ICCS
IEA

Assessment Framework

Wolfram **Schulz**
Julian **Fraillon**
Bruno **Losito**
Gabriella **Agrusti**
John **Ainley**
Valeria **Damiani**
Tim **Friedman**

Springer

Wolfram **Schulz**
Julian **Fraillon**
Bruno **Losito**
Gabriella **Agrusti**
John **Ainley**
Valeria **Damiani**
Tim **Friedman**

Assessment Framework

Wolfram Schulz
The Australian Council for Educational Research
Camberwell, Victoria
Australia

John Ainley
The Australian Council for Educational Research
Camberwell, Victoria
Australia

Tim Friedman
The Australian Council for Educational Research
Camberwell, Victoria
Australia

Gabriella Agrusti
Lumsa Università
Rome, Italy

Bruno Losito
Università degli studi Roma Tre
Rome, Italy

Julian Fraillon
International Association for the Evaluation of Educational Achievement (IEA)
Amsterdam, The Netherlands

Valeria Damiani
Lumsa Università
Rome, Italy

The International Association for the Evaluation of Educational Achievement (IEA), with headquarters in Amsterdam, is an independent, international cooperative of national research institutions and governmental research agencies. It conducts large-scale comparative studies of educational achievement and other aspects of education, with the aim of gaining in-depth understanding of the effects of policies and practices within and across systems of education.

Foreword

The International Civic and Citizenship Study (ICCS) 2022 continues IEA's investigation into the ways in which young people understand and are prepared to be citizens in a world where contexts of democracy and civic participation continue to change. ICCS 2022 is the third cycle in the study's current form but actually constitutes the fifth IEA study of this learning area. The International Association for the Evaluation of Educational Achievement (IEA) begun its investigation of civic and citizenship education back in 1971 with nine countries participating in IEA's Six Subject Survey. This investigative effort continued with the 1999 IEA Civic Education Study (CIVED), which was implemented in 28 countries. Each of these earlier studies laid the foundation for IEA's current study program of students' civic knowledge, attitudes, and engagement, with important contributions to what ICCS is today—the only international study dedicated to exploring the ways in which students interact with the complexities of the modern global society, focusing on civic culture, social justice, human rights, and influences of the ever-changing political landscape.

The need for sound data on both continuing and newly emerging topics of relevance for civic and citizenship education led to the establishment of ICCS 2009 as a baseline study with results on which findings from future cycles could be compared. The international survey was enriched through additional regional instruments that were developed for Asia, Europe, and Latin America to allow research of civic-related aspects that were of particular interest in these respective regions. Findings from ICCS 2009 and its subsequent second cycle in 2016 gave many interesting insights into the civic knowledge, beliefs, attitudes, and behaviors that students were developing and how these varied within and across countries as well as geographic regions. ICCS results have also provided information on young people's perceptions of democratic institutions and societal values. The output from the first two cycles of ICCS—compiled into international and regional reports, a civic and citizenship education encyclopedia, two technical reports, and two international databases accompanied by their respective user guides—further includes a wealth of data that are available for secondary research into a wide range of topics of relevance to this field.

Building on the previous cycles, in addition to the study of persisting issues already in focus, topics of particular contemporary relevance such as the impact of digital technology on civic engagement, migration and diversity, environmental sustainability, young people's views of their political systems as well as global citizenship, add further value to the wealth of information collected by ICCS 2022. It is also the first time that ICCS includes the option of a computer-based delivery, which will be administered in about two thirds of participating countries. Since the study cycle's inception, the COVID19- global pandemic has further altered the context for civic and citizenship education as well as for the implementation of this particular study, and as a result, ICCS 2022 has faced many challenges. However, IEA is confident that these developments have not compromised the integrity and quality of the current data collection and its participation standards.

Twenty-three countries and two benchmarking entities are participating in ICCS 2022, and this assessment framework provides insight into the study's conceptual background, cognitive, affective-behavioral and contextual content, and assessment design. It also describes content relevant for the measurement of the United Nations' Sustainable Development Goals (SDGs) that is related to Global Citizenship Education (GCED) and Education for Sustainable Development (ESD). Countries that participated in ICCS 2009, ICCS 2016, and ICCS 2022 will be able to monitor changes in their students' civic knowledge, attitudes, and engagement over time. Apart from information on persisting issues relevant for this learning area, all participating countries in ICCS 2022 will additionally obtain data related to more recent developments with implications for civic and citizenship education including student perceptions related to the recent COVID-19 pandemic.

This framework is the compilation of the hard work of many dedicated institutions and individuals. IEA is grateful to the staff at the international study center at the Australian Council for Educational Research (ACER) for their work on constructing and implementing the study. These efforts were further supported by the collaboration with Laboratorio di Pedagogia Sperimentale (LPS) at the Roma Tre University, Rome and LUMSA University of Rome. Namely, I thank the ACER colleagues, Wolfram Schulz, Tim Friedman, John

Dirk Hastedt

IEA Executive Director

Contents

1. OVERVIEW

1.1 Purpose of the study

The purpose of the International Civic and Citizenship Education Study (ICCS) is to investigate the changing ways in which young people are prepared to undertake their roles as citizens across a wide range of countries. In pursuit of this purpose, ICCS gathers data to report on students' conceptual knowledge and understandings of aspects related to civic and citizenship education. It further collects and analyzes data about student attitudes and engagement relevant to the area of civic and citizenship education (Schulz et al., 2008; Schulz et al., 2016). The International Association for the Evaluation of Educational Achievement (IEA) commissioned ICCS in response to widespread interest in continuing research on, and establishing regular international assessments of, civic and citizenship education.

There has been an impressive history of IEA studies of civic and citizenship education (see Schulz, 2021; Torney-Purta & Schwille, 2011). The first IEA study of civic education was conducted as part of the Six-Subject Study[1], with data collected in 1971 (Torney et al., 1975), and the second study, the IEA Civic Education Study (CIVED), was carried out collecting data among 14-year-old students in 1999 followed by an additional survey of upper-secondary students in 2000 (see Torney-Purta et al., 2001; Amadeo et al., 2002). One decade later, IEA conducted ICCS 2009 as a baseline study for future assessments in this learning area (Schulz et al., 2008), which was then followed by its second cycle in 2016 (Schulz et al., 2016). Due to these efforts, IEA studies have provided invaluable datasets that are available for secondary analyses of issues related to civic and citizenship education across a wide range of national contexts (Knowles et al., 2018).

The results of the first implementation of ICCS in 2009 were reported in a series of IEA publications (Schulz et al., 2010; Kerr et al., 2010; Schulz et al., 2011; Fraillon et al., 2012; Ainley et al., 2013) and have also led to numerous reports and publications within countries. The 2016 iteration of ICCS explored both the enduring and the emerging challenges to educating young people in a world where contexts of democracy and civic participation continue to change, and it reported on changes in selected outcomes and contexts between 2009 and 2016 (Losito et al., 2018; Schulz et al., 2018a; Schulz et al., 2018b).

In recent years, there have been many developments with implications for civic and citizenship education. While notions of citizenship and identities defined by nation states continue to be challenged by globalization, migration, and the establishment of supra-regional organizations, there is also a broadening of9 the scope of issues which societies have to respond to. These go beyond national borders and attract worldwide prominence, opening questions about the extent to which young people are prepared to engage not only in their regional or national societies but on a global scale. Types of engagement are also changing with the pervasiveness of information flows through digital technologies and associated opportunities for new ways of participation (Brennan, 2018; Kahne et al., 2014; Theocharis & Van Deth, 2018). In addition, political systems once thought to be stable (such as long-established democracies) show signs of instability and the rise of new political movements that are often formed in response to globalization, growing economic inequalities, and increased migration (European Commission, 2016; Eurostat, 2018; UNESCO [United Nations Educational, Scientific and Cultural Organization], 2018).

---

1   In 1965 IEA inaugurated a cross-national survey of achievement in six subjects: science, reading comprehension, literature, English as a foreign language, French as a foreign language, and civic education.

The third cycle of ICCS, with a data collection in 2022, was developed in consideration of ongoing developments and challenges in civic and citizenship education. Similar to ICCS 2016, it combines the goal of monitoring changes over time regarding students' civic knowledge, attitudes, and engagement with the aim of investigating new or broadened aspects that are relevant for this learning area in the current contexts for participating countries. In particular, ICCS 2022 extends the scope of ICCS 2016 to explore further content and themes associated with global citizenship, sustainable development, migration, changes to traditional political systems, and the use of digital technologies for civic engagement.

