisation in the classroom, and how to teach sensitive topics in the school curriculum, constitute a matter of concern for teachers and are a key

issue in the approaches taken for prevention and countering of violent extremism (P/CVE) through education.

Against this backdrop, building resilience and reducing the vulnerability of young people to social polarisation, radicalisation processes, and violent extremist narratives is a crucial aspect when it comes to preventing violence in the school environment. Exploring the challenges, practices, and the (good and bad) reactions put in place by teachers at school to deal with contentious issues in the classroom is a good way to create a dialogue among various contexts and practices in different EU Member States.

## Method

Between the 1980s and 1990s, scholars demonstrated a growing interest in understanding how challenges linked to controversial issues enter the classroom. Since the 2000s there has been a growth in terms of the number of publications and projects addressing this issue, in an effort to shed light on this phenomenon. However, the ever-evolving social, economic, and geopolitical landscape, and local differences and peculiarities within specific national contexts of the EU Member States, makes it difficult to keep these findings updated, and to provide systematic overview of the challenges and the contentious topics teachers face in the school environment as part of their work with students. Furthermore, comparative cross-country analyses of this phenomenon, as well as studies focusing on the relationship between teachers and parents in dealing with contentious issues affecting their pupils and children are particularly lacking in the existing literature. Adding a layer of complexity, on top of this, the data collection process on this subject is challenging due to the sensitive nature of the topics, and the need to involve primary sources (e.g., teachers or parents) who, understandably, may have some concerns in discussing sensitive issues regarding their pupils, their children, or themselves.

For these reasons, and considering that secondary school students are in a period of developing identities, beliefs, values, and opinions, this work on contentious topics faced by teachers in the secondary school environment as part of their work with students, and on the possible reactions teachers may adopt to dealing with these challenges, has been conceived as exploratory research, with the aim to provide a qualitative and updated contribution to the analysis of the phenomenon in question through six case studies represented by the six EU Member States under investigation: Belgium, Greece, Italy, the Netherlands, Poland, and Romania. Specifically, the research activity in these countries has been carried out through three steps:

1. Desk research of the existing literature published in the last two decades on this topic, with a focus on projects implemented in secondary schools

to handle contentious and polarising topics and curb young radicalisation.

2. The distribution of an online survey named *Contentious issues in the classroom: teachers' challenges and responses* to teachers in the six above-mentioned countries.

3. The conduction of two workshops (a 'Set-the Scene' and a 'Follow-up' workshop). This activity was implemented within the framework of the Social Labs developed by the project PARTICIPATION.[1]

The overarching research questions that guided desk research, the conduction of the workshops, and the creation of the online survey were:

1. What are the main challenges and polarising contentious issues faced by teachers in secondary schools as part of their work with the students in Belgium, Greece, Italy, the Netherlands, Poland, and Romania?

2. What are the main good and bad practices which are possible to list on how to deal with these challenges and contentious issues in the classroom in Belgium, Greece, Italy, the Netherlands, Poland, and Romania?

A focus on the relationship between teachers and their student's parents, the quality and usability of the existing educational tools, and issues relating to teachers' training to deal with challenges and contentious topics connected with polarisation and radicalisation entering the school environment was included in this research path.

With the exception of this introductory article, the other six contributions of this monographic issue – while concisely presenting the background data of the different country's contexts, as emerged during desk research – mainly focus on sharing and analysing the findings gathered via the administration of the online survey and the conduction of the workshops with teachers. Finally, a conclusive article provides a comparative cross-country analysis and a set of recommendations addressed to policymakers and school administrations to help teachers in dealing with challenges and contentious issues entering the classroom.

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[1] The project *PARTICIPATION* made use of the Social Lab method to co-create solutions and tools for the analysis and intervention in the field of polarisation, radicalisation, and extremism, by using a participatory and bottom-up approach. Within the whole project, the Social Lab method has been developed to: diagnose the state of radicalisation in different contexts; adapt existing activities as well as create and test new agreed pilot actions to promote the uptake of measures to prevent, mitigate and reverse radicalization processes/factors; raise awareness and provide information, (self) assessment, mutual exchange, and learning; test the Social Lab as a training tool and provide suitable incentives to include practices of mutual learning and cooperation in radicalization studies; develop and test in Social Labs actions and activities which will contribute to implementing measures and mechanisms that fully recognize the importance of social inclusion in addressing radicalisation phenomena. For more details about the Social Lab approach, see the Methodological Handbook for Social Labs at this link: https://participation-in.eu/resources/

The research path has been led by the European Foundation for Democracy (EFD) and the University of Catania. The research team was also composed by researchers coming from the following organisations: Kentro Merimnas Oikogeneias kai Paidiou (KMOP), Centro studi ed iniziative europeo (CESIE), Stichting Human Security Collective (HSC), Universiteit Maastricht (UM), Polish Platform for Homeland Security (PPBW), and Peace Action Training and Research Institute of Romania (PATRIR).

### The 'Set-the-Scene' workshop

Having drafted the first version of the online survey as a structured questionnaire, containing both closed-ended and open-ended questions based on the preliminary findings collected through the desk research, a 'Set-the-Scene' workshop was held with teachers at secondary schools in the different countries under investigation. The main objective of these workshops was twofold: first, to present the framework and the objectives of the research, and to start building a trustful relationship with the teachers involved, providing them with a safe space to discuss their experiences; second, to discuss with the teachers involved the first version of the survey, ensuring that the questions were clear, and asking them to reflect on possible improvements that could be made to the survey. These 'Set-the-Scene' workshops have been mainly conducted online, although some of them took place in person depending on the availability and the preferences of the teachers in the various countries.

In accordance with the Social Labs methodology developed within the framework of the H2020 project *PARTICIPATION*, the research team remained available to the participating teachers during the whole course of the fieldwork. Specifically, the research team made itself available to answer any additional questions or doubts that the teachers may have had and made it clear that the findings of this research would be publicly shared as a way to exchange views, knowledge, and practices among the different countries involved, and to help support teachers in dealing with contentious issues in the classroom. Furthermore, in each country a figure who acted as the 'Facilitator' was identified. The Facilitator has been in charge of selecting, contacting, and following the research process with teachers.

