

# Democratic education and the epistemic quality of democratic deliberation

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## Abstract

This article examines the challenges that an epistemic account of deliberative democracy, according to which democratic deliberation has ‘truth-tracking’ capacities, encounters in contemporary polarized societies, and then discusses how these challenges could be addressed through democratic education. The focus of the article is especially on two phenomena indicated by recent empirical research: the increasing public distrust in experts and motivated reasoning that affects citizens’ belief-formation. The article suggests that some of the idealizing core assumptions of epistemic democracy make it difficult to recognize and address these phenomena as serious challenges to the epistemic quality of public deliberation. With these challenges in view, the article then addresses the question how the deliberative model of education should be revised or complemented for it to prepare students for epistemically good-quality public deliberation. The article proposes two pedagogical approaches: (1) fostering students’ epistemic trust through a ‘realistic’ account of science education, and by familiarizing students with adequate criteria for recognizing trustworthy experts, and (2) teaching integrative negotiation, which focuses on examining and explicating students’ interests and needs in situations in which motivated reasoning prevents them from meaningfully engaging with educationally and epistemically productive practices.

## Keywords

deliberative democracy, democratic education, epistemic democracy, epistemic trust, motivated reasoning

## Introduction

In theories of democratic education, insufficient attention has been paid to the epistemic skills and virtues required of citizens even though, considering the current ‘post-truth’ political climate, these abilities are crucial for citizens’ engagement in democratic

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decision-making in a responsible way (Chinn et al., 2021: 51). Deliberative theories of democracy provide a potential foundation for these educational considerations because in them specific attention has been paid to citizens' capacity to reason well and justify their views (Mansbridge et al., 2010: 65). In the 'epistemic' branch of deliberative democracy, deliberation has also been argued to have 'truth-tracking' capacities and result in epistemically good-quality decisions (List and Goodin, 2001: 277; Min and Wong, 2017: 1). Accordingly, education for deliberative democracy, which focuses on fostering character traits, skills, and virtues associated with rational deliberation (e.g. Gutmann, 1999), is a promising candidate for teaching students the abilities that are needed for taking part in epistemically beneficial democratic processes.

However, recent political events have raised questions about the relationship between democracy and the epistemic quality of decision-making. The rise of populist politics, among other things, has contributed to the formation of a post-truth political climate in which citizens' distrust in scientific knowledge and expertise, and the formation of political views based on partisan identities, are commonplace (Baghrarian and Panizza, 2022: 9). Under these circumstances, philosophers and political scientists have started to doubt the epistemic value of democracy, and some have arrived at the view that in many cases political participation renders people irrational and biased (Brennan, 2016: 7–8; Brown, 2018: 195). These insights have been supported by recent findings in cognitive and political science, which demonstrate that the deliberative view of citizens as epistemic agents does not correspond with the empirical evidence concerning citizens' political behaviour or the formation of their political views (Benson, 2021: 8262; Wright, 2022: 25).

In this article, I examine the gap between the epistemic account of deliberative democracy (e.g. Landmore, 2013a) and the empirical findings that reflect the reality of citizens' political belief-formation and decision-making (e.g. Baghrarian and Croce, 2021; Wright, 2022). Based on this examination, my aim is to understand how democratic education could better contribute to the epistemic quality of public deliberation by taking into consideration citizens' potential delimitations as epistemic agents, and the challenges that deliberation among lay citizens may face in contemporary democracies and concerning complex political problems. I particularly focus on two issues: first, the increasing *public distrust in scientific experts*, which jeopardizes the epistemic quality of public deliberation (Baghrarian and Croce, 2021; Kabat, 2017), and second, *motivated reasoning* (Kahan, 2013; Wright, 2022) as a social and psychological mechanism that delimits citizens' capabilities for reasoned belief-formation.

In response to these phenomena, I suggest pedagogical approaches through which democratic education could better support students' capability to take part in public deliberation in an epistemically productive way. First of these is *fostering students' epistemic trust* in reliable epistemic authorities, such as scientific experts. I suggest that such trust can be fostered by offering students a realistic understanding of the nature of scientific research and providing them with adequate criteria for recognizing trustworthy experts. Second, I suggest that *integrative negotiation* – a negotiative strategy recently discussed in the context of deliberative democratic theory (see Warren and Mansbridge et al, 2013; Wright, 2022) – could offer a promising approach for educating students to recognize and better cope with forms of motivated reasoning in themselves and in others. Moreover, I

will examine the repercussions of these pedagogical approaches to the development of students' rational autonomy. I conclude by suggesting that while some concessions to the deliberative model of education may be necessary considering the discussed empirical findings, they do not justify a straightforward rejection of the deliberative ideal, as this might result in depriving students of the very possibility to become agents capable of reasoned deliberation and belief change, and thus undermine their rational autonomy.

The article is structured as follows: I start by defining the notions of deliberative democracy and education and the concept of epistemic democracy. I then move on to discussing the challenges that the idea of epistemic democracy currently faces in light of the findings of empirical research. In the following section, I introduce the pedagogical strategies that might render democratic education better suited for addressing these challenges. In the final section, I present some concluding remarks.

## **Deliberative democracy and education and the epistemic benefits of deliberation**

The theory of deliberative democracy derives from the idea of fair and egalitarian deliberation among citizens as the primary means of securing democratic legitimacy (Benhabib, 1996; Habermas, 1996). The theory highlights the element of collective will- and opinion-formation as a crucial feature of the democratic process: within democratic deliberation, citizens are expected to be willing to revise and adjust their political views and make concessions to their immediate self-interests in favour of what all citizens could will in common (Habermas, 1996). The theory thus emphasizes how values and beliefs can be productively revised through collective weighting of reasons and mutual perspective-taking (Habermas, 1997). Due to this view, the deliberative model has been argued to have various benefits as compared to other theories of democracy such as the aggregative model in which democracy is perceived merely as means of navigating between citizens' individual interests. In addition to legitimating state's use of political power, deliberative democracy is said to enhance equality, toleration and mutual respect among citizens, and have community-generating power (Cooke, 2000: 948–951).