For the first time, ICCS 2022 also offers countries the option of assessing students using a computer-based delivery platform as an alternative to the paper-based delivery applied in previous study cycles. Like other IEA studies, ICCS is transitioning from paper-based to computer-based assessment, a form of data collection that is becoming more and more prevalent in national as well as cross-national studies. Computer-based assessment offers opportunities for measuring cognitive skills in ways that are not available for paper-based assessment by providing an interactive environment for civic-related tasks that are undertaken using digital technologies.

1.2 Study background

Civic and citizenship education is implemented to provide young people with knowledge, understanding, and dispositions considered necessary to participate successfully as citizens in society. Young people should understand civic principles and institutions, know how to engage in civil society, be able to exercise critical judgment, and develop an understanding and appreciation of the rights and responsibilities of a citizen. Developing these attributes in young people is key to a functioning democracy, which depends on citizens as actively involved agents regarding decision-making, governance, and change. This can be seen to contrast with authoritarian and non-democratic regimes, where the role of citizens is rather one of passive obedience. Furthermore, in view of the increasing cultural diversity within many modern societies, ICCS also seeks to contribute to the understanding of how this diversity impacts on civic and citizenship education and how young people respond to this in terms of their knowledge, engagement, and attitudes. Civic competences are increasingly also regarded as part of a broader skill set required in workplaces (Gould, 2011; Torney-Purta & Wilkenfeld, 2009). As such, they are not only of interest to political and community leaders, but also of value to and valued by a growing number of employers (OECD [Organisation for Economic Cooperation and Development], 2015).

There is a large body of scholarly work emphasizing the importance of political socialization processes among young people for the formation of attitudes and disposition for engagement (van Deth et al., 2007; Neundorf & Smets, 2017; Myoung & Liou, 2022). Although early work assumed strong and enduring influences on later political orientations, subsequent studies show evidence for the changeability of attitudes during socialization and characterize political orientation as a process of learning (Searing et al., 1976; Niemi & Klinger, 2012; Rekker et al., 2015; Peterson et al., 2020). Scholars have postulated that young people tend not to have already developed enduring beliefs and are therefore open to be influenced by external factors (see, for example, Sears & Levy, 2003). Research has also highlighted the features of youth political participation when compared to political engagement among adults (Weiss, 2020).

Parents and home environments have been emphasized as particularly important agents in the process of early political socialization (Bourdieu, 1996; Jennings et al., 2009; Reay, 1998; Lauglo, 2011), but there is also ample evidence about the influence of peers and media (for example, Wattenberg, 2008; Campos et al., 2017), political events (Dinas, 2013), and school education (Nie & Hillygus, 2001; Torney-Purta, 2002; Lee et al., 2021). School education has the potential of compensating for less enriching backgrounds in developing political socialization and may interact

with other factors that contribute to the development of citizenship orientations (Neundorf et al., 2013, 2016; Hoskins et al., 2017). Even though the later years of adolescence and early adulthood have been regarded as formative and "impressionable" years, there is evidence that late childhood and early adolescence are also of crucial importance for developing citizenship orientations (van Deth et al., 2011; Bartels & Jackman, 2014).

There has been a long tradition in academic work on educational policy and practice to highlight the importance of education for instilling democratic values (Dewey, 1916). In this context it is noteworthy that cross-national data demonstrate that many countries nowadays include civic and citizenship education explicitly in their national curricula (Ainley et al., 2013; Cox, 2010; European Commission/EACEA [The European Education and Culture Executive Agency]/Eurydice 2017). There is evidence from various research studies that the classroom climate plays an important role in shaping civic-related learning outcomes, while the effects of aspects of curricula are less well studied (Geboers et al., 2013).

Traditionally, concepts underlying civic and citizenship education have typically been associated with the notion of nation states. The establishment of supranational organizations (such as the EU [European Union]), increased migration across borders, and pressure from globalization have challenged traditional notions of civic and citizenship education and prompted the development of cross-national concepts such as "global citizenship" (Brodie, 2004; Reid et al., 2010; Schattle, 2012; Veugelers, 2011; Pashby et al., 2020). One interpretation of this development has been linked to a consideration of the implications of increasing diversity, and multiculturalism, for citizenship and identity (Modood & Meer, 2013; Morrell, 2008). However, other research has indicated that the notion of a nation state, sometimes even including nationalistic perspectives, continue to prevail in curricula for civic and citizenship education (Fozdar & Martin, 2020; Kennedy, 2012; Osler, 2011).

Conover (1995) conceptualizes citizenship as consisting of three elements: (1) formal and informal aspects of citizenship as membership of a political community, (2) a "sense of citizenship" which is made up of citizenship identity and an understanding of what is involved in citizenship, and (3) citizenship practices involved in political participation and civic engagement. In ICCS we have adopted a view that is broadly consistent with this long-established definition because it facilitates an extension of the notion of citizenship beyond the level of nation states.

The concept of social cohesion is also important in civic and citizenship education. Social cohesion is a complex notion that broadly refers to the extent and strength of links and connections between individuals, groups, organizations, and communities. Although the concept has been criticized for its lack of clarity (Green & Janmaat, 2011), it is a useful reference point for a comparative study such as ICCS (Reichert et al., 2021; Veerman et al., 2021). In the context of ICCS, we apply a broad definition of social cohesion as "a state of affairs concerning both the vertical and the horizontal interactions among members of society as characterized by a set of attitudes and norms that includes trust, a sense of belonging, and the willingness to participate and help, as well as their behavioral manifestations" (Chan et al., 2006, p. 289f.).

1.3 Recent developments and persisting challenges

Since ICCS 2016, there have been changes regarding the global context for civic and citizenship education, with implications for this learning area. Additionally, certain challenges in the study of civic and citizenship education continue to persist. The following topics and results from ICCS 2016 are important to consider and relevant to a study of civic and citizenship education (Schulz et al., 2018b; Schulz, 2018):

- Monitoring civic learning in relation to changing contexts for civic and citizenship education: ICCS 2016 results indicated increases in civic knowledge since 2009 in about half of the participating countries, even though considerable variation remained within and across countries.

- Reviewing patterns of, and dispositions toward, civic engagement: ICCS 2016 results suggested changes in patterns since 2009 with respect to; the use of media information, increases in discussions about political and social issues, and expected civic participation in some countries; however, students with greater knowledge and understanding of the area in in both ICCS 2009 and 2016 were less inclined to consider future active political participation (using conventional channels) than those with less knowledge and understanding.

- Gathering data on student attitudes towards citizenship and equal rights: Results from ICCS 2016 indicated strong support for equal rights as seen in the previous cycle, as well as some increases in tolerance; however, interpretations of positive and negative situations for democracy were not always consistent across countries.

- Providing a more comprehensive coverage of information about the school as a place for learning: ICCS 2016 results provided further insights into the role of schools as a place for the learning of civic and citizenship issues and for experiencing a democratic environment where students can practice their rights and responsibilities as young citizens; however, the results also indicated that more information is needed regarding the responsiveness of schools to student needs, their support of students' sense of belonging to the school community, and their provision of support for engagement with cognitive aspects of civic learning.

For ICCS 2022, the following global developments that have become particularly relevant over recent years are considered:

- Increased globalization and migration, as well as the changing causes for migration (in particular growing numbers of refugees escaping war zones or political oppression) that challenge notions of citizenship tied to nation states. There is a need to consider these global developments in the context of the contents and goals of civic and citizenship education, including recent movements that reject globalization and demand a return to nationally defined priorities (Bauman, 2016; Reimers, 2013; UNESCO, 2015).

- Growing awareness of the implications of increasing diversity for civic and citizenship education, with an emphasis on how schools consider and acknowledge diversity in societies regarding characteristics such as ethnicity, religion, gender, sexual orientation, or disability (Banks, 2001; Osler, 2012; Sincer et al., 2019). Increasing awareness of environmental issues and concerns about the consequences of climate change for the future of this planet, which has led to the phenomenon of international youth movements, such as Fridays for Future (De Moor et al., 2020; Marquardt, 2020), and there has also been a formal recognition of the global significance of Education for Sustainable Development as well as Global Citizenship Education through their inclusion in the United Nations 2030 Agenda for Sustainable Development, specifically in form of the Sustainable Development Goal Target 4.7 (SDG: 4.7) (Council of the European Union, 2021; United Nations, 2015, p. 17; UNESCO, 2020, 2021).