### The online survey

After receiving feedback from teachers during the 'Set-the-Scene' workshops, the first version of the online survey named *Contentious issues in the classroom: teachers' challenges and responses* has been finetuned, incorporating the main insights that were received, producing a standardised questionnaire for all the countries involved. The final questionnaire has then been translated into each country's language. To overcome issues relating to the different country contexts (e.g., differences in the educational systems, dif-

ferent roles of teachers in the various countries, different curricula and levels of education, different terminologies, etc.) the various research partners were free to adapt some terms to their local context, ensuring that this would not have affected the meaning of the questions and the answers. Furthermore, a higher number of questions with open-ended answers has been added, to allow teachers to better clarify some points. This was a specific request coming from many of the teachers who participated in the 'Set-the-Scene' workshops.

The online survey has been administered to a sample of teachers working at secondary schools with a population of students mainly aged between 12 to 19 in the six EU Member States under investigation. Teachers were assured of complete anonymity and were asked to answer the questionnaire based on all the experiences (with various student groups) they have had in the school environment in (approximately) the last five years. To encourage a larger number of teachers to participate in the survey, participants were allowed to answer all or only some of the survey questions. A total of 156 teachers responded to this online survey as detailed in the table below:

Table 1. Breakdown of teachers responding the online survey.

| Country | Number of responding teachers |
|---|---|
| Belgium | 32 |
| Italy | 29 |
| Greece | 26 |
| Poland | 24 |
| Romania | 24 |
| The Netherlands | 21 |
| Total | 156 |

The questionnaire of the online survey has been divided into three sections. The first section investigated the most recurrent challenges, and the contentious topics teachers face in the classroom and the school environment and to what extent teachers experienced them. The section includes questions on:
- What is teachers' perception about the support they receive from their colleagues and the school management in dealing with these issues.
- Their thoughts about existing educational tools and training for school staff to address challenges and contentious topics in the classroom, and what they would need more in order to strengthen their capacity to deal with these challenges.
- Their relationship with the parents of their students.

The second section looked into reactions and practices to address challenges and contentious topics in the classroom and the school environment. This has included questions on:

- Identifying good and bad practices to deal with challenges and contentious topics in the classroom.
- Their main suggestions and perceived obstacles to dealing with challenges and contentious topics in the classroom.
- Any additional comments teachers wanted to share for the sake of the survey.

Finally, the third section of the survey was devoted to collecting information on the sample of teachers who filled out the questionnaire. In this section, information on teachers' gender, age, country of work, subjects taught, years of teaching, as well as type and location of their schools, age groups of their students, and other roles covered at school besides teaching, has been collected.

### The 'Follow-up' workshop

After having analysed the data gathered from the online survey, the research partners conducted the 'Follow-up' workshops with teachers in their respective countries. This was a unique opportunity to readdress some questions and ask for clarifications, especially regarding the collected open answers, and achieve a more in-depth understanding of the specific context of each country. Furthermore, this has enabled the research partners to strengthen the trust-based relationship built with the teachers during the 'Set-the-Scene' workshops.

### Context overview

The question of discussing controversial/contentious issues in the classroom has long been debated by scholars and by society as a whole. Addressing sensitive or controversial issues and topics in the classroom is generally valued as a positive way to prepare future citizens for participating in the handling of societal controversies, helping youth to actively participate in political and civic activities as adults, developing a citizenry and electorate that is educated and enlightened, and raising awareness among young people of how fake narratives are oftentimes constructed to sway public opinions (Oulton et al, 2004; Byford et al, 2009, p. 169). Similar positions are mirrored by the National Council for the Social Studies (NCSS): "A primary goal of public education is to prepare students to be engaged and effective citizens" (Byford et al, 2009, p. 165). In addition, the NCSS highlighted, in 2007, four attitudes and abilities that the study of contentious matters should aid in the development of (Byford et al, 2009, pp. 165-166):

1. "The ability to study relevant social problems of the past or present and make informed decisions or conclusions".
2. "The ability to use critical reasoning and evidence- based evaluation in the study and analysis of significant issues and ideas; this includes development of skills of critical analysis and evaluation in considering ideas, opinions, information, and sources of information".
3. "The recognition that differing viewpoints are valuable and normal as a part of social discourse".
4. "The recognition that reasonable compromise is often an important part of the democratic decision- making process".

According to Soley (1996, p. 8), "Teaching about issues that are controversial is a responsible and appropriate way for students to learn about values and to study value conflicts". According to the author, it encourages critical thinking skills in pupils and gives them the tools to recognise and evaluate both their own values and those of others. The benefits of discussing controversial issues, as a way to enhance critical reasoning, is also shared by Ruth L. Healey (2012): "Higher education is an important space for critical engagement with challenging issues. Preparing for and participating in debates enables students to develop critical thinking skills, alongside a variety of oral presentation and discussion skills" (Healey, 2012, p. 1).