The deliberative theory of democracy has also received rather broad interest in the context of philosophy of education. There are some differences in how different scholars have understood and conceptualized the nature, purpose and aims of education for deliberative democracy, and also suggestions concerning the ways of implementing deliberation through educational practices have varied to some degree (Samuelsson, 2018). However, most educational scholars associate the benefits of deliberative education with the acquisition of the democratic competencies required for students' future engagement in public deliberation (Molnar-Main, 2017). These competencies can be roughly divided into the following categories:

1. *Democratic virtues* such as toleration, mutual respect and acceptance and appreciation of diversity; the ability to adopt the generalized viewpoint of justice; and the motivation to reach shared consensus or compromise with others (Gutmann, 1999: xiv; Reich, 2007: 189; Englund, 2010: 24–25; Hess, 2009: 17).

2. *General cognitive skills* associated with rational argumentation and critical thinking, such as the ability to formulate and assess reasons, arguments and evidence and the increased reflexivity concerning one's interests, values and beliefs, including the capacity to evaluate and change views and beliefs on the basis of reasons and through considering the perspectives of others (Reich, 2007: 189–190; Hess, 2009: 29; Nishiyama, 2021: 112).<sup>1</sup>

In addition to these competencies, which are often considered to be the central constituents of deliberative democratic citizenship, taking part in deliberation has been argued to foster general social and communication skills, including the ability to listen to others and engage in discussions in a socially respectful and effective way (Reich, 2007: 189; Thomas, 2010: 4). Furthermore, drawing from a body of empirical research, Hess (2009) also highlights the importance of deliberation for enhancing students' political interest and engagement in society and for strengthening their capability to address politically controversial issues in a constructive and non-partisan way. McAvoy and Hess (2013) emphasize the importance of addressing controversial issues by means of classroom deliberation especially in the prevailing context of political polarization. This is because they find deliberation – when adequately implemented – to have the capacity to counteract at least some of the problematic tendencies of politically polarized societies (I will return to this matter later).

As noted above, educational scholars also differ to some degree in their views on how deliberation should be implemented and what the crucial features of classroom deliberation are. Englund (2010: 24), for instance, highlights features that derive directly from the deliberative ideal of rational discourse, including equality of deliberation in terms of giving space and time for different viewpoints; mutual tolerance and respect among participants; collective will-formation and consensus as general aims of deliberation; and freedom from external control and constraint, including that of the teacher. In turn, Hess (2009) and McAvoy and Hess (2013) place much stronger emphasis on the teacher's role in deliberation especially in selecting adequate *issues* or topics to be discussed and in creating the type of open classroom climate that enables perennial and controversial political issues to be addressed in a constructive and deliberative way. By this they mean a form of discussion that focuses on such genuinely deliberative questions as 'How should we live together?' and 'Which option seems best/most fair given varied views and perspectives?', and which thus takes distance from the limited scope of each participant's self-interest (Hess, 2009: 37; McAvoy and Hess, 2013: 20).

Notably, most deliberative educators have focused on the capabilities and skills that are beneficial especially for strengthening the *normative* dimensions of democracy, such as fair democratic processes and just institutions (e.g. Gutmann, 1999; Hess, 2009; McAvoy and Hess, 2013). Relatively few scholars, in turn, have focused on the *epistemic* virtues and skills that are needed for participating in deliberation that aims at *truth* and *knowledge* rather than justice or moral/political agreement. In this context, I use the term 'epistemic' in a restricted sense to refer to the 'truth-tracking' features of deliberation and the associated virtues and skills that taking part in such deliberation requires. Evidently, some of the capabilities discussed by deliberative scholars are both epistemically *and* normatively relevant: for instance, the general cognitive skills mentioned above are beneficial not only for reaching fair and just decisions but also for assessing evidence and reasons concerning

different knowledge claims. Moreover, some scholars have also argued deliberation and discussion to enhance learning and content understanding beyond political and moral issues, primarily because deliberation allows perceiving matters from diverse perspectives, which is a beneficial feature of most forms of inquiry (Hand and Levinson, 2012: 617; Hess, 2009: 31–32). Reich (2007: 190) also points out that even actual *knowledge* may be generated through participation in deliberation. By this knowledge, he refers to the understanding of the different argumentative positions regarding a specific topic and the facts or assumptions that underlie each perspective. Reich emphasizes, however, that this type of knowledge is rarely the primary aim of deliberation.

Aside from these remarks, it is fair to say that the *epistemic* potential of deliberative education has received relatively little attention among educational scholars. However, the same does not apply to the theory of deliberative democracy: there is a strong branch of research on ‘epistemic democracy’ that highlights the epistemic or ‘truth-tracking’ qualities of deliberation (e.g. Bohman, 2006; Goodin, 2017; Landmore, 2013a, 2013b; Min and Wong, 2017). This approach suggests that insofar as there are correct answers to be found to political issues, they are more likely to be achieved through democratic deliberation than by other means of decision-making (Goodin, 2017: 353). In defence of this argument, epistemic democrats highlight the epistemically valuable features of deliberation, including the collective weighting of arguments and counterarguments, reciprocity in giving and asking for reasons, and the rule of the better argument. Due to these qualities, deliberation is argued to facilitate learning processes that yield epistemically high-quality outcomes (Min and Wong, 2017: 4).

Recently, some epistemic democrats, including H el ene Landmore (2013a: 102) and Scott Page (2007: 7), have highlighted *cognitive diversity* as the primary feature contributing to the epistemic quality of deliberation. Briefly put, cognitive diversity means that individuals come equipped with different cognitive abilities and psychological traits that determine the way they frame, interpret, and resolve problems (Landmore, 2013a: 102). According to epistemic democrats, the benefit of such diversity is that it allows participants in deliberation to examine the problem at hand from different cognitive perspectives and thus enables arriving at a more global solution than deliberation among like-minded individuals (Landmore, 2013a: 102). Therefore, the inclusion of more and more cognitively diverse people in a democratic process will arguably result in epistemically better outcomes.<sup>2</sup>

These arguments presented by epistemic democrats have found some support from empirical research. It has been demonstrated that carefully planned and moderated deliberation can yield epistemically beneficial learning processes and result in desirable belief change with actual effects on political behaviour (Fishkin, 2018: 325). Moreover, especially with the addressed problems being relatively simple, deliberation among a diverse group of citizens has been indicated to have the capacity to recognize and choose best solutions to a given problem (Landmore, 2013a: 101).