- The growing importance of information exchange and engagement through digital media that have had important implications for how citizens inform and express themselves about current events and how they interact using alternative channels of engagement (Anduiza et al., 2012; Bachen et al., 2008). Furthermore, there are questions connected to this issue regarding the risks associated with this development such as the treatment of private information, increases in threatening and aggressive communication ("hate speech"), and concerns that young people lack the ability to distinguish reliable from misleading information (Howard & Hussain, 2011; McGrew et al., 2017; Kaufman, 2021).

- Political developments in many countries that have led to a weakening of traditional political systems and even threatened the stability of long-standing democracies. These developments may be related to alienation of groups in society, often related to economic inequalities, and raise questions about the future engagement of young people (Boogards, 2017; Hobolt et al., 2016; Inglehart & Norris, 2016).

- In early 2020, civil societies across the globe were challenged by the outbreak of the COVID-19 pandemic that led to restrictions on freedom of movement and democratic participation. The advent of national emergencies has raised questions about aspects of democratic processes including the acceptance of restrictions on individual freedom and the appropriateness of delegating more power to an executive during times of crises (Marzocchi, 2020; Landman & Di Gennaro Splendore, 2020) as well as about the capacity of democracies to handle such situations (Frey et al., 2020).

1.4 Broadening the scope of ICCS content

To consider recent developments and persisting challenges within the global context, we identified content focus areas for the third cycle of ICCS. It is important to acknowledge that certain new or refined aspects measured in ICCS 2022 may have relevance for more than one of the focus areas (for example, perceptions of diversity) and that relevant content for each of these areas was already included in earlier ICCS surveys.

The focus areas are:

- Sustainability

- Engagement through digital technologies

- Diversity

- Young people's views of the political system

One further area was also identified as deserving more explicit recognition given that it is an overarching area related to aspects already present in ICCS or to the focus areas listed above:

- Global citizenship

In the following section, we provide brief descriptions of each of these five focus areas for ICCS 2022.

1.4.1 Sustainability

Education for sustainable development (ESD), frequently treated in conjunction with Global Citizenship Education (GCED, has become an important area of interest in view of many pre-existing and newly emerging demographic, environmental, economic, and social challenges (see, for example, Bromley et al., 2016; Bourn et al., 2017; Wals & Benavot, 2017). While some scholars have noted that there is a lack of conceptual agreement across research and practice of ESD (see, for example, Kopnina & Meijers, 2012), there is evidence of increasing efforts to incorporate content related to this area in national curricula (Benavot, 2014). At the international level, there have been initiatives to promote ESD through the formulation of learning objectives (UNESCO, 2017, 2020, 2021) and to assess the extent of ESD-related topics across national curricula (UNESCO International Bureau for Education, 2016). Cross-national research has highlighted the complexities of implementing ESD content in secondary education (Taylor et al., 2019) and it has shown embedding this learning area in initial teacher education as an emerging area of activity that continues to lack systematic approaches with solid conceptual underpinning (Evens et al., 2017).

In particular, the potential impact of climate change has increasingly raised serious concerns about the sustainability of human development. This issue has been identified as a public concern in opinion surveys across the globe, even though there have also been differences in perception across countries (Pew Research Center, 2019). Consequently, there have been calls to strengthen ESD in national school curricula to provide young people with better knowledge about, and better understanding of, the causes and consequences of climate change (Mochizuki & Bryan, 2015).

The ICCS 2016 assessment framework (Schulz et al., 2016) included environmental sustainability in civic and citizenship education as one of three areas identified for inclusion to broaden the scope of the second ICCS cycle (together with social interaction at school and use of new social media for civic engagement). This helped establish ICCS as a data source for ESD (and GCED) indicators (Sandoval-Hernández et al., 2019). For ICCS 2022, we incorporate the broader notion of sustainability that includes content associated with environmental, social, and economic sustainability, with the aim of increasing the emphasis on ESD and the amount of ESD-related content compared to previous cycles of ICCS.

1.4.2 Civic engagement through digital technologies

Over the last two decades, young people have increasingly interacted via digital communication and social media. Digital technologies provide new possibilities for mobilization, organization, and interaction of wider audiences (Brennan, 2018), and in particular of young people, including the formation of digital communities introducing types of behaviors that are unique to the online environment (Cho, 2020). The use of social media and the internet is widely regarded as having profound effects on civic engagement among youth, and research suggests that new social media can be effective in enhancing civic participation while also having potential negative consequences for society (Kahne & Bowyer, 2019; Kahne et al., 2012; Middaugh et al., 2016; Rainie et al., 2012).

In these new media, content is often created interactively rather than through one-way communication as evident in traditional media, and these developments may have implications for civic and citizenship education (Kahne et al., 2016). There have also been calls to arrange better support to facilitate the use of such technologies among communities (Wenger et al., 2009). In response to these developments, a concept of "digital citizenship" has emerged, which refers to membership in a community defined by their use of information and communication technology (ICT) to engage in society, politics, and government (see, for example, Frau-Meigs et al., 2017; eTwinning, 2016; Mossberger et al., 2008; Christensen et al., 2021).

Engagement through digital technologies can be regarded as a relatively new form of civic participation that facilitates obtaining information and engaging with others. However, it is important to recognize that the collective use of digital tools may also have severe impacts on safe, effective, and responsible participation (Choi, 2006). Negative consequences of increasing civic engagement with digital technologies include its exploitation by extremist groups (e.g., by making it easier to disseminate "hate speech") (Tynes et al., 2015) or the potential impact of inaccurate online information (see, for example, Heflin, 2015). Furthermore, the possibility of limiting people's information intake to web-based communication from like-minded sources may also contribute to the polarization of opinions (Spohr, 2017).

ICCS 2016 identified the use of social media for civic engagement as one of the areas in which to broaden the scope of the study, and its student questionnaire included a (limited) set of new items focused on the use of these media for civic engagement. While results from ICCS 2016 (Schulz et al., 2018b) showed that the use of social media for civic engagement remained limited (albeit with substantial variation across participating countries), it is likely that the use of social media for civic engagement may increase further over time given this form of media's general pervasiveness. A recent example of the crucial role of social media in promoting youth activism at a global level is the *School Strike 4 Climate* movement, where the Twitter platform was used extensively as a forum for mobilization (Boulianne et al., 2020). ICCS 2022 continues to monitor young people's civic engagement through digital technologies, including their participation via social media.

1.4.3 Diversity

The increasing diversity of student populations is a global educational trend and affects schools and other educational institutions by posing obstacles (see examples regarding the effects on civic and citizenship education in some countries in Malak-Minkiewicz & Torney-Purta, 2021), but also providing opportunities for building multicultural and inclusive schools (Banks & McGee Banks, 2009; Griffith et al., 2016; Banks, 2020). In today's globalized world, recent economic, demographic, and technological changes have made international migration more wide-spread so that it affects nearly all countries (Sandoval-Herandez et al., 2018; OECD, 2012; United Nations, Department of Economic and Social Affairs, Population Division, 2017). Working with cultural diversity is frequently seen as an opportunity as well as a challenge (Hattam, 2018), and civic and citizenship education provides a potential tool for the integration of diverse groups into society (Banks, 2017, 2021). Some researchers have argued for viewing diversity as a resource for enriching school education through the promotion of knowledge and respect for other cultures (Council of Europe, 2018; Schachner, 2014, 2019; Schachner et al., 2016).

It is important to emphasize that the concept of diversity embraces a wide range of socially ascribed or perceived differences, such as by sex, age, ethnic/social origin, language, religion, nationality, economic condition, or special learning needs (Daniels & Garner, 1999). These differences could represent a reason for, exclusion from or limitation to, educational opportunities and lead to social exclusion in adulthood. According to the United Nations (2016) "social exclusion is a multidimensional phenomenon not limited to material deprivation; poverty is an important dimension of exclusion, albeit only one dimension. Accordingly, social inclusion processes involve more than improving access to economic resources" (p.17). The philosophy and practice of inclusion has recently received growing attention in terms of equal opportunities for education in many countries, however, there are also still wide-spread debates about how to define inclusive schools.