So far, most of the P/CVE work in the education sphere has been devoted to addressing contentious issues, by providing multiple viewpoints and encouraging self-reflection in the classroom, focusing mainly on secondary schools (Frase & Sinisalo, 2021, p. 10). Recently, Van Alstein (2019), building on the literature on democratic citizenship education, stated that teachers may make a significant contribution to the teaching of democratic citizenship, if they are successful in turning challenging conversations and societal conflicts into productive learning opportunities, encouraging an open classroom environment (Van Alstein, 2019, p. 5). Indeed, open discussion about issues of public concern can be considered as the engine of a functioning democracy (Harwood & Hahn, 1990). In this framework, the discussion of controversial/contentious issues is seen as a pedagogical way to teach the principles and practices of democratic citizenship education. In the literature, this concept about students experiencing open discussions in the classrooms, with classrooms being considered "as places to investigate issues and explore their opinions and those of their peers", is defined as "open classroom climate" (Torney-Purta, Lehmann, Oswald, Schulz, 2001, p. 138). Nonetheless, despite the important reasons summarised above, many contextual factors may affect a teacher's decision or capability to discuss controversial topics in the classroom, including official curricular policies, cultural values, personal experiences, and a teachers' differing beliefs and sense of purpose (Ho, McAvoy, Hess, Gibbs, 2017, March). Levitt and Long-

street (1993) state that many teachers view teaching controversial topics as extremely challenging because the discussions can be detrimental to students due to teachers' inexperience or incapacity to understand the emotional contexts or moral quandaries that the pupils are attempting to justify (Byford et al, 2009, p. 165). Other reasons include the fact that students may frequently be deliberately obtuse during their argumentation instead of relying on rational reasoning. This is particularly true when they use the internet to retrieve narratives that merely mirror their own ideas and beliefs. This makes it extremely difficult, for teachers, to teach students the importance of comparing different analyses and viewpoints (Byford et al, 2009, p. 166). In some cases, teachers may feel uncomfortable in discussing contentious issues such as sexuality or religion (Byford et al, 2009, p. 166). Judith L. Pace (2021, p. 228) stress that, in other cases, teachers feel unprepared to take up this challenging practice because they worry about losing control, causing a fight in the classroom, hurting their pupils, receiving criticism from parents and the community, and facing sanctions from their management.

Whatever the difficulties, being faced with controversial/contentious issues and topics that sometimes degenerate into conflicts or even acts of violence, appears to be a matter of fact for teachers as part of school life. Controversial issues have been defined by some scholars as "those issues on which our society is clearly divided and significant groups within society advocate conflicting explanations or solutions based on alternative values" (Stradling, Noctor, Baines, 1984, p. 12). As previously mentioned, the school can be considered as a microcosm of society where conflicting values, views and explanations coexist. The subjects of these competing perspectives include a wide range of matters, from questions pertaining to policy issues (e.g., climate change, immigration, etc.) to the questioning of historical and distressing events (e.g., wars, genocides, terrorist attacks, etc.), from religious matters to gender issues, from the issue of living together in a society to troubles in the family, from the spread of conspiracy theories in society to racism, and so on.

Activities implemented at schools to address these issues can take many different forms. Van Alstein (2019) identifies at least three scenarios in which disputes and tensions could arise in the classroom:[2]

*"The class in turmoil:* Teachers are confronted with confrontational remarks made by students, or with fiercely contested discussions or instances of polarisation.

*Controversial topics in the curriculum:* Teachers have to teach subject matter that is sensitive or that can cause controversy among students.

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[2] Some parts are quoted in italics as they were in the original source.

*Controversy as a form of pedagogy:* Teachers want to work proactively and constructively with students on controversial or sensitive issues and use discussions of these issues as a way to teach the principles and practice of democratic citizenship education" (Van Alstein, 2019, p. 7).

**Teachers' challenges**

Challenges for teachers in addressing contentious issues and topics in the classroom start with the advice on the principles that teachers might adopt (Oulton et al, 2004, p. 491). For instance, changing their role from 'transferring knowledge' to 'moderating a conversation' in the classroom, which is a recurrent suggestion in the existing literature (Farinelli, 2019, p. 6), but is not an easy task for a variety of reasons: first, although some remarkable practical guides are available on the topics of polarisation and radicalisation, and their discussion and prevention at school, as well as guides on how to deal with controversial issues in the classroom, transferring this "prevent material" into the specific classroom settings is not always straightforward (Oulton et al, 2004, p. 491). The same goes for national legislation and National Action Plans for preventing extremism. In some cases, transferring legislation and national guidelines into educational practices to be implemented at school may be highly challenging in some contexts (Niemi et al, 2018, p. 4). Second, the challenge of clearly differentiating, during conversations with pupils, between provocations of youth who are in the process of exploring different worldviews and indicators of a possible radicalisation process remains a matter of concern (Farinelli, 2019, p. 6). Third, and linked to the previous point, in some countries teachers are required to report any instances of student radicalisation. This has been reported as a motive of concern, for some teachers, as their reports could have an unknown impact on the pupil (Farinelli, 2019, p. 6). Furthermore, the requirement to "spotting radicals" on the one hand, and the necessity to build dialogue, trust, and inclusion for an effective instructional activity on the other, appear to be mutually exclusive to some teachers (Ragazzi, 2018, p. 10).[3] Fourth, many authors urge the use of a neutral or balanced strategy, in which the teacher serves as a discussion's impartial host, to manage conversations on contentious issues in the classroom without promoting their own views in the comfort of their position of authority (Cotton, 2006, p. 224). While neutrality and balance both seem sensible in the context of avoiding any types of indoctrination, it is exceedingly challenging to remain completely neutral and avoid expressing any personal points of view. An interesting example in this regard is the research

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[3] About the underdevelopment of the application of counter-radicalisation efforts in school see also Mattsson, C., & Sjøen, M. M (2019). Preventing radicalisation in Norwegian schools: how teachers respond to counter-radicalisation efforts. *Critical Studies on Terrorism*, 13:2, pp. 218-236. Taylor and Francis Ltd.

conducted by Debby Cotton (2006), investigating the principles and methods used by three seasoned geography teachers instructing on contentious environmental problems in English secondary schools. As stated by the author: "In line with much of the literature, the findings reveal that these teachers believed they should adopt a 'neutral' or 'balanced' approach to teaching controversial environmental issues. However, in the reality of the classroom, such an approach proved unsustainable, and the teachers experienced significant difficulties in enacting their beliefs" (Cotton, 2006, p. 223).

Building on the existing literature, it is possible to expand upon the challenges affecting teachers' work in the classroom. These challenges can be divided into three main categories: general challenges, challenges in home-school cooperation, and contentious topics and issues entering the classroom.