## **Challenges to the epistemic view of deliberative democracy**

Recently, the idea of epistemic democracy has encountered increasing criticism, which derives from the prevailing state of democratic politics in various societies. The

increasing science denialism and scepticism, public ignorance and such events as Brexit and the presidential election of Donald Trump have led many political theorists to question democracy as an epistemically beneficial way of making political decisions (Achen and Bartels, 2016; Brennan, 2016). Jason Brennan (2016) has been among the most forceful critics of epistemic democracy: drawing from empirical research by political scientists, psychologists and economists, he argues that citizens are far too ignorant, misinformed or irrational to be trusted to make good political decisions. Their judgement is affected by group behavioural patterns, they tend to be biased in holding and forming beliefs and assessing evidence and most of them do not even hold stable political beliefs at all. Considering these deficiencies, he concludes that democratic decision-making is ill-equipped to yield epistemically good-quality outcomes (Brennan, 2021: 377–378).

Similar critiques have also been directed more specifically to the deliberative model of democracy. Most of them focus on the discrepancies between the idealized model of democratic deliberation, the qualities of citizens as epistemic agents and the complex reality of actual political decision-making. For instance, attention has been drawn to the suitability of public deliberation for solving highly complex political problems in contemporary democracies (Benson, 2021). Usually, the response of deliberative democrats to such critiques has been *more deliberation*. As Robert Talisse (2022: 17) points out, the supporters of deliberative democracy typically highlight the need of citizens to practice deliberation to learn the skills and virtues associated with deliberative practices. Moreover, deliberative democrats also propose various institutional arrangements, including educational ones, by which the behaviour of actual citizens would come to resemble the ideal model of rational deliberation more closely.

In this article, I propose an alternative approach: through examining the specific problems that hinder citizens' capability to take part in epistemically good-quality decision-making, my intention is to suggest targeted pedagogical practices that might help to bridge the gap between the deliberative theory of democracy and the reality of democratic politics and citizens' political behaviour. To make such pedagogical suggestions, it is necessary first to examine in more depth what exactly is 'wrong' with epistemic versions of deliberative democracy when examined from the viewpoint of real-life political processes and the qualities of citizens as epistemic agents. I focus particularly on two 'blind spots' of the epistemic conception of deliberative democracy, which have become increasingly visible in the current context of political polarization: *public distrust in experts* and *motivated reasoning*.

### *Public distrust in experts*

In recent years, the epistemic authority of experts, especially scientific experts, has been under attack by right-wing populists, various media-driven campaigns, conservative think tanks and corporations (Baghrarian and Panizza, 2022: 9). The consequences of these attacks have included, just to mention a couple of examples, citizens' growing vaccine hesitancy and increasing climate change scepticism. What is particularly alarming about such public distrust is that it is no longer a minor phenomenon. For instance, despite the broad scientific consensus on anthropogenic climate change, in the survey by the Pew Research Center (2019) covering 26 countries across the world, the median shares across the countries of those who saw climate change as either a minor threat or no threat at all

were 20% and 9%, and in the United States 16% and 23%, respectively (Pew Research Center, 2019).

This type of science scepticism and distrust in experts is particularly troubling from the perspective of the epistemic quality of democratic decision-making. Namely, resolving complex political problems in contemporary democracies typically requires knowledge, skills and abilities, such as scientific theories and methodologies, that lay citizens simply cannot be expected to have. Therefore, considering the complexity of political problems associated with, for instance, health, safety, economy and the environment, and given the unavoidable gap in knowledge and information that separates experts and citizens, public trust in experts and an appropriate division of epistemic labour between citizens, policymakers and experts is crucial to a well-functioning democracy and good governance, as well as the epistemic quality of political decisions (Baghrarian and Panizza, 2022: 13; Holst and Molander, 2019: 542).

In the context of epistemic democracy, this relevance of experts and expert knowledge to the epistemic quality of democratic decision-making has been largely disregarded (Moore, 2017: 110–111). The primary reason for this is that, in epistemic democracy, reliance on experts is often presented as a threat to democracy and argued to lead to democratic deficits (Holst and Molander, 2019: 544). However, recognizing the importance of expert knowledge for democracy does not have to mean undermining the role of citizens as those holding primary decision-making power. Here, I follow Christiano (2012: 36) who argues that while citizens should play a predominant role in determining the political aims to be pursued in a democratic society, experts play an important role in public deliberation through their ‘filtering’ function: experts provide the pool of knowledge and theories from which citizens and policymakers can choose the ones they see as most fit for pursuing democratically decided-upon aims. Moreover, especially in the context of the prevailing science scepticism, experts have a key role in filtering out irrational options that cannot be backed up with scientific evidence. Experts can thus contribute to the epistemic quality of democratic deliberation without this necessarily diminishing citizens’ political power.

The opposition between democracy and expert knowledge is also erroneous in the sense that the quality of expert knowledge available largely depends on the existence of an inclusive and egalitarian democratic society. Namely, experts can only contribute to the epistemic quality of decision-making if expert knowledge is not infected by systematic epistemic, political or social bias. Especially, scholars in feminist epistemology have argued for the epistemically important role of social and cognitive diversity within scientific communities (e.g. Solomon, 2006). Therefore, ensuring the availability of good-quality expert knowledge requires that the institutional arrangements through which experts receive their position *as experts* is itself democratic in the sense that people from various backgrounds and social positions can pursue expert roles in society, and that the institutional and structural barriers that prevent some groups, such as women or minorities, from accessing expert communities are removed. Moreover, fostering an open and transparent culture of public discussion is another way through which a well-functioning democratic society contributes to the existence of reliable expert knowledge: producing and communicating expert knowledge to the public in an open and transparent way and

subjecting expert views to open public discussion and debate allows holding experts accountable to the public (Holst and Molander, 2014: 30–31).