The ICCS 2016 assessment framework already addressed issues related to migration and its effects on debates about civic and citizenship education. Students' attitudes concerning migration issues were included in three of the four content domains related to the affective-behavioral domain attitudes, in particular regarding students' attitudes toward civic society and systems, civic

principles, and civic identities (Schulz et al., 2016). However, in view of recent developments, ICCS 2022 assesses a broader range of aspects including how schools and civic and citizenship education accommodate increasing diversity.

1.4.4 Young people's views of the political system in their country

Over the past decade there have been growing concerns regarding a worldwide "democratic recession" (Diamond, 2015, 2021). These have arisen in response to an observable increase across many countries in authoritarian government practices as well as new political movements that have undermined support for traditional political parties, and, in some cases have challenged the stability of democratic systems (Boogards, 2017; Mair, 2002). For civic and citizenship education these recent developments raise the question to what extent tendencies toward alienation and an understanding of and preference for populist solutions to government are shared by young people (Gidron & Hall, 2019; Henn & Weinstein, 2006), and whether education has the potential of promoting democratic principles to counteract prospects of growing alienation among young citizens (Estellés & Catellví, 2020; Sant, 2019). Furthermore, as a response to the outbreak of the COVID-19 pandemic, there have also been new recent challenges to democratic government in the form of restrictions of individual freedom and citizen participation (Marzocchi, 2020).

Young people's views of the political system were addressed in ICCS 2009 and 2016, both in the international and regional student questionnaires. While results from these two surveys showed considerable support for democratic government and equal opportunities across countries, this was less consistent for issues related to media diversity, individual freedom within the context of national security considerations, or (in some countries) regarding nepotism in politics, corruption, and authoritarian government. New aspects for measurement in ICCS 2022 are related to attitudes toward government and the political system as well as perceptions of potential threats to democracy. Furthermore, the study also addresses beliefs about the extent to which democratic governments should be able to impose restrictions on individual freedom during national emergencies, such as the outbreak of the COVID-19 pandemic.

1.4.5 Global citizenship

Global Citizenship Education has received considerable attention in debates about the needs for identifying global education targets in view of an increasing cross-national interconnectedness and the globalization of political, social, economic, and environmental issues (Veugelers, 2011). However, definitions of this area have often been inconsistent (Oxley & Morris, 2013; Pashby et al., 2020). UNESCO describes global citizenship as, "a sense of belonging to a broader community and common humanity. It emphasizes political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global" (UNESCO, 2015, p. 14).

Many aspects of the conceptual content associated with GCED have been included in IEA studies relating to civic and citizenship education for over 40 years (see Torney et al., 1975; Torney-Purta et al., 2001; Schulz et al., 2008, 2016). However, these aspects were included in previous IEA studies because they were regarded as within the existing scope of civic and citizenship education programs across countries, rather than emerging from a new area with its own theoretical or educational focus. As such, content and concepts associated with this area in earlier IEA studies of civic and citizenship education were not explicitly linked to GCED perspectives and were not grouped or explicitly described as belonging primarily to either area. For ICCS 2022, GCED-related content is more explicitly recognized within this assessment framework with a view to increasing the emphasis given to this overarching area, and this study continues to be the only international study dedicated to providing empirical data on youth attitudes toward and engagement with global issues.

1.5 Computer-based delivery

Many international comparative studies, as well as national large-scale assessments, have moved to or are currently transitioning to computer-based forms of assessment (Beller, 2013; Sibberns, 2020). For the first time in the context of ICCS, this cycle offers the option of a computer-based delivery of the study's student survey, and about two thirds of participating countries chose this new delivery mode. In this context, it is important to note that online delivery of teacher and school questionnaires has already been available across all cycles of ICCS since its inception in 2009. The number of countries and respondents within countries making use of online delivery of the teacher and school questionnaires has increased across the ICCS cycles, and online delivery is expected to also become the standard mode of data collection for these contextual instruments in future ICCS cycles.

One important argument for moving to computer-based delivery is that information about political and social issues is increasingly presented through electronic media, and that there is a growing potential for civic engagement via social media and other web-based tools. Here, computer-based delivery offers an opportunity to provide digital assessment content that reflects how a growing proportion of students experience content related to civic and citizenship issues. While most parts of the students' cognitive assessment are delivered using the same format across both computer and paper modes, computer-based assessment also includes modules that measure students' knowledge through the provision of computer-enhanced item material. These computer-enhanced modules place students in simulated participatory real-world scenarios using the online context. As part of each scenario, students complete dynamic interactive tasks that include some form of feedback to their responses. The interactivity of the tasks, the opportunity for dynamic feedback and the narratives that place the students as participants in civic action within a digital environment are what differentiate the computer enhanced modules from items that are completed both on paper and computer.

Like other international studies, ICCS 2022 faces the challenge of ensuring comparability of results from computer-based and paper-based administration of its instruments. This is important both in terms of comparing country results across the two modes present in the study, as well as with results from the previous (paper-based) assessment. While experience has shown that there is a potential for mode effects, results also show that there is considerable consistency regarding the measurement of constructs (see, for example, Fishbein et al., 2018).

1.6 Research questions

The key research questions for ICCS 2022 concern students' civic knowledge, their dispositions to engage, and their attitudes related to civic and citizenship issues as well as contexts in this learning area. Each of the following general research questions (RQs) relate to a subset of specific research questions that will be addressed in ICCS 2022.

> RQ1   *How is civic and citizenship education implemented in participating countries?* This research question is concerned with the national contexts for civic and citizenship education and includes the following specific research questions:
>
> a) *What are the aims and principles of civic and citizenship education in each participating country?* Analyses will focus on information from the national contexts survey and published sources about the background and intentions behind civic and citizenship curricula in participating countries.

b) *Which curricular approaches do participating countries choose to provide in civic and citizenship education?* Analyses will focus on different types of civic and citizenship education implemented in participating countries and will be based on national contexts survey data, published sources, teacher survey and school survey data.

c) *What changes and/or developments in this learning area can be observed since the 2009 and 2016 cycles?* Analyses will only include data from countries participating in the corresponding ICCS surveys from 2016 or 2009 and focus on reforms and changes in the national contexts for civic and citizenship education.

d) *How do education systems, schools, and educators perceive the role of civic and citizenship education across participating countries?* Analyses will address how teachers and school principals perceive, and how national curricula and policies state, the role that schools and teachers should play in preparing young people for citizenship.

RQ2 *What is the extent and variation of students' civic knowledge within and across participating countries?* Analyses to address this research question primarily focus on student test data and encompass the following specific research questions:

a) *Are variations in civic knowledge associated with student characteristics and background variables?* Analyses will investigate the influence of student gender, socioeconomic indicators, and other background variables on civic knowledge.

b) *What contextual factors explain variation in students' civic knowledge?* Analyses will study the relationship between contextual variables at different levels with variation in students' civic knowledge.

c) *What changes in civic knowledge have occurred since the previous survey cycles?* Analyses will be limited to those countries participating in the corresponding ICCS surveys and require comparable measures of civic knowledge over time.

RQ3 *What is the extent of students' engagement in different spheres of society and which factors within or across countries are related to it?* This research question is related to indicators of student engagement and encompasses the following specific research questions:

a) *What beliefs do students hold regarding their own capacity to engage and the value of civic participation?* Analyses will focus on student perceptions of civic engagement.

b) *What is the extent and variation of students' civic participation in and out of school?* Analyses will focus on student reports on their past and current involvement in civic-related activities, as well as their communication about civic-related issues (including engagement with new electronic media).

c) *Which expectations do students have regarding civic and political participation in the future?* Analyses will address students' behavioral intentions regarding different forms of civic or political participation.

d) *What changes in the extent and forms of student engagement can be observed since the previous ICCS cycles?* Analyses will include data from those countries participating in the corresponding ICCS surveys and engagement indicators included in both studies.