### General challenges

Lenos and Keltjens (2016, pp. 4,6) highlight three main challenges: first, "the professional and personal challenge of acceptance of deviant or provoking worldviews." Second, as previously stated, the fact that "teachers run the risk of being confronted with critical and sometimes angry reactions from parents, colleagues, press and politicians". Third, a "lack of time and resources to change the school organisation and curriculum".

Claes *et. Al.* (2017, p. 22) state that there is a need to understand why certain students are more likely to respond to conversation opportunities and hence benefit from them more than others. This is not an easy task for teachers.

Ragazzi and Walmsley (2020, pp. 44, 45, 54, 55) emphasise the ambiguities in the terminology referred to radicalisation and extremism, the equivocality of possible signs of radicalisation, the fact that reporting cases of radicalisation in the classroom to the authorities is oftentimes a one-way flow of information, and that boundaries between educational intervention and security intervention against radicalisation and violent extremism are sometimes very blurred. In their turn, Beršnak and Prezelj (2021, p. 49) report that in Slovenia, many school workers and teachers in their sample of study have a poor understanding of the field of radicalisation, with some of them not available to attend discussions on these topics, due to their lack of knowledge (Beršnak & Prezelj, 2021). This entails the inability of many school workers to recognise radicalisation, and the tendency to consider this issue only as a matter of security (Beršnak & Prezelj, 2021, p. 66). Similarly, violent radicalisation and extremism are relatively new topics in some EU Member States and schools, and it is possible that these subjects make teachers and other frontline practitioners uneasy, making the discussion of these issues challenging. In this regard, "Some teachers and principals feel

uncertain about how to react and respond to young people's comments that indicate extremist views" or "may feel unsure of when they should contact, for example, the police about a young person" (Finnish National Agency for Education, 2018, p. 13).

According to Van Alstein (2019, p. 10), dealing with polarisation, radicalisation, and extreme viewpoints is part of the challenges teachers face in the classroom and "the first challenge for teachers when this happens is find out how deeply rooted these convictions are". The progressive decline in teachers' authority, the impact of the COVID-19 pandemic on school, and the necessity to face and resolve conflicts in the classroom, are among the main challenges highlighted by Valente *et Al.* (2020, pp. 4, 5). In this regard, the authors state that: "there is a gap in society, between the values it promotes and demands the school and the lack of credibility that is given to the teacher, questioned before the disapproval of parents and society itself, which instigates an even greater student's conflict, in classes" (Valente et al, 2020, p. 6).

**Challenges in home-school cooperation**

As stated above, conflictual relationships with their pupils' parents may constitute an important challenge for teachers. The *Guidebook for schools and parents* written by teachers in the framework of the *Comenius Regio Project* is the result of inter-institutional and worldwide talks and initiatives about how to foster close collaboration between parents and class teachers/ tutors. The report in question summarises a number of challenges and issues affecting the relationship between teachers and parents. The table below reports the most relevant data of this two-way relationship:

Additionally, Barge and Loges (2003, p. 141) report a variety of characteristics which may influence both parents' and teachers' desire and ability to cooperate in their children's education. Regarding parents, the authors quote the following aspects: "efficacy in involvement", "level of education", "socio-economic status", "parents' own negative school experiences", and "lack of transportation" As far as teachers are concerned, "lack of training", "doubts that they can actually change parents' attitudes", "the racial composition of teachers and parents", and "the amount of teacher–parent communication" are the four characteristics stressed by the authors which may limit effective cooperation with parents. Finally, parental involvement levels are affected by school characteristics too, with the authors highlighting "student–teacher ratio", "number of minority teachers", "setting, academic focus, climate, and sense of community" as well as "the attitude of school board and principals toward parental involvement", as the main aspects playing a role in this regard.

Table 2. Difficulties in home-school cooperation.

| TEACHERS | PARENTS |
|---|---|
| Lack of time | Lack of time |
| A feeling of not being listened to by the other side | A feeling of not being listened to by the other side |
| Doubt that a conversation might change anything | Doubt that a conversation might change anything |
| A sense of lack of real influence on the behaviour of parents towards their children | Fear that a conversation with the teacher may have a negative impact on the treatment of their child. Lack of trust |
| Their own or other teachers' previous experience indicating absence of effects of cooperation with the parents or the parents' underestimating of the efforts undertaken by the teacher | No real sense of support from the teacher |
| The feeling that the problem lies not in the pupil, but the family and the teacher is not able to change the whole complex situation. | Fear of hearing " bad news " about the child, thereby also of lowering their value as parents. |
| Fear of public performance | Escape from taking on (unconsciously) the role of the student - defenseless against the authority of the teacher (behaviour as in the childhood: parents forget that they are adults). |
| Objective difficulties in the organization of meetings, such as: lack of time and space for quiet conversation, etc. | Not feeling welcome, teachers have to (not want) to organise a meeting, time pressure, poor organisation of the meetings. |
| Burnout, aversion to communicating with the so-called "difficult parents" because of the emotional costs of this type of relationships. | Parents' negative experiences - decisions in relation to their children made arbitrarily, without their participation or asking for their opinion. |

*Source: Szybinski High School in Cieszyn (2020). https://bit.ly/3A43HNf ).*

## Contentious topics and issues

A number of research pieces and publications across Europe have listed some of the main contentious issues and topics teachers face as part of their work with students, in different countries and schools. As stated in the previous pages, these opposing viewpoints, conflicting explanations, and competing values, may sometimes result in violence if not properly addressed. They include a variety of different topics that involve macro-categories, such as identity and belonging, society, politics, ideologies, religion, and civil co-existence. With no pretence to exhaustiveness, these topics and issues can be listed as follows:[4] physical or verbal violence between pupils, vandalism,