I therefore suggest that epistemic democrats' disregard of the role of experts in democratic decision-making – as well as the straightforward juxtaposition between 'rule by the people' and 'rule by experts' – is problematic and prevents addressing the problem of distrust as a serious challenge to the epistemic quality of democratic deliberation. Evidently, this distrust is justified if, for instance, it results from the dishonest or biased behaviour of scientists or from the distorted relationship between expert knowledge and political decision-making. But when distrust is a result of inadequate understanding of the nature of scientific research or lack of appropriate criteria for recognizing trustworthy experts, democratic education can be at least part of the solution in the attempt to address the problem. However, outlining such solutions may require giving up some of the assumptions held by epistemic democrats, such as the 'diversity trumps ability theorem' (Landmore, 2013a: 104).

However, recent studies suggest that citizens' inadequate science literacy is only one reason contributing to the increasing science denialism and public ignorance (e.g. Chinn et al., 2021). In fact, it has been argued that public ignorance is often linked to the social and psychological mechanisms exhibited by citizens and has less to do with the behaviour of scientists or the nature of scientific research as such (Wright, 2022: 28). Therefore, I address the issue of *motivated reasoning* next.

### *Motivated reasoning*

An epistemic account of deliberative democracy is based on the idea that rational persuasion is capable of inducing reasoned belief change in participants of deliberation. In other words, when participants are presented with good and convincing reasons why they should accept the argument in question, they should be willing and able to change their initial beliefs in favour of the stronger and better justified view. The epistemic relevance of deliberative democracy stands or falls with this view – namely, if participants in deliberation are either unwilling or unable to follow the 'forceless force of the better argument' (Landmore, 2013a: 1214), the capacity of deliberation to yield epistemically good-quality outcomes is jeopardized.

However, contemporary research on public deliberation indicates that political discussion is mostly driven by forces that have very little to do with rational persuasion or better arguments. Rather, research in both cognitive and political science demonstrates that humans tend to evaluate evidence and form beliefs in non-truth-conducive ways (Hannon and de Ridder, 2021: 157). For example, people seek out, uncritically accept, and remember evidence that allows them to maintain their previously held beliefs and tend to be critical towards and avoid counterevidence to these initial beliefs. This tendency of humans is typically referred to as *motivated reasoning* (Baghrarian and Croce, 2021: 453; Wright, 2022: 26) or *confirmation bias* (Gunn, 2021: 196).

Motivated reasoning is typically intertwined with affective mechanisms that have to do with *social identity* (Wright, 2022: 26). As the social identity theory argues, people often form and obtain beliefs based on the social group to which they belong or identify with. In consequence, the beliefs associated with a particular group affiliation become



*identity-protective*, which means that any challenge to these beliefs is experienced as a threat to the identity in question (Hannon and de Ridder, 2021: 157–158). This entanglement of beliefs and social identity makes reasoned belief change particularly difficult in the case that the beliefs in question are central to the group identity. In such cases, an agent is much more likely to hold on to his or her initial beliefs even when presented with rationally persuasive counterevidence. In fact, many scholars argue that these mechanisms actually make it *rational* for the person to hold even false or biased beliefs if they protect the person's social identity (Levy, 2022; p. xiii; Somin, 2021: 242).

These cognitive mechanisms are especially strong in polarized political settings that operate on ingroup/outgroup psychological dynamics. In such circumstances, standing out from one's political group through divergent beliefs constitutes a high-level identity threat. Accordingly, it has been indicated that, in contemporary democratic societies, polarization has less to do with issue positions than with growing *affective polarization*, which refers to the emotional importance of partisan social identities to political agents (Iyengar, 2021: 91). Rather than the actual political content, group membership often becomes the most decisive feature determining the political opinions that a person holds. Therefore, if one's political party supports a particular policy, and especially if the outgroup opposes it, the person is more likely to endorse the policy in question independent of its content (Sunstein, 2017: 75–77).

These findings place into question the basic assumptions of epistemic democracy, especially the idea that citizens are willing to engage in mutual perspective-taking and impartial scrutiny of arguments and counterarguments to arrive at epistemically best solutions (e.g. Landmore, 2013a). While citizens might be capable of doing that and even willing to do so under certain moderated conditions, empirical research shows group membership and social identity to be far more influential in shaping citizens' political opinions than the reasons given for or against a particular view (Sunstein, 2017).

From an educational perspective, the important question is what the implications of these findings are or should be for democratic education. If empirical evidence shows that the basic assumptions of epistemic deliberative democracy collide with the way citizens in reality reason and behave, should the entire idea of deliberative democratic education be rejected as unrealistic and inappropriate for responding to the needs of contemporary democracies? My response to this question is ultimately 'no', but I do think that the deliberative model of education needs some more targeted pedagogical strategies to respond to the issues just discussed.

## **Towards an epistemically beneficial form of deliberative education**

As indicated earlier, while there is evidence that citizens do not often act in the way the deliberative model presupposes, there is also counterevidence indicating that deliberation *can* have morally and epistemically desirable effects (e.g. Fishkin, 2009, 2018). It is also noteworthy that the empirical studies that question the epistemic relevance of deliberation do not justify an unqualified rejection of the benefits of deliberative models of *education*; after all, educational institutions and practices in contemporary democratic

societies are rarely organized in a manner that the deliberative model recommends. Therefore, we do not have access to data indicating how citizens might behave, and how democratic processes might function, in the ideal case that all citizens received a proper education for deliberative democratic citizenship. It is also overly pessimistic to think that education is *entirely* incapable of fostering *any* of the deliberative virtues and capabilities in students. Moreover, very few educational scholars would challenge the importance of teaching students to reason well, engage in rationally motivated discussions or encounter others with differing beliefs and values with toleration and respect. These features that are associated with the deliberative views of democracy and education are desirable qualities in citizens especially considering the current state of political polarization.

Some educational scholars have focused particularly on illuminating the value of deliberative education in politically polarized contexts: according to McAvoy and Hess (2013), teaching students how to deliberate on controversial political issues is a way to counteract the political tendencies and practices that are damaging to democracy in the current political culture. They suggest that learning to discuss politically controversial issues in a constructive way is ‘democracy-sustaining’ (p. 17) and one of the cornerstones of a healthy and well-functioning democracy, and thus a key feature of education against political polarization. According to McAvoy and Hess (2009), teachers should not shy away from bringing even highly controversial political issues to classrooms but create instead what they refer to as a ‘political classroom’ (p. 30) in which students are encouraged to deliberate together on authentic and current political issues that raise genuine controversy in society. They further make concrete suggestions (which I unfortunately cannot address here due to space restrictions) on how to introduce controversial issues to students in a way that is particularly beneficial for combatting the negative influences of the surrounding political culture.