RQ4   *What beliefs do students in participating countries hold regarding important civic issues in modern society and what are the factors influencing their variation?* This research question is related to different student affective measures and encompasses the following specific research questions:

a) *What are students' beliefs regarding the importance of different principles underlying a democratic society?* Analyses will focus on students' value beliefs regarding democracy and citizenship, as well as issues related to concerns about global citizenship and sustainable development on a world-wide scale.

b) *What attitudes do students hold toward civic institutions and society?* Analyses will address the way students perceive society in general, its rules and institutions.

c) *What are students' perceptions of social cohesion and diversity in the societies they live in?* Analyses will be related to students' acceptance of equal rights and opportunities for all social groups, acceptance of diversity, and peaceful coexistence.

d) *What changes in student beliefs can be observed since previous ICCS cycles?* Analyses will include only data from those countries participating in the corresponding ICCS surveys and affective measures included in both studies.

RQ5   *How is schooling in participating countries organized with regard to civic and citizenship education and what is its association with students' learning outcomes?* This research question is related to the ways schools (within their community context) provide spaces for civic and citizenship education, and encompasses the following specific research questions:

a) *To what extent do schools in participating countries have participatory processes in place that facilitate civic engagement?* Analyses will be based on student, teacher, and school survey indicators regarding the school climate for participation at school and civic engagement.

b) *To what extent do schools and communities interact to foster students' civic engagement and learning?* Analyses will include student, teacher, and school survey data related to the schools' interactions with the wider community (from local communities to interaction via web-based media) as well as opportunities for students' active civic involvement.

c) *To what extent do schools offer programs or activities related to civic learning and experiences (including activities related to global awareness, environmental sustainability, peaceful coexistence, engagement at local, national and global levels, and responsible use of social media)?* Analyses will include student, teacher, and school survey data.

1.7 General study design

Consistent with previous ICCS cycles (Zuehlke, 2011; Weber, 2018), the student population to be surveyed consists of students in their eighth year of schooling (including students who are approximately 14 years of age). Typically, ICCS 2022 assesses Grade 8 students, provided that the average age of students at this year level is 13.5 years or above. In countries where the average age of students in Grade 8 is less than 13.5 years, Grade 9 is defined as the target population. In each sampled school, intact classrooms are selected, and all students in a class are assessed for the ICCS 2022 survey. Assessing this grade is in line with practice in other IEA studies that survey lower-secondary students across different learning areas.

The definition of the target population of teachers is also the same as in the previous ICCS cycles. ICCS 2022 surveys all teachers teaching regular school subjects to students in the target grade at each sampled school but is limited to those teachers teaching the target grade during the testing period and employed at the school since the beginning of the school year. At each participating school, 15 teachers are randomly selected, and, in schools with fewer than 20 teachers, all of them are surveyed. As in previous implementations of ICCS, there is also an international option to ask teachers of civic-related subjects at the target grade additional questions on civic teaching and learning.

An important unique feature of ICCS is the administration of additional regional instruments. ICCS 2009 included regional instruments for countries in Asia, Europe, and Latin America (Agrusti et al., 2018; Fraillon et al., 2012; Kerr et al., 2010, 2011; Schulz et al., 2011), while ICCS 2016 administered student questionnaires for European and Latin American participants (Agrusti et al., 2018; Losito et al., 2018; Schulz et al., 2018a). ICCS 2022 once again includes regional instruments for countries in Europe and Latin America that are developed to assess region-specific aspects of civic and citizenship education. The content of the regional instruments focuses on topics that are not covered in the international survey material and of particular relevance in the countries of the particular geographic region.

The following instruments are administered as part of the ICCS 2022 survey:

- An *international student test* consisting of items measuring students' civic knowledge and ability to analyze and reason. The instrument is either administered on paper or using the computer-based delivery platform.

- An *international student questionnaire* consisting of items measuring student background variables and student perceptions. The instrument is either administered on paper or using the computer-based delivery platform.

- *Regional student instruments* consisting of questionnaire-type items. These instruments are only administered in countries participating in the European and Latin American modules. The instruments are either administered on paper or using the computer-based delivery platform.

- A *teacher questionnaire*, administered to selected teachers teaching any subject in the target grade. It gathers information about teacher background variables and teachers' perceptions of factors related to the context of civic and citizenship education in their respective schools. As in previous ICCS cycles, participating national centers have the option of offering an online administration of this questionnaire.

- A *school questionnaire*, administered to school principals of selected schools to capture school characteristics and school-level variables related to civic

and citizenship participation. As with the teacher questionnaire, the school questionnaire may be completed online by respondents in countries participating in the option of an online delivery.

- The *national contexts survey*, completed online by national center experts, is designed to gather data about the structure of the education systems, the status of civic and citizenship education in the national curricula, and recent developments in the area. The data obtained from this survey will supplement published information sources about countries and their education systems to assist with the interpretation of the results from the student, school, and teacher instruments, and in describing national contexts for civic and citizenship education.

1.8 Characteristics and structure of the ICCS 2022 assessment framework

The assessment framework provides a conceptual underpinning for the international instrumentation for ICCS 2022. It needs to identify and define those aspects of cognitive and affective-behavioral content that should be considered important learning outcomes of civic and citizenship education, as well as contextual factors that are setting the context for students' civic learning. It should be noted that within the context of this framework, the term "learning outcomes" is used in a broad way and that it is not intended to confine civic and citizenship education to school learning or any specific theoretical perspective. The way students develop civic knowledge and understanding, as well as affective-behavioral dispositions towards civic and citizenship issues, potentially depends on many factors, including those beyond the learning environment at schools (see Amnå et al., 2009; Neundorf et al., 2016; Pancer, 2015; Pancer & Pratt, 1999; Wray-Lake, 2019).

The development of young people's knowledge and understanding of content and concepts related to civic and citizenship issues is one of the primary aims of this particular learning area. The importance of such knowledge and understanding lies also in the fact that it crucially underpins the ability of citizens to engage productively in society. Cross-national measurement of civic knowledge and understanding has been key to IEA studies relating to civic and citizenship education. The resulting data have provided important insights into the role of cognitive knowledge. The ICCS 2022 civic knowledge framework (Chapter 2) describes aspects of students' civic knowledge in terms of their content and the cognitive processes associated with it that are measured with ICCS 2022 student test items.

Civic and citizenship education provides opportunities for active participation, promotes the development of attitudes towards important aspects of civic life, and develops dispositions in young people to make positive contributions to their societies. Results from IEA studies investigating this learning area have contributed to the recognition that, as students acquire knowledge and understanding of aspects of civic and citizenship issues, it is also of crucial importance to investigate their attitudes to, and dispositions to participate in, civic life. Conversely, it should also be emphasized that as young people develop interests and inclinations toward engagement in civic life, they also learn and understand more about key aspects of civic and citizenship issues. The ICCS 2022 civic attitudes and engagement framework (Chapter 3) describes affective-behavioral constructs that are measured with student questionnaire items included in international and regional instruments.

ICCS has drawn on the conceptual model used in CIVED 1999 in its investigation of how young people are prepared for their roles as citizens through its emphasis on how individual students are influenced by different "agents of socialization" (Torney-Purta et al., 2001, p. 21). While ICCS

as a study of civic and citizenship education places an emphasis on the role of schools, it assumes that learning of civic and citizenship content as well as the development of civic-related attitudes and dispositions toward engagement are a product of processes that take place in different environments and are not confined to school learning. Young people acquire knowledge, attitudes, and behavioral dispositions through interactions with a wide range of potentially significant actors and the various communities with which they are and/or feel associated. The ICCS 2022 contextual framework in Chapter 4 describes the variables that set civic-related cognitive and affective-behavioral learning outcomes into context, and that are measured by student, teacher and school questionnaires as well as the national contexts survey.

Compared to the conceptual frameworks for ICCS 2009 and 2016, a major change implemented in the ICCS 2022 assessment framework is that the previous civic and citizenship framework (describing both cognitive and affective-behavioral content) is now presented in two separate frameworks, the civic knowledge framework and the civic attitudes and engagement framework. This was implemented to simplify the structure of the assessment framework and make it more internally consistent. It is important to note that these changes to the structure do not affect the comparability of content and scope of ICCS 2022 with previous cycles. The civic attitudes and engagement framework further includes a sub-structure that covers similar elements as the content domains in the civic knowledge framework, so that the new framework structure continues to allow investigating the connections of civic knowledge with attitudes and engagement.

The new structure maintains a high degree of consistency across cycles, reflects contemporary research findings on civic and citizenship education among students at secondary school, is designed to address the needs and interests of participating countries, limits the framework's scope to aspects that can be appropriately measured, encompasses relevant features that describe the breadth of contexts and outcomes of civic and citizenship education, and considers a wide range of diverse contexts for this learning area across participating countries.