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[4] These data are from the following texts: Hanse, L. (2013). *Guide pratique relatif à la prévention et la gestion des violences en milieu scolaire.* Fédération Wallonie-Bruxelles. http://veille-eip.org/sites/default/files/belgique-prevention-gestion-violences-milieu-scolaire.pdf; Lenos, S., & Keltjens, M. *School leaders and prevention of radicalisation. Setting the conditions for a safe and democratic environment*, op. cit.; Ragazzi, F. *Students as Suspects? The challenges of*

students' membership in (or support for) groups advocating for the use of political violence, extremist ideologies, drug use, bullying and cyber-bullying, racism and xenophobia, various types of discrimination, conflicts between religious authority and school authority, the use of religious symbols, unexpected new eating habits or clothing style linked to religious practices, change of social identity and discourse, disinformation related issues, 'Us vs. Them' and 'Them vs. Us' perspectives, prejudices and stereotypes, distrust towards government and authority (including schools), the COVID-19 pandemic's impact on young people's mental health, early school dropping out, conflicts with parents/family, risky games, different interpretation of sensitive historical events, gender issues, sexual harassment, forced marriages, misogyny, and pathological forms of jealousy.

These topics and issues, together with the necessity to deal with an increasingly diverse student population in the classroom, pose significant challenges to teachers, and requires updated methods and practices to be successfully addressed.

**Resilience-building teaching activities**

The existing literature has highlighted a number of options and practices for teachers to help their students resist violent extremist narratives, facilitate an open classroom climate that allows students to investigate issues and explore their opinions and those of their peers (Claes et al, 2017, p. 22) and help teachers in dealing with controversial/contentious topics in the classroom.

In this regard, some studies Kerr & Bonnell (2011, pp. 5, 6, 7) point out, as key ingredients for resilience-building teaching activities, the necessity to:

1. "Making a connection through good design and a young-person centred approach".
2. "Facilitating a safe space for dialogue and positive interaction".
3. "Equipping young people with appropriate capabilities - skills, knowledge, understanding and awareness".

Furthermore, an effective, working partnership with local agencies, being able to rely on supportive school leaders, and integrating discussion on

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*counter-radicalisation policies in education in the Council of Europe member states*, op. cit.; Finnish National Agency for Education, *Prevention of violent radicalisation in schools and educational institution*, op. cit.; Farinelli, F., & Bouarfa, T. (2018, November). *Laïcité et Prévention de la Radicalisation. Guide pratique pour les enseignants et les professionnels de terrain*. EFD-CEP. https://www.europeandemocracy.eu/publication/laicite-et-prevention-de-la-radicalisation-guide-pratique-pour-les- enseignants-et-les-professionnels-de-terrain/; Ragazzi, F., & Walmsley, J. *Counter-radicalisation in the classroom. The challenges of counter-radicalisation policies in education in the Council of Europe member states*, op. cit.; Valente, S., Lourenço, A. A., & Németh, Z. (2020). School Conflicts: Causes and Management Strategies in Classroom Relationships, op. cit.; Frase, A., & Sinisalo, L. *Manifesto for Education. 2nd Edition*, op. cit.

controversial topics with the wider school curriculum are deemed relevant factors that enable successful interventions (Kerr & Bonnell, 2011).

Claudia Wallner's research paper (2020, p. 5) suggests that "the majority of P/CVE education interventions are developed on the basis of one or more common assumptions about how education can increase the resilience of students to violent extremism". In this regard, her research highlights five fundamental processes that are widely used in P/CVE teaching, despite the fact that there is not unanimous consensus in the field over what these common assumptions are. These basic mechanisms are the following (Wallner, 2020, pp. 9-21):

- "Interventions Focused on the Knowledge of Students": the foundations of many of the education and P/CVE programmes in the literature are based on the idea that equipping students with specific information and values may help them fend against violent extremist recruitment methods and their associated propaganda. This includes strategies that emphasise civic and historical education, fostering civic virtues, inclusivity and tolerance, and historical awareness.
- "Interventions Focused on the Way Students Think": initiatives to promote civic and historical education tend to mandate what students should think. Differently, interventions to strengthen students' resistance to violent extremism, by fostering the growth of critical thinking abilities, focus on how young people process and question the information they are exposed to.
- "Interventions Addressing the Way Students Engage with Each Other": the contact theory, which holds that regular, constructive interaction with perceived outgroups lessens 'Us vs. Them' mentalities and forms the foundation of interventions aimed at fostering interactions between groups of students from diverse backgrounds.
- "Interventions Focused on Building the Capacity of Educators": successful interventions appear to depend on the level of training a teacher has.
- "Cross-Cutting Interventions": these are interventions that include all the above-mentioned characteristics.

**Advice and practices**

Considering this framework, it is possible to list some specific pieces of advice and suggested practices reported in the existing literature for teachers to deal with challenges and controversial topics and issues in the classroom. The main reported recommendations and practices can be clustered as follows:[5]

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[5] The following practices are taken from: Byford, J. M., Lennon, S., & Russell, W. B. Teaching Controversial Issues in the Social Studies: A Research Study of High School Teachers. op. cit.; Bonnel J., et. Al. (2011). *Teaching approaches that help to build resilience to extrem-*

- *Create safe spaces for democratic discussion*:
  - Reflect in-depth on your teacher identity and role.
  - Establish shared norms, collaborative learning, respectful listening, and humor.
  - Give your students the possibility to express their frustration and concerns at school.
  - It is important to pose questions and let students talk and share their own opinions.
  - Help students to reach their own conclusions, guiding them without imposing your views and encouraging an open, non-judgmental interaction.
  - Enhance empathy and interaction skills by doing things collectively.
  - Discuss with small groups. This helps to better manage the conversation with students.
  - Avoid arousal of emotions and use de-escalation techniques when dealing with emotional conflicts.
  - Pay attention to, and engage with, those who feel left out.
  - Be patient and ask for help from other teachers and school professionals if you feel uncomfortable discussing some topics and issues.