While I agree with McAvoy and Hess concerning the potential benefits of deliberation in polarized societies what I find to be missing from their approach is a more detailed consideration of the effects of political polarization on the very *possibility of deliberation*. Although they recognize the fact that deliberative democracy is challenged by polarization, they do not address the question what ought to be done if the very *preconditions of deliberation* – including the possibility to rely on trustworthy epistemic and political authorities in one’s reasoning and judgement, and the capability to assess evidence and reasons in a non-partisan way – are significantly impaired as a consequence of polarization.

My view is that precisely because of these impediments, fostering capabilities of rational deliberation *alone* may not be enough for students to learn to take part in epistemically productive deliberation in contemporary democracies. Earlier, I gave two different reasons for this: first, decision-making concerning matters that require high levels of scientific expertise, citizens’ ability to *trust* reliable scientific experts is decisive for the epistemic quality of decision-making (Baghrarian and Panizza, 2022: 13). Second, social identity and motivated reasoning are often more influential in determining citizens’ political decisions than the reasons provided in defence of or against particular views (Wright, 2022: 26). Therefore, while teaching students general skills and virtues of rational deliberation may address these issues to some degree, more targeted strategies to

intervene with epistemically unproductive forms of reasoning may also be required.<sup>3</sup> With this in view, my aim in this section is to suggest some pedagogical approaches to complement the deliberative model, which might render the model better equipped to meet the challenges discussed in this article.

### *Fostering epistemic trust*

Believing based on trust is a fundamental human practice and a crucial feature of all social and political life. Exercising warranted trust enables learning from and collaborating with others and facilitates the division of cognitive labour between experts and lay citizens (Baghramian and Panizza, 2022: 3). It is characteristic of complex, modern societies that citizens pervasively trust and rely on others' judgement, which is not problematic in so far as citizens are able to rationally assess what warrants such trust (Anderson, 2011: 144). *Epistemic trust*, which is the form of trust relevant to this discussion, involves relying on knowledge claims and testimony of others, and accepting them as sources of epistemic authority, on matters where we ourselves lack access to relevant knowledge and evidence, and have good reasons to believe that others are more knowledgeable than us (Baghramian and Panizza, 2022: 3–4).

Fostering trust can also be argued to be an inevitable part of all education. For instance, classroom science does not rediscover and justify scientific knowledge anew for each group of students, but teaching is based on the tacit assumption that students trust that what they are being taught has been discovered and justified in a reliable way (Solomon, 2021: 37). On the other hand, fostering trust is not entirely unproblematic; this is because blind or uncritical trust in epistemic or other authorities risks undermining a person's capacity for rational assessment of beliefs and knowledge claims (Baghramian and Panizza, 2022: 6–7; Siegel, 2005: 360–361). Therefore, fostering trust might jeopardize the promotion of students' rational autonomy, which is often considered to be not only a worthwhile educational aim in a general sense but also a prerequisite for a well-functioning democracy (Winch, 2006: 65–66). As Siegel (2010: 143) argues, fostering students' capability for reasoning and critical thinking (i.e. the abilities and skills of reason assessment and the dispositions to engage in and be guided by such assessment) is crucial for treating students with respect as persons, for supporting their personal autonomy and capacity to make informed choices about their lives, and for preparing them for adulthood in a more general sense. Moreover, as Brighouse (1998: 735) points out, as democratic legitimacy requires citizens' uncoerced consent on the laws, institutions and social norms by which they are governed, democratic education must ensure that citizens are capable of autonomous rational reflection of the social arrangements and institutions of their society and are able to critically assess the values and knowledge inculcated in them. In this sense, fostering trust in reliable epistemic authorities ought to be carried out in a way that simultaneously enables the development of students' skills and virtues of independent reasoning and rational assessment.<sup>4</sup>

Miriam Solomon (2021) has proposed a promising strategy for fostering epistemic trust by cultivating students' realistic, in-depth understanding of the nature of scientific research. In this account, trust is a feature that does not develop *independently* of rational understanding and evaluation of knowledge claims. Rather, trust emerges as a

side-product of students' awareness of how scientific research 'actually works'. Solomon (2021: 36) argues that one of the central impediments to citizens' trust in scientific experts lies in existing forms of science education, which portray scientific research in a highly unrealistic fashion as linear, unproblematic accumulation of knowledge. According to her, the prevailing model of science education disregards scientific disagreement and uncertainty as inevitable and oftentimes productive parts of scientific research. Normalizing these features could especially contribute to preventing the type of science scepticism that derives from misinterpreting dissent and uncertainty as signals of the general untrustworthiness of science and researchers (Solomon, 2021: 37–38). Namely, harbouring unrealistic expectations about the nature of scientific research and the behaviour of scientists may easily lead citizens to misinterpret dissent and lack of certainty as signs that experts in general do not know what they are talking about or that there is something wrong with the methods, theories and processes employed.

In practice, this 'realistic' approach to science education could involve introducing to students genuine cases of scientific inquiry and discovery, which are reconstructed and displayed in their full complexity, paying attention to the non-linear and multifaceted processes through which certain beliefs that are currently taken to be true became endorsed by most scientists (Solomon, 2021: 37–38). Solomon (2021: 39) also highlights the need to teach students about the procedures through which objectivity is sought after and secured by scientific communities, such as the education of future researchers, peer review processes for grants and publications, discursive practises in conferences and scientific meetings and the norms of scientific integrity. Furthermore, for students to develop trust in reliable scientific experts not only in natural sciences but also in such fields as education and social sciences, students should learn that, in these fields, positionality and social features of research often play a significant role in the formation of knowledge. This, however, does not mean that there is necessarily systematic bias involved; what is crucial in such fields is the ability to *make explicit* and *justify* potential positionalities in research (e.g. Harding, 2015; Longino, 1990). A 'realistic' account of science education just proposed thus specifically aims to correct *misplaced* distrust, which derives from an inadequate understanding of the nature of scientific research and the role that uncertainty, disagreement and social positionality play in the formation of scientific knowledge.