The ICCS 2022 assessment framework consists of four parts that follow this introduction: the civic knowledge framework (describing aspects to be addressed when measuring students' civic knowledge and understanding), the civic attitudes and engagement framework (describing the affective-behavioral constructs to be measured), the contextual framework (outlining the relevant context factors measured through student, teacher, school, and national contexts questionnaires necessary to understand cognitive and affective-behavioral learning outcomes), and in Chapter 5 the assessment design (describing the coverage of framework domains, the different item types, the assessment design, features of computer-enhanced measurement used in the international option of a computer-based delivery, and the expected cognitive, affective-behavioral and contextual indices). The framework also includes appendices with information about staff and institutions involved in ICCS 2022, key terms related to the civic knowledge framework, information on the described levels of civic knowledge, and examples of ICCS 2022 test items.

2. CIVIC KNOWLEDGE FRAMEWORK

2.1 Framework scope and structure

The ICCS test of civic knowledge and understanding is a central component of this study. To respond to test questions assessing students' knowledge and understanding of civic-related issues, students need to apply distinct cognitive processes to civic and citizenship content. In the context of ICCS, civic knowledge has evolved as the term used to refer to demonstrable student achievement based on the application of the cognitive processes to content as measured by the ICCS test. In ICCS, the term civic knowledge encompasses student achievement that extends beyond their capacity to recall information and includes students' ability to reason with and apply their knowledge.

The content that underpins the measurement of student civic knowledge in ICCS 2022, as in previous cycles, is organized according to four distinct content domains. To further support a complete representation of the cognitive aspects that underpin expressions of students' civic knowledge, the ICCS 2022 assessment framework distinguishes between two cognitive domains that outline the types of cognitive processes applied by students' when they respond to test items.

2.2 Content domains

Content domains describe areas related to civic and citizenship education about which individuals may have developed knowledge and understanding. Each content domain is divided into subdomains, and each subdomain is related to a number of aspects that may overlap.

The ICCS civic knowledge framework frequently uses a set of key terms that are either related across all content domains, or specifically related to particular content domains. While recognizing that many of them are the subject of ongoing dispute (see, for example, Koyama, 2017; Haste, 2010), the definitions of key terms (both general and domain-specific) have been developed to support consistent understandings of the framework's contents across the broad range of countries participating and interested in ICCS (see Appendix B for a list of relevant key terms).

The four content domains are:

      I.   Civic institutions and systems

      II. Civic principles

      III. Civic participation

      IV. Civic roles and identities

The first content domain, *civic institutions and systems*, relates to the mechanisms, systems, and organizations that underpin societies. The second domain, *civic principles*, is concerned with shared ethical foundations of civic societies. *Civic participation* refers to the nature of the processes and practices defining and mediating the participation of citizens in their civic communities. ICCS recognizes the centrality of the individual citizen through the fourth content domain *civic roles and identities*. This domain refers to formal or informal civic roles, citizens and the individuals' personal perception of being agents of civic action with connections to multiple communities. Together, these four domains describe the civic and citizenship content that will be assessed with the ICCS 2022 civic knowledge test.

It is important to emphasize that the content domains in ICCS do not presuppose an analytic structure. Across previous cycles of ICCS, civic knowledge has been reported as a single dimension (Schulz et al., 2010, 2018). The presentation of content across four domains is primarily intended to organize the content thematically in a way that is coherent with civic and citizenship curriculums, reinforce the content validity of the instruments, and make the framework content accessible to readers. With that in mind, the thematic differences across the four content domains may provide an analytic framework for further secondary analyses of students' civic knowledge and will also be reviewed with ICCS 2022 main survey data.

The four content domains were originally defined in the ICCS 2009 assessment framework (Schulz et al., 2008) and retained with minor modifications in ICCS 2016 (Schulz et al., 2016). All content domains were retained in substance but with some modifications for ICCS 2022. While in the first two cycles aspects of individuals' roles as citizens were described as part of the first content domain (previously called, *civic society and systems*), they are now incorporated into the fourth content domain (now called *civic roles and identities*). The content domain *civic institutions and systems* now includes *economic systems* as an additional subdomain. In the content domain *civic principles*, the subdomain *sense of community* was substituted with the content domain *solidarity*, while *sustainability* was added as another subdomain. In comparison with the ICCS 2009 and ICCS 2016 frameworks, this framework also includes more explicit references to content associated with global citizenship education and education for sustainable development. It is important to note that while structural changes were introduced in ICCS 2022, all civic knowledge aspects present in the previous assessment frameworks continue to be included.

2.2.1 Civic institutions and systems

The content domain, *civic institutions and systems*, focuses on the formal and informal mechanisms and organizations that underpin the functioning of the societies. The three subdomains of civic institutions and systems are:

> I.   State institutions
>
> II. Economic systems
>
> III. Civil society

State institutions

The subdomain, *state institutions*, focuses on those institutions central to the processes and enacting of civic governance and legislation in the common interest of the people they represent and serve.

Aspects related to this subdomain include:

- Legislatures/parliaments

- Governments

- Supranational/intergovernmental governance bodies

- Judiciaries

- Law enforcement bodies

- National defense forces

- Public service providers

- Electoral commissions

Economic systems

The subdomain, *economic systems*, focuses on institutions, players, structures, mechanisms, and relationships that are relevant to the economy.

Aspects related to this subdomain include:

- Economic structures, mechanisms, and conditions

- Economic interest groups (e.g., chambers of commerce)

- Companies/corporations

- Financial institutions (national and supranational)

- Tariffs and trade relations between countries

- Taxation

Civil society

The subdomain, *civil society*, focuses on those institutions that can mediate citizens' contact with their state institutions and allow citizens to actively pursue many of their roles in their societies.

Aspects related to this subdomain include:

- Trade unions

- Political parties

- Non-governmental organizations (NGOs)

- Advocacy groups (for example, pressure, lobby, campaign, special interest groups)

- Traditional media (for example, newspaper, television, and radio)

- New media (for example, web forums, blogs, Twitter, Instagram, Facebook, and podcasts)

- Religious institutions

- Schools

- Cultural organizations

2.2.2 Civic principles

The content domain, *civic principles*, focuses on the shared ethical foundations of civic societies. The framework regards support, protection, and promotion of these principles as civic responsibilities and as frequently occurring motivations for civic participation by individuals and groups. The domain consists of five subdomains:

I.   Equity

II. Freedom

III. Rule of law

IV. Sustainability

V.   Solidarity

Equity

The subdomain, *equity*, focuses on the principle that all people have the right to fair and just treatment, and that protecting and promoting equity is essential to achieving peace, harmony, and productivity within and among communities. The principle of equity is derived from the notion of equality—that "all people are born equal in terms of dignity and rights" (United Nations, 1948).

Aspects related to this subdomain include:

- Equal opportunities

- Equal rights

- Inequalities across and within societies

Freedom

The subdomain, *freedom*, focuses on the concept that all people should have fundamental freedoms, as articulated in the United Nations Universal Declaration of Human Rights (United Nations, 1948). Societies have a responsibility to actively protect the freedom of their members and to support the protection of freedom in all communities, including those that are not their own. However, there are situations where certain freedoms might have to be restricted when they conflict with others (e.g., to prevent hate speech aimed at the incitement of hatred toward others) or when this is necessary to preserve the safety of society as a whole (e.g., in national emergencies such as the COVID-19 pandemic).

Aspects related to this subdomain include:

- Freedom of opinion and expression

- Freedom of movement and residence

- Freedom of thought, conscience, and religion

- Freedom of peaceful assembly and association

- Freedom from fear

- Freedom from want

Rule of Law

The subdomain, *rule of law*, is related to the principle of governance that all persons, institutions, and entities (public or private and including the State itself) are subject and accountable to laws, which are publicly promulgated, independently adjudicated, equally enforced, and consistent with international standards and norms protecting human rights. It furthermore requires the establishment of "measures to ensure adherence to the principles of supremacy of the law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision-making, legal certainty, avoidance of arbitrariness, and procedural and legal transparency" (United Nations 1948, 2004).