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*ism among young people*. Office for Public Management and National Foundation for Educational Research. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/182675/DFE-RR119.pdf; Healey, R. L. The Power of Debate: Reflections on the Potential of Debates for Engaging Students in Critical Thinking about Controversial Geographical Topics. op. cit.; Hanse, L. *Guide pratique relatif à la prévention et la gestion des violences en milieu scolaire*. op. cit.; HEART. Helpdesk Report: *Education and extremism*, op. cit.; Lenos, S., & Keltjens, M. *School leaders and prevention of radicalisation. Setting the conditions for a safe and democratic environment*. op. cit.; UNESCO (2017). *Preventing violent extremism through education Sustainable Development Goals United Nations Educational, Scientific and Cultural Organization A guide for policy-makers*. https://unesdoc.unesco.org/ark:/48223/pf0000247764; Finnish National Agency for Education. *Prevention of violent radicalisation in schools and educational institution*. op. cit.; Ragazzi, F. *Students as Suspects? The challenges of counter-radicalisation policies in education in the Council of Europe member states*. op. cit.; Farinelli, F., & Bouarfa, T. *Laïcité et Prévention de la Radicalisation. Guide pratique pour les enseignants et les professionnels de terrain*. op. cit.; Carrasco, D., & Torres Irribarra, D. (2018). The Role of Classroom Discussion. In A. Sandoval Hernandez, M. M. Isac, & D. Miranda (Eds.), *Teaching Tolerance in a Globalized World*, Vol. 4, Cap. 6, pp. 87-102. IEA, Springer. https://link.springer.com/content/pdf/10.1007/978-3-319-78692-6.pdf; Club de Madrid (2019). *Education for Preventing Violent Extremism (EPVE)*. Working Group Paper. https://clubmadrid.org/wp-content/uploads/2019/07/EPVE-Working-Group-Paper-1.pdf; Van Alstein, M. *Controversy and polarisation in the classroom. Suggestions for pedagogical practice*. op. cit.; Mattsson, C., & Sjøen, M. M. Preventing radicalisation in Norwegian schools: how teachers respond to counter-radicalisation efforts. op. cit.; Wallner, C. *Preventing and Countering Violent Extremism Through Education Initiatives. Assessing the Evidence Base*. op. cit.; Szybinski High School in Cieszyn. *Psychological and Pedagogical Counselling Centre in Cieszyn, Cooperation between school and parents. Supporting the educational process. A guidebook for schools and parents*. op. cit.; Pace, J. L. How Can Educators Prepare for Teaching Controversial Issues? Cross-National Lessons. op. cit.; Farinelli, F. *Conspiracy theories and right-wing extremism – Insights and recommendations for P/CVE*. op. cit.

- Be aware that ambiguities may persist in some students and that teaching democratic dialogue is a long path.
- Promote intercultural dialogue and knowledge about different cultures.
- Facilitate intercultural exchanges.

- *Adopt a whole-school approach*:
  - Discuss contentious topics and issues you are facing in the classroom during school assemblies to share views, receive support, and establish a coordinated approach.
  - Develop anti-bullying policies and codes of conduct through participatory processes involving students, teachers, school personnel, and families.
  - Emphasise specific values/principles/beliefs across the whole school.
  - Enhance teacher-to-teacher communication both in terms of coordination and mutual support.

- *Curriculum-based approaches*:
  - Incorporate concepts of acceptance, multiculturalism, diversity, and civic responsibility, into the existing curriculum.
  - Develop a proper curriculum to deal with challenges and contentious topics by paying attention to the selection, timing, and framing of issues.
  - Introduce cross-curricular approaches promoting interdisciplinary studies and project-based learning.
  - In order to minimise possible adverse reactions, prior to addressing the personal ones, start by addressing less divisive matters that are not particularly near to heart and affect public opinion.
  - Enhance emphasis on creative resources and group activities.

- *Enhance critical thinking skills*:
  - Introduce the students to a range of perspectives, even if they are dissimilar to their own, while approaching these topics in a spirit of critical inquiry.
  - Increase a continuous space for debate among students within the classroom, helping them to recognise the complexity of decisions and opinions.
  - Improve the students' communication skills to enhance their critical thinking against conspiracy theories and fake news.
  - Encourage your pupils to develop stronger arguments and more convincing evidence when defending their own positions.
  - When it comes to discussing contentious topics by using critical thinking skills or fact and logic-based interventions, pay attention to the role of emotions in shaping students' beliefs.

- Tap into guides and any other useful material containing suggestions for activities, games, and initiatives devoted to facilitating the exchange of information and different points of view between youth on polarising, contentious issues.

- *Non-formal education*:
  - Encourage the participation of the students in arts and sports programmes as a way to improve their competencies and expand their network of relations.
  - Create a welcoming environment for children who find it difficult to convey their feelings, ideas, and experiences in order to prevent their isolation by using art and creative forms of instruction as an alternative.
  - Organise extra-curricular activities at school on the basis of the needs of the students.

- *Create effective partnerships*:
  - Resort to the help of external experts to discuss specific contentious topics in the classroom.
  - Cooperate with your colleagues in developing referral procedures with community leaders, local agencies, and educators.
  - Involve your students in cultural events which are devoted to demonstrating the common resolve of all communities to halt hate speech and violent extremism.

- *Consider peer approaches*:
  - Involve students who may prove to be particularly successful in establishing contact with isolated or angry students.
  - Tap into youth-led projects and initiatives that promote intercultural communication and inclusive school environments.
  - Use platforms and spaces which resonate with youth.

- *Home-school cooperation*:
  - Inform parents on their children's progress at school on a regular basis.
  - Try to understand the parents' expectations concerning school.
  - Build a partnership between parents and the school environment by creating a friendly and peaceful atmosphere.
  - Reject prejudices. Be ready to proactively communicate with every parent and to receive and calmly analyse possible criticism.
  - Do not think that you are always right and know everything. Listen to parents, let them talk, and show understanding when you clarify your positions.
  - Think about the form and content of the conversation with parents before it takes place.