Solomon's suggestions align with some of the previous attempts to outline educational strategies to counteract the problematic tendencies of polarization. Along the lines of Solomon, Chinn et al. (2020: 54) argue that the current science curricula of basic education are insufficient for addressing phenomena such as fake news and misinformation, the breakdown of trust in scientific and other experts, and the priority that is given to political opinions over facts and evidence. Corresponding with the 'realistic' form of science education just outlined, Chinn et al. (2020: 54–55) argue that educational institutions and practitioners should aim to create authentic epistemic environments for students instead of the safe and carefully curated ones that schools typically present to them. Students should be introduced to the complexity that is associated with warranting knowledge claims; for instance, to prepare students for the challenges that they will encounter in real life, students may be presented with and taught to assess conflicting evidence that may vary in quality, reliability and belief consistency.

Another strategy that Chinn et al. (2020: 57) propose, which strongly aligns with my suggestions above, is to familiarize students with the prevailing epistemic systems, especially scientific research. Students should learn how scientific knowledge can be reliably produced despite the influence of different ideological, social and economic factors on researchers' work, and they should also understand why it is important that scientists rely on particular epistemic aims and ideals, and why certain processes are reliable ways to pursue and achieve these aims. According to them, students should also be provided with understanding of how epistemic systems and authorities regulate the conditions of knowledge production, when and how such conditions may be impaired (by, for instance, systematic bias, economic interests or epistemic injustice), and how these conditions can be improved.

As in my suggestions above, the underlying motivation of Chinn's, Barzilai's and Duncan's proposals is to offer students a realistic understanding of epistemic practices available in their society, provide them with tools to resolve genuine problems that they will encounter in assessing and warranting knowledge claims, and to prevent the type of unwarranted mistrust that arises from the discrepancy between the idealized view of knowledge production presented to them in schools, and the complex reality that they encounter outside educational institutions.

Moreover, Chinn et al. (2020: 55) also highlight the importance of providing students with an adequate understanding of how trustworthy epistemic authorities and experts can be recognized and how their expertise can be assessed. This evidently involves bringing to students' attention the specific *criteria* that can be used to distinguish trustworthy scientific experts from those whose purpose is mainly to misinform or create confusion and irrational doubt in citizens. As Anderson (2011: 144) points out, reliance on others' expertise does not undermine democracy or citizens' autonomy in so far as citizens are able to judge, based on appropriate reasons and criteria, who can be trusted.

In epistemology, there is a broad discussion on the adequate criteria for recognizing experts worthy of epistemic trust (e.g. Anderson, 2011; Brennan, 2020; Goldman, 2001; Holst and Molander, 2014), which unfortunately cannot be discussed here due to space restrictions. Notably, not all epistemic criteria that scientists themselves use are necessarily available to lay citizens as they lack access to the evidence and relevant skills and knowledge for the use of such criteria. Therefore, especially in the context of education, the criteria introduced to students should be such that they can be easily adopted and used by lay citizens even if they lack the ability to assess the content of the knowledge claims as such. At least the following are good candidates for such criteria:

- *Experts' openness and responsiveness to public criticism* (Holst and Molander, 2014: 30–31);
- *Experts' relevant scientific education and background and the positive recognition the expert has received within a given field* (Anderson, 2011: 146–147);
- *Conformity of the statements of a particular expert with an established body of knowledge within a given field* (Goldman, 2001: 93).

As Solomon (2021: 38) points out, in the case of climate change denialists, the so-called experts may have some scientific background, but they are not usually climate scientists

and thus lack the sufficient grounds to present themselves as epistemic authorities in the field. They usually do not present their claims on venues where these claims could be publicly criticized, and do not respond to criticisms in a meaningful way. Moreover, their opinions frequently contradict with views that are the subject of broad consensus within the scientific community, such as the effect of humans on global warming. The last, consensus-criterion may seem contradictory to the previously described normalization of scientific disagreement. However, this is not necessarily the case. For example, in the case of climate change, while there is an overwhelming consensus on the effect of humans on global warming, climate scientists disagree on various more minor issues concerning, for instance, the extent and nature of that effect (Kabat, 2017: 1054). Hence, using the consensus-criterion for recognizing reliable climate experts does not mean denying the possibility and productivity of smaller-scale disagreements in the field.

However, as already stated, when distrust in scientific experts is associated with individuals holding *identity-protective* beliefs rather than with the nature of scientific research, these beliefs cannot be easily changed by fostering reason-based epistemic trust. Hence, in what follows, I move on to the problem of motivated reasoning and the possibilities to address this issue through education.

### *Teaching integrative negotiation*

As motivated reasoning is associated with beliefs that derive from exclusive, partisan identities, responses to such reasoning in the context of political and cognitive science typically focus on ‘nudging’ behaviour by framing certain issues or choices in ways that makes belief change desirable from the perspective of a particular identity-group (Levy, 2022: xvi). For instance, framing certain opinions or policies as being endorsed by one’s political ingroup or being supported by widely held values within the group are often suggested to foster desirable belief change (e.g. Doell et al., 2021; Levy, 2022).

But are such strategies appropriate in the context of education? No, at least not without problems. This is because, while it may be justified in some cases to ‘nudge’ or engineer political behaviour through appealing to or harnessing existing social identities, in the context of education, similar ‘nudging’ constitutes a form of indoctrination as it deprives students of the possibility of autonomous rational judgement. It is not the purpose of education to directly affect students’ choices or behaviour but to equip them with capabilities and skills that enable them to make conscious, reasoned and autonomous choices themselves.

At the same time, however, democratic education ought to prepare students for the reality of political life in which motivated reasoning plays a significant role, perhaps much greater than rational deliberation. Moreover, students themselves are not immune to motivated reasoning: while it is less likely for children and young people than adults to hold static social identities, motivated reasoning itself is a feature of basic social and psychological mechanisms that begin to develop already in childhood. Schools are places in which it is common for children and young people to begin to form their identities through ingroup/outgroup distinctions and adopt opinions and beliefs based on what their peers say and do. Ignoring these tendencies means risking the practical feasibility and effectiveness of education for deliberative democracy.