Aspects related to this subdomain include:

- Recognition of the supremacy of law

- Equality before the law regardless of their background and personal characteristics (such as gender, race, religion, authority, or social status)

- Fairness in the application of law

- Separation of powers

- Mechanisms and institutions for challenging existing laws

- Participation in decision-making

- Legal certainty

- Legal and procedural transparency

Sustainability

The subdomain, *sustainability*, is related to the principle that human development meets the needs of the present without compromising the ability of future generations to meet their own needs (see Schulz et al., 2016; United Nations, 1987). The principle of sustainability requires both collective and individual activities to make human development more sustainable.

Aspects of sustainability include:

- *Environmental sustainability* as a "state in which the demands placed on the natural world can be met without negatively impacting on the natural world or reducing its capacity to support human life" (Schulz et al., 2016, p. 18).

- *Social sustainability* as a state in which current social practices, processes and systems support the capacity for future generations to have the same or greater access to social resources than the current generation to ensure human survival and promote the well-being of all human beings.

- *Economic sustainability* as a state in which an economy can support a defined level of economic production indefinitely through responsible consumption and production so that it can meet future demands in a sustainable way.[2]

---

2   In ICCS, primarily because of the focus on students in grade 8, economic sustainability is covered in less explicit detail than environmental sustainability and social sustainability

Solidarity

The subdomain, *solidarity*, reflects the notion that individuals or groups show support for each other. Solidarity is an expression of social cohesion based upon the interdependence which people have on each other and is a civic principle that is related to their sense of belonging and connectedness within societies.[3] Expressions of solidarity between members and groups in society tend to vary considerably across different national contexts (e.g., in terms of support provided to people in need). The notion of transnational solidarity is also of importance in this context and relates to the degree to which members of a national society develop recognition for support of those in other countries (see, for example, Domerath, 2012). It is important to note that there are also negative forms of solidarity, as, for example, when solidarity is promoted only within particular groups in the population at the expense of others.

Aspects related to this subdomain include:

- Social welfare

- Charity

- Mutual aid or support

- Transnational aid or support

2.2.3 Civic participation

The content domain, *civic participation*, refers to the manifestations of individuals' actions in their communities. Civic participation can operate at any level of community and in any community context (including schools as the imminent context for the age group under study). The level of participation can range from awareness to engagement through to influence. The three subdomains of *civic participation* are:

     I. Decision-making

    II. Influencing

    III. Community participation

Decision-making

The subdomain, *decision-making*, focuses on active participation that directly results in the implementation of policy or practice regarding the individual's community or a group within that community. Aspects of this subdomain include:

- Engaging in organizational governance

- Voting

---

3   Durkheim (1969) distinguished between mechanical solidarity, based on structural links like group membership or mutual dependence, and organic solidarity, reflecting a more individualistic form of solidarity related to the identification with a larger and more diverse collective as well as empathic views of others in society (see also Honneth, 1996; Thijssen, 2012).

Influencing

The subdomain, *influencing*, focuses on actions aimed at informing and affecting any or all of the policies, practices, and attitudes of others or groups of others in the individual's community. Aspects of this subdomain include:

- Engaging in public debate (including participation through social media)

- Engaging in demonstrations of public support or protest (including "virtual" engagement through the use of, for example, online petitions)

- Engaging in policy development

- Developing proposals for action or advocacy

- Selective purchasing of products according to ethical beliefs about the way they were produced (ethical consumption/ethical consumerism)

- Recognizing corruption

Community participation

The subdomain, *community participation*, focuses on participation, with a primary focus on enhancing a person's connections with a community, for the ultimate benefit of that community. Aspects of this subdomain include:

- Volunteering

- Participating in cultural, community or interest-based organizations (including virtual/online communities)

- Acquisition of information (through traditional media, social media, internet sites or personal communication)

2.2.4 Civic roles and identities

The content domain, *civic roles and identities*, refers to knowledge and understanding of the individual's civic roles and identities, and their perceptions of these roles and identities. Civic roles and identities include those that are related to concepts of nation, ethnic origin, and cultural heritage. ICCS assumes that individuals both influence and are influenced by the relationships they have with family, peers, and civic communities. Thus, an individual's civic identity explicitly links to a range of personal and civic interrelationships. This framework asserts and assumes that individuals may have multiple articulated identities rather than a single civic identity. Civic communities include points of reference at many levels, ranging from family and local community to geographical regions or the global community. Furthermore, communities can be based on specific topics (such as sports or common interests) or even be formed through the use of digital technologies.

The content domain *civic roles and identities* comprises three subdomains:

I. Citizens

II. Civic self-image

III. Civic connectedness

Citizens

The subdomain, *citizens,* focuses on students' knowledge and understanding of formal and informal aspects of the civic relationships between individuals and their societies.

Aspects related to this subdomain include:

- Citizens' roles within their civic society

- Citizens' responsibilities within their civic society

- Citizens' opportunities to engage within their civic society (e.g., voting rights)

Civic self-image

The subdomain, *civic self-image,* refers to students' recognition of the differences in experience individuals may have regarding their place within and across different civic communities. Civic self-image focuses on individuals' knowledge and understanding of their civic and citizenship values, their management of these values, and the extent to which these values can be in harmony or in conflict when individuals engage with their various civic communities. Civic communities may range from local groups to the global community, and may also consist of virtual communities (e.g., defined by those that are digitally supported).

Aspects related to this subdomain include:

- Global citizenship identity

- Supra-national identity

- National identity

- Cultural identity

- Ethnic identity

- Gender identity

- Religious identity

- Identifying with communities (local, interest-based, virtual)

Civic connectedness

The subdomain, *civic connectedness,* refers to students' recognition of the sense of connection individuals may have regarding different civic communities. It also refers to a recognition of the communities' individuals may feel connected to that may vary substantially and include global as well as virtual (e.g., digitally defined) communities.

Civic connectedness also includes students' recognition and understanding of the definition and role of tolerance toward diversity (of civic ideas and actions) within and across their communities, and their recognition and understanding of the effects that different civic and citizenship values and belief systems across different communities may have on members of those communities.

Aspects related to this subdomain include:

- Acceptance of, respect for, and appreciation of difference (sometimes also referred to as tolerance)

- Global awareness

- Sense of community

- Social cohesion

2.3 Cognitive domains

Each of the four content domains encompasses different types of knowledge concerned with civic and citizenship issues (factual, procedural, conceptual, and meta-cognitive). The civic knowledge framework considers the extent to which students develop the capacity to process the content of the four domains and reach conclusions that are broader than any single piece of knowledge. This includes the processes involved in understanding complex sets of factors influencing civic actions and planning for and evaluating strategic solutions and outcomes. The scope of civic knowledge as conceptualized for ICCS is not limited to direct applications of knowledge that reach conclusions about concrete situations. It also includes the selection and assimilation of knowledge, as well as the understanding of multiple concepts, so that conclusions about complex, multifaceted, unfamiliar, and abstract situations can be reached. To capture these distinct features of cognitive knowledge, ICCS 2022 distinguishes remembering or recalling information or processing content in terms of understanding from applying an understanding to new situations[4].

When responding to the ICCS 2022 civic knowledge test, students need to know the civic and citizenship content that is assessed. They also need to be able to apply more complex cognitive processing to their civic and citizenship knowledge and to relate their knowledge and understandings to real-world civic action. Consequently, two cognitive domains are observable, the first, *knowing*, outlines the types of civic and citizenship information that students are required to demonstrate knowledge of. The second domain, *reasoning and applying*, details the cognitive processes that students require to reach conclusions and to translate their knowledge into civic actions. Similar definitions of cognitive domains can be found in the mathematics and science frameworks for TIMSS (see Mullis and Martin, 2013, 2017).

2.3.1   Knowing

The cognitive domain, *knowing*, refers to the learned civic and citizenship information that students use when engaging in the more complex cognitive tasks that help them make sense of their civic worlds. Students are expected to remember, recall or recognize definitions, descriptions, and the key properties of civic and citizenship concepts and content, and to illustrate these with examples. Due to the nature of ICCS as an international study, the concrete and abstract concepts students are expected to know in the core cognitive assessment are those that can be generalized across societies.

---

4   This classification is a simplified version of the hierarchy of cognitive processes articulated by Anderson and Krathwohl (2001). The simplification is intended to reflect what is appropriate for students in the target grade and what is most relevant to studying their knowledge of civic and citizenship issues.