- If you have to give the parents bad news, start by finding the student's positive qualities.
- Do not leave a parent with a problem to solve – rather, offer help, show ways to cope, or direct them to the right person.

All of these recommendations and practices stemming from the existing literature on this subject have been thought to enhance the well-being of students and prevent harmful conflict and violence, although, as stated in the previous pages, transfer them into the classroom settings, depending on the different context specificities, requires additional efforts, as well as continuous research, training, and updates.

**Bad reactions**

To conclude this overview, it must be noted that addressing challenges and contentious topics in the classroom may lead teachers to inappropriate reactions. In this regard, Van Alstein (2019, p. 3) warns about the pitfall of the so-called 'one-size-fits-all' approach. In fact, strategies that are meaningful in one context might be inappropriate in another. In other cases, teachers "might apply practices that may be relevant and effective in one context in situations where another approach might be more effective". Cultural and national differences may require different approaches, as certain elements may be inappropriate or outright offensive in specific contexts. A second issue highlighted by the author is the so-called "strategy of avoidance" (Van Alstein, 2019, p. 4). Teachers may opt to ignore controversial issues because "they are afraid of losing control of the class, or because conflicts might harm students, or that parents might react negatively, or because they feel they lack the necessary skills or the proper training to deal with these kinds of situations" (Van Alstein, 2019, p. 4).

The Finnish National Agency for Education (2018, p. 13) sees labelling students and making over-interpretations between the various practices, as a possible area that might negatively affect students. Carrasco *et. Al.* (2018, pp. 94-99) warns about the inherent risk in considering that the controlled variables in the schools would be uniform across the different students in the classroom, since this might give space for misunderstandings. Imposing their own views, making sarcastic remarks in the classroom about students' skills, intelligence, and work ethics are additional bad reactions teachers should avoid.[6] Furthermore, failing to provide a safe space for discussion in the classroom and in the school environment, lacking of variety in lessons, and teaching without having clear learning objectives, are generally con-

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[6] In this regard, see, for instance, Felder, R. M., & Brent, R. (n. d.). The Ten Worst Teaching Mistakes. IOWA State University. https://www.celt.iastate.edu/wp-content/uploads/2015/09/Top10TeachingMistakes.pdf

sidered as blunders that should be avoided.[7] Finally, neglecting to plan for students' needs, and failing to take into account the role that emotions play in the formation of pupils' worldviews, may result in students losing motivation. Giving children too little trust or too much independence can also result in the educational activities being less successful (Salud, 2022).

## Final remarks

This article provided an overview of the main challenges and contentious topics teachers face as part of their work with students in secondary schools as well as practices to address these issues drawing from the existing literature on this subject. The article also set the scene in terms of the adopted methodology to undertake explorative research on this topic in the framework of the H2020 project *PARTICIPATION*, thus introducing the following articles of this monographic issue which have followed the same methodology.

This background overview has highlighted both the complexity of the scenario referred to the landscape of the prevention of polarisation and radicalisation-related issues linked to contentious topics teachers need to address in the classroom and the importance to follow a participatory methodology when it comes to investigating social sensitive issues and conduct fieldwork activities with the involved social units. As for this latter point, the Social Labs methodology developed in the framework of the H2020 project *PARTICIPATION* has provided the methodological foundations for the process undertaken under this research. Social labs are local hubs that support local experimental learning processes and aid in boosting the efficacy of research and innovation initiatives. In the simplest terms, social labs unite individuals who are impacted by complex societal issues in numerous ways (such as polarisation or radicalisation-related issues), including adults, children, religious leaders, community leaders, policymakers, etc., in a secure environment conducive to learning through participatory experimentation.

With regard to the challenges and contentious topics faced by teachers in the secondary school environment, this article emphasizes the wide variety of issues entering into the school environment hence posing the role of teachers as a crucial part of the whole front-line actors' work on the prevention of polarisation and radicalisation in society. At the same time, their precious work in this field is affected by multiple obstacles among which an important component is a lack of studies and projects focused on challenges in home-school cooperation. Indeed, resilience-building teaching activities also require good management of the triangular relationships between teachers,

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[7]  *Ibid.*

students, and parents. Furthermore, having a school consistent framework to handle contentious issues in the classroom, inserting discussions on contentious topics into the official schools' curricula, raising awareness about existing educational tools, and establishing internal and external networks of cooperation would be of tremendous importance to support teachers in the handle of this kind of challenges and in providing students with a safe space for democratic discussion at school.

## References

Barge, J. K. & Loges, W. E. (2003). Parent, Student, and Teacher Perceptions of Parental Involvement. *Journal of Applied Communication Research*, 31:2, 140-163. Routledge, Taylor & Francis Group.

Beršnak, J. V. & Prezelj, I. (2021). Recognizing youth radicalization in schools: Slovenian 'frontline' school workers in search of a compass. *International Sociology*, Vol. 36, 49-70. https://journals.sagepub.com/doi/pdf/10.1177/0268580920953333tto

Branje, S., Spitzer, J., & Becht, A. I. (2021). Dynamics of Identity Development in Adolescence: A Decade in Review. *Journal of Research on Adolescence*, 31(4), 908-927. https://doi.org/10.1111/jora.12678

Byford, J. M., Lennon, S., Russell, W. B. (2009). Teaching Controversial Issues in the Social Studies: A Research Study of High School Teachers. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 82(4), 165-170. doi:10.3200/TCHS.82.4.165-170

Calaprice, S. (2004). *Alla ricerca d'identità. Per una pedagogia del disagio*, Editrice La Scuola, Brescia.