In the theory of deliberative democracy, *integrative negotiation* (Warren and Mansbridge et al, 2013; Wright, 2022) has been proposed as a possible strategy to resolve conflicts of interest in a way that departs from, but is compatible with, the model of rational deliberation. At the core of integrative negotiation is the idea that parties with conflicting interests or beliefs can co-operatively work on a win-win solution without demanding either of the parties to give up the needs and interests underlying their conflicting positions (Warren and Mansbridge et al, 2013: 71). Recently, Graham Wright (2022) has discussed integrative negotiation in relation to the issue of motivated reasoning. He argues that the strategy could be employed as an alternative to deliberation in situations where demanding reasoned belief change constitutes a significant identity threat to one or more of the parties involved. To avoid being locked in a zero-sum situation in which one or more of the parties is unwilling to compromise, Wright (2022: 27–28) suggests that the parties should focus on examining and discussing the interests and needs that underlie particular beliefs and then use this information to work out a solution that could potentially satisfy all parties' needs *without* necessarily requiring them to change identity-protective beliefs.

For instance, in the case of climate change scepticism, integrative negotiation could be used to persuade sceptics to agree on the reduction of the use of fossil fuels by offering them a solution that meets some of their core interests. Their agreeing on the solution is thus not conditional on them *changing their beliefs* but, rather, their needs and interests being recognized and responded to in some way. The underlying assumption here is that science scepticism might not actually derive from deep-rooted suspicion of scientific research as such but may be associated with other needs and interests, such as fear of loss of profit or livelihood. In this case, what might be needed for sceptics to agree on fossil fuel reductions is that these underlying needs are addressed and met through, for example, by creating alternative sources of livelihood or giving direct compensations to those whose income directly or indirectly depends on fossil fuel industries. The benefit of such integrative strategy is that it does not induce the type of identity threat that the requirement to change identity-protective beliefs would, and thus enables agreement on epistemically beneficial solutions *despite* these beliefs.

However, integrative negotiation may be problematic when applied to the context of education: as already noted, the primary purpose of education is not to yield epistemically beneficial solutions or to induce belief change as such, but to teach students the skills, knowledge and virtues through which they may themselves arrive at an adequate understanding of a given issue (e.g. Siegel, 2018: 322). In the case of climate change, for instance, this means presenting students with the scientific evidence that supports the current understanding of the phenomenon, and introducing them to the complex processes, methodologies and scientific controversies through which this understanding has been formed, while treating all students with respect regardless of their diverse ethical, political or religious views.

The problem here is, however, that such approach does not yet teach students to recognize or to cope with motivated reasoning in themselves or others, and thus risks leaving students poorly equipped to take part in democratic processes in an epistemically productive way. My suggestion therefore is that while education should refrain from harnessing existing identities in the attempt to induce desirable belief change, integrative

negotiation could nevertheless provide a useful pedagogical approach to address, make explicit and discuss the interests and needs that motivate students to hold or reject certain beliefs. In this sense, rather than viewing integrative negotiation as an alternative to fostering rational deliberation, it could be used as a *complementary* strategy especially in situations when the attempt to foster reasoned belief change falls short.

Consider an example – previously discussed by Kilby (2004) and Siegel (2018) – in which students holding creationist beliefs take part in a science class on evolution theory. During the class, continuous controversies emerge between religious students and others because of their conflicting beliefs on the topic. Employing a more traditional, deliberative strategy – as the one suggested by Kilby – might focus on fostering reasoned debate on the topic among students. However, when viewed from the perspective of motivated reasoning and identity-protective beliefs, the engagement in such debate might result in religious students experiencing the type of identity threat that makes reasoned belief change even less likely for them. Hence, in this case, a more productive strategy might be to find out, through a process of integrative negotiation, what would make participation in the science class more attractive to these students, and thereby seek for an integrative solution that neither alienates them nor compromises the content of the science class. While belief change cannot and should not be forced on anyone, participation in epistemically productive practices (in this case, the science class) may be rendered more acceptable to dissenting students by addressing and making explicit the needs that motivate students to hold certain beliefs despite convincing counterevidence. Sometimes discussing these needs may be enough to reduce the identity threat experienced by students and, consequently, even enable them to take part in educational practices in a way that facilitates rational assessment of beliefs. However, even if this is not the case – as it seldom is when addressing identity-protective beliefs – students may nevertheless exhibit less resistance towards the educational practices in question as they feel that their beliefs and identities are not attacked but, rather, heard and integrated into these practices.

To compare my suggestion with those by Kilby (2004) and Siegel (2018) who have also discussed the example of creationism versus evolution theory in the context of education, I side with Siegel in that the teacher should *not* signal to students, as suggested by Kilby, that the epistemic status of each theory is a matter of controversy and something to be decided through deliberation among students. Educational practices ought to be carried out in a fashion that aligns with what is currently considered to be the best epistemic practices and most warranted beliefs. Hence, as Siegel (2018: 322) points out, even though it is not justified to force religious students to change their beliefs, an adequate understanding of evolution theory and the evidence that supports it ought to be presented to all students regardless of their previously held beliefs. Also, Siegel (2018: 322) rightly highlights the need to treat dissenting students with moral respect, and to acknowledge differences in cultural and religious background with sensitivity and sympathy. However, the strategy of integrative negotiation suggests taking a step further from this: it encourages teachers to develop educational practices that more actively aim to make explicit and satisfy, through a collective process of negotiation, the needs and motivations of dissenting students. One could imagine that meeting religious students' needs might involve recognizing, through concrete educational practices, their beliefs and views even though they conflict with the educational aims and epistemic contents of the class. The



task of integrative negotiation is thus to find out, together with the students in question, how could their needs of recognition be met without, however, making concessions to what is taught as epistemically warranted in the class. For instance, the views of religious students could, perhaps, be addressed, welcomed and included as spiritually and culturally (rather than epistemically) relevant and valuable contributions, and concrete practises could be designed to meet this aim.

Notably, taking part in integrative negotiation is not only beneficial to students exhibiting motivated reasoning; rather, engaging in such negotiation may also teach other students to recognize and reflect on their own reasoning in other situations where they themselves hold identity-protective beliefs. Furthermore, through negotiating between different interests and finding common solutions with others who hold conflicting beliefs, students may learn to recognize and develop strategies to cope with motivated reasoning whenever conflicts in belief prevent mutual co-operation. In the best case, students may learn to facilitate such negotiations themselves by recognizing and discussing their own and others' needs and interests, and through finding ways to reconcile different needs without this compromising the epistemic quality of the practices in which they take part. Hence, while integrative negotiation may not be able to eliminate deep-coded social and psychological tendencies that affect reasoning, it can nevertheless help students to become aware of their own and others' unconscious bias and inform them about the way such bias affects reasoning. Consequently, taking part in integrative negotiation may enable students to recognize and better cope with motivated reasoning in others, and thus help them to develop strategies to work towards epistemically productive solutions in a manner that minimizes the threat to others' identities.

## Conclusion

In this article, my aim has been to suggest some revisions to the deliberative model of democratic education based on the criticism directed at epistemic democracy and especially its deliberative variant. I particularly addressed two issues that challenge the basic assumptions of epistemic democracy: the role of experts in epistemically good-quality decision-making, and motivated reasoning. I then proposed strategies to take these issues into account in democratic education. My first proposal concerned fostering students' epistemic trust in reliable scientific experts by providing them with a realistic understanding of the nature of scientific research as well as offering criteria for recognizing trustworthy experts. Second, I suggested that motivated reasoning could be intervened with by fostering integrative negotiation as an extension of education for deliberative democracy. I suggested that participation in integrative negotiation might enhance students' capability to reflect on their own and others' motivated reasoning and enable the pursuit of epistemically favourable solutions in a way that minimizes the identity threat that would follow from imposing the requirement of belief change on individuals holding identity-protective beliefs.

However, after suggesting these revisions to the deliberative model, it is noteworthy that, especially in the context of education, such concessions do not necessarily come without a price. As Jane Mansbridge et al. (2010: 78) suggest, legitimating identity and self-interest in deliberation may undermine the capacity of the deliberative ideal to

inspire transformations in the direction of the common good. The same holds for epistemically desirable belief change. Correspondingly, in the context of democratic education, discarding the aims of rational deliberation and autonomy and the associated skills and virtues as educational aims would problematically deprive students of the very possibility to *become* agents capable of reasoned belief change. Therefore, a significant risk is associated with taking the empirical evidence of citizens' rational deficiencies to mean that such deficiencies cannot, even in principle, be addressed through education.

In this sense, any concessions made to the deliberative model of education should be such that they support or at least align with the goal of fostering students' rational autonomy. This is important also regarding democracy as a normative project, which ultimately depends on the idea that citizens *are* capable of reasoned assessment of the laws and policies by which they are governed (Brighouse, 1998). At the same time, however, democratic education should also equip students for public discussion and political life that often does not follow the rules of rational deliberation. Therefore, the suggestions outlined in this article should be understood as an attempt to strike a balance between the often not-so-rational nature of democratic politics and the highly idealized model of deliberative democracy in a way that neither surrenders the aims of democratic education to the prevailing reality of democratic politics nor leaves students without any tools to cope with such reality.

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### Notes

1. These skills are closely associated with critical thinking and autonomy addressed by various scholars in philosophy of education (e.g. Siegel, 2010, 2017; Winch, 2006). The central difference between these approaches and education for deliberative democracy is that the latter strongly emphasizes reasoning as a collective rather than individual practice and highlights the relevance of critical thinking and reasoning skills not only to the particular individual but also to democracy and democratic citizenship.
2. This idea is typically referred to as 'Diversity trumps ability theorem' (e.g. Landemore, 2013a: 104). Since larger groups are usually also more cognitively diverse than smaller groups, Landemore (2013a: 104) further generalizes this theorem into a 'Numbers Trump Ability Theorem'.
3. Siegel (2018) has provided an important critique of the 'truth-tracking' qualities of discourse or deliberation: he contests the view held by many Habermasian theorists that reaching an agreement under ideal conditions of rational discourse is a sufficient reason to think that the consensus reached is true or justified. In fact, in his later works, Habermas (1998, 2003) drew

the same conclusion and argued for a distinction between truth and moral rightness of which only the latter is a justification-*immanent* criterion. Unfortunately, I cannot elaborate on this discussion here (for further reading, see Habermas, 1998, 2003). To support the claim that rational deliberation on epistemic issues should nevertheless be taught in schools, it can be argued that while agreement under ideal conditions does not suffice as an epistemic *criterion* regarding truth claims, dialogical justification is nevertheless a crucial part of most forms of rational inquiry, including scientific research. Furthermore, my view is that education into rational deliberation on epistemic issues requires teaching students, broadly speaking, the same virtues, capabilities and skills that critical thinking and reasoning in general. These, according to Siegel (2010, 2017), include the ability to assess the warranting strength of reasons and the cogency of arguments as well as epistemic virtues of open-, fair- and independent-mindedness, intellectual modesty and humility, an inquiring attitude and respect for others in group inquiry and deliberation. However, in this article, my focus is on examining what the adequate pedagogical measures might be when the preconditions of both rational deliberation and critical thinking are compromised.

4. Siegel (2005) has provided a useful analysis of the role of epistemic trust in education through his critique of Alvin Goldman. According to Siegel, Goldman suggests that students – because of their young age and limited reasoning capacities – are sometimes justified in believing the teacher’s testimony even though they lack testimony-independent reasons for doing so. Against this view, Siegel (2005: 361–363) argues that students generally have testimony-independent reasons for trusting their teachers (the teacher as an expert and an epistemic authority, her academic credentials, and the experiences that students acquire of her epistemic reliability through taking part in instruction). Moreover, Siegel argues that the ability for reason assessment begins to develop fairly early on, which is why the type of ‘unquestioned’ trust that Goldman suggests education to depend on is necessary only for a very limited period of time. My suggestions for fostering epistemic trust align with Siegel’s arguments in the sense that I understand trust in relevant epistemic authorities to develop *alongside* with students’ increasing understanding of the nature of different forms of rational inquiry, including scientific research. Through learning how evidence can be rationally assessed and how existing beliefs can be put to test, students become gradually more and more equipped to assess, in a testimony-independent fashion, the trustworthiness of what is being taught to them as facts in the science class.

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