Carrasco, D. & Irribarra, D. T. (2018). The Role of Classroom Discussion. In A. Sandoval-Hernández, Isac M. M., & Miranda, D. (Eds.), *Teaching Tolerance in a Globalized World*, Vol. 4, Cap. 6, 87-102. IEA, Springer. https://link.springer.com/content/pdf/10.1007/978-3-319-78692-6.pdf

Cotton, D. R. E. (2006). Teaching controversial environmental issues: neutrality and balance in the reality of the classroom. *Educational Research*, Vol. 48, No. 2. doi:10.1080/00131880600732306

Farinelli, F. (2019). *RAN EDU meeting on dealing with religion-inspired extremist ideologies in school*. Radicalisation Awareness Network - European Commission. https://home-affairs.ec.europa.eu/system/files/2019-12/ran_edu_meeting_dealing_religion-inspired_extremist_ideologies_school_14-15_112019_en.pdf

Farinelli, F. (2021). *Conspiracy theories and right-wing extremism – Insights and recommendations for P/CVE*. Radicalisation Awareness Network - European Commission. https://ec.europa.eu/home-affairs/networks/radicalisation-awareness-network-ran/publications/conspiracy-theories-and-right-wing-extremism-insights-and-recommendations-pcve-2021_en

Finnish National Agency for Education (2018). *Prevention of violent radicalisation in schools and educational institution*. https://www.oph.fi/sites/default/files/documents/prevention-of-violent-radicalisation-in-schools-and-educational-institutions.pdf

Frase, A. & Sinisalo, L. (2021). *Manifesto for Education. 2nd Edition*. Radicalisation Awareness Networks – RAN Practitioners. https://ec.europa.eu/home-affairs/whats-new/publications/manifesto-education-2nd-edition-2021_en

Haldane, J. (2004). Values, Education and the Human World: Essays on Education, Culture, Politics, Religion and Science, Volume 1 of *St. Andrews studies in philosophy and public affairs*, Imprint Academic.

Harwood, A. M., Hahn, C. (1990). *Controversial issues in the classroom.* ERIC Clearinghouse for Social Studies/Social Science Education Bloomington IN - Document Reproduction Service No. ED327453. Retrieved from https://ita.calameo.com/read/00000147531f58247ba26

Healey, R. L. (2012). The Power of Debate: Reflections on the Potential of Debates for Engaging Students in Critical Thinking about Controversial Geographical Topics. *Journal of Geography in Higher Education*, 36:2, pp. 239-257.

Ho, L., McAvoy, P., Hess, D., Gibbs, B. (2017, March). Teaching and Learning about Controversial Issues and Topics in the Social Studies. A Review of the Research. In M.M. Manfra & C.M. Bolick (Eds.), *The Wiley Handbook of Social Studies Research* (Chapter 14). Meghan McGlinn Manfra, Cheryl Mason Bolick. https://doi.org/10.1002/9781118768747.ch14

Kerr, D., Bonnell, J. (2011). *Teaching approaches that build resilience to extremism among young people.* National Foundation for Educational Research. https://www.nfer.ac.uk/publications/OPXZ02/OPXZ02.pdf

Lenos, S. & Keltjens, M. (2016). *School leaders and prevention of radicalisation. Setting the conditions for a safe and democratic environment.* Radicalisation Awareness Network – Ex-Post Paper. https://ec.europa.eu/home-affairs/system/files/2016-12/ex_post_paper_ran_edu_antwerp_19-20_04_2016_en.pdf

Levitt, G. A., & Longstreet, W. S. (1993). Controversy and the teaching of authentic civic values. *The Social Studies* 84 (4): 142–47. Taylor and Francis Ltd.

Niemi, P., Benjamin, S., Kuusisto, A., Liam Gearon L. (2018). How and Why Education Counters Ideological Extremism in Finland. *Religions*, 9, 420. https://doi.org/10.3390/rel9120420

Oulton, C., Day, V., Dillon, J., Grace, M. (2004, December). Controversial Issues: Teachers' Attitudes and Practices in the Context of Citizenship Education. *Oxford Review of Education*, 30 (4), pp. 489 – 507. doi: 10.1080/0305498042000303973

Pace, J. L. (2021). How Can Educators Prepare for Teaching Controversial Issues? Cross-National Lessons. *Social Education* 85(4). National Council for the Social Studies. https://www.socialstudies.org/system/files/2021-08/se-850421228.pdf

Ragazzi, F. (2018). *Students as Suspects? The challenges of counter-radicalisation policies in education in the Council of Europe member states.* Council of Europe.

Ragazzi, F., Walmsley, J. (2020). *Counter-radicalisation in the classroom. The challenges of counter-radicalisation policies in education in the Council of Europe member states* Council of Europe. https://rm.coe.int/prems-006921-counter-radicalisation-in-the-classroom/1680a149c4

Salud, J. A. Wrong Practices Teachers Make Unconsciously. *Teacherph.* Retrieved September 27, 2022, from https://www.teacherph.com/wrong-practices-teachers-make-unconsciously/

Soley, M. (1996). If it's controversial, why teach it?. *Social Education*, 60 (1), 9–14. https://www.socialstudies.org/sites/default/files/publications/se/6001/600101.html

Stradling, R., Noctor, M., Baines, B. (1984). *Teaching Controversial Issues.* London, UK, Edward Arnold.

Torney-Purta, J., Lehmann, R., Oswald, H., Schulz, W. (2001). *Citizenship and Education in Twenty-eight Countries.* Amsterdam, IEA Secretariat.

Valente, S., Lourenço A.A., Németh, Z. (2020). School Conflicts: Causes and Management Strategies in Classroom Relationships. In M. P. Levine (Eds.), *Interpersonal Relationships*. London: IntechOpen. https://www.intechopen.com/chapters/74550

Van Alstein, M. (2019). *Controversy and polarisation in the classroom. Suggestions for pedagogical practice.* Flemish Peace Institute. https://vlaamsvredesinstituut.eu/wp-content/uploads/2019/12/Inspirational-guide_Controversy_PRINT.pdf

Wallner, C. (2020, June). *Preventing and Countering Violent Extremism Through Education Initiatives. Assessing the Evidence Base.* RUSI. https://static.rusi.org/pcve_education_final_web_version.pdf