The cognitive domain, *knowing*, relates to the following cognitive processes:

- *Defining*: Respondents are able to identify statements that directly define civic and citizenship concepts and content.

- *Describing*: Respondents are able to identify statements that directly describe the key characteristics of civic and citizenship concepts and content.

- *Illustrating with examples:* Respondents are able to identify examples that directly support or clarify statements about civic and citizenship concepts and content.

2.3.2 Reasoning and applying

The cognitive domain, *reasoning and applying*, refers to the ways in which students use civic and citizenship information to reach conclusions that are broader than the contents of any single concept and to make use of these in real-world contexts. *Reasoning and applying* includes, for example: the use of knowledge to reach conclusions about familiar concrete situations; the selection and assimilation of knowledge and understanding of multiple concepts; the evaluation of proposed and enacted courses of action; providing recommendations for solutions or courses of action.

The cognitive domain, *reasoning and applying*, relates to the following cognitive processes:

- *Interpreting information:* Respondents are able to identify statements about information presented in textual, graphical, and/or tabular form that make sense of the information in the light of a civic and citizenship concept.

- *Relating:* Respondents are able to use the key defining aspects of a civic and citizenship concept to explain or recognize how an example illustrates a concept.

- *Justifying:* Respondents are able to use evidence and civic and citizenship concepts to construct or recognize a reasoned argument to support a point of view.

- *Integrating:* Respondents are able to identify connections between different concepts across themes and across civic and citizenship content domains.

- *Generalizing:* Respondents are able to identify civic and citizenship conceptual principles manifested as specific examples and explain how these may apply in other civic and citizenship contexts.

- *Evaluating*: Respondents are able to identify judgments about the advantages and disadvantages of alternative points of view or approaches to civic and citizenship concepts and actions.

- *Suggesting solutions:* Respondents are able to identify courses of action or thought that can be used to alleviate civic and citizenship problems expressed as conflict, tension, and/or unresolved or contested ideas.

- *Predicting:* Respondents are able to identify likely outcomes of given civic and citizenship policies strategies and/or actions.

3. CIVIC ATTITUDES AND ENGAGEMENT FRAMEWORK

3.1 Framework scope and structure

Similar to previous IEA studies of civic and citizenship education, ICCS places great emphasis on the measurement of affective-behavioral aspects with student questionnaire items. These measures are regarded as important learning outcomes and have a similar standing in the process of development, analysis, and reporting as cognitive measures of students' civic knowledge. Student attitudes, perceptions, and behaviors relevant to civic and citizenship issues are organized according to two affective-behavioral areas which are elaborated in the sections which follow:

> Affective-behavioral area 1: *Attitudes* (e.g., judgements in relation to ideas, people, objects, events or situations)

> Affective-behavioral area 2: *Engagement* (e.g., interest in, and expectations of, civic engagement through civic action and future political participation)

Aspects relating to these domains are measured with the international or regional ICCS 2022 student questionnaires using items that do not require correct or incorrect responses (typically with Likert-type item format), indicating for example the extent to which respondents agree or disagree with a given statement. While most constructs or aspects are measured as an integral part of the international student questionnaire, others are included as international options or in the regional student questionnaires for Europe and Latin America. It should be noted that, the inclusion of topics in regional instruments was determined by region-specific interests expressed by countries in each geographic region and does not mean that they are deemed as unimportant in other countries.

3.2 Attitudes

The affective-behavioral area, *attitudes*, refers to judgements or evaluations regarding ideas, persons, objects, events, situations, and/or relationships. It is possible for individuals to harbor contradictory attitudes at the same time. *Attitudes* encompass perceptions that are focused on specifics and can change over time, as well as those reflecting broader and more fundamental (or deeply rooted) beliefs (about values)[5] that tend to be constant over longer periods of time. Attitudes include attitudes toward civic principles, perceptions of civic issues and institutions, and perceptions of civic roles and identities.

Constructs and measures reflecting students' attitudes are described with regard to the following subareas, which cover similar aspects as three of the four content domains in the civic knowledge framework in Chapter 2 (i.e., *civic principles, civic institutions and systems, and civic roles and identities*):

- • *Attitudes toward civic principles:* examples include attitudes toward gender equality, attitudes toward diversity, and attitudes toward sustainable development.

---

5   ICCS 2009 distinguished "value beliefs" from "attitudes" but since ICCS 2016 the affective-behavioral area attitudes encompasses both types of beliefs. This change was implemented to address concerns about the possibility to clearly distinguish more enduring and deeply-rooted beliefs from those that are more focused on specific issues and more time-specific in a study of adolescents in this relatively young age group.

- *Attitudes toward civic issues and institutions:* examples include trust in institutions, and perceptions of threats to the world's future.

- *Attitudes toward civic roles and identities:* examples include perceptions of good citizenship behavior, European identity, and expectations about one's individual future.

3.2.1   Attitudes toward civic principles

The following constructs reflecting student attitudes toward civic principles are measured as part of the international student questionnaire and the regional European and the Latin American questionnaires in ICCS 2022:

- Students' perceptions of threats to democracy (international student questionnaire)

- Students' attitudes toward gender equality (international student questionnaire)

- Students' attitudes toward equal rights for immigrants and non-immigrants (international student questionnaire)

- Students' attitudes toward environmental sustainability (international student questionnaire)

- Students' attitudes toward equal rights for all ethnic groups in society (international student questionnaire, optional)

- Students' perceptions of discrimination (European and Latin American student questionnaires)

- Students' attitudes towards freedom of movement for European citizens within Europe (European student questionnaire)

- Students' attitudes toward corrupt practices (Latin American student questionnaire)

- Students' attitudes toward disobedience to the law (Latin American student questionnaire)

- Students' attitudes toward homosexuality (Latin American student questionnaire)

Students' perceptions of threats to democracy: In the IEA CIVED survey in 1999, students were asked to rate a number of characteristics of society as either "good or bad for democracy" (see Torney-Purta et al., 2001). ICCS 2009 used a set of nine items that measured the extent of student agreement as to what a society should be like, using a set of items that were adapted from a subset of those included in CIVED. Most of these items were endorsed by very large majorities of students across all participating countries (Schulz et al., 2010). In ICCS 2016, students' attitudes toward democratic values were assessed using a different format that requires students to rate a number of possible characteristics of a society as "good", "bad" or "neither good nor bad" for democracy, and results showed considerable variations across countries (Schulz et al., 2018b). For ICCS 2022, students are asked about their perceptions of the extent to which different possible situations in society would be bad for democracy.

Students' attitudes toward gender equality: Gathering data about attitudes toward women's rights was part of the IEA civic education studies in 1971 and 1999 (Torney et al., 1975; Torney-Purta et al., 2001). ICCS 2009 measured the endorsement of gender equality and showed that large majorities agreed with the positive, and disagreed with the negative, statements about gender equality (Schulz et al., 2010). Support for gender equality was associated with student characteristics, and female students expressed more support for gender equality than males (Sandoval et al., 2018). ICCS 2016 results, making use of the same item set as in the previous cycle, showed increased endorsement of gender equality in some countries as well as persisting differences across participating countries (Schulz et al., 2018; Schulz & Ainley, 2018). ICCS 2022 assesses students' attitudes toward gender equality with a slightly modified set of items. While these studies have traditionally considered gender equality between women and men, conceptualizations of gender have evolved beyond this binary view of gender. Consequently, we expect that a broader conceptualization of gender, which recognizes individual gender self-determination including non-binary conceptualizations, will underpin the measurement of students' attitudes towards gender identity in future cycles of ICCS.

Students' attitudes toward the rights of immigrants: The assessment of beliefs about the rights for immigrants has been a focus of research in recent years (Heath & Richards, 2016; Masso, 2009; Paas & Halapuu, 2012; Rustenbach, 2010). Using similar item sets as in CIVED 1999 (Torney-Purta et al., 2001), ICCS 2009 measured endorsement of rights for immigrants and found that majorities among lower-secondary students tended to be overwhelmingly in favor of equal rights for immigrants (Schulz et al., 2010). However, support was associated with student characteristics and female and immigrant students had more positive attitudes (Munck et al., 2018; Sandoval et al., 2018; Schulz et al., 2010). Based on the same set of items in its regional European questionnaire, ICCS 2016 showed similar levels of support across European countries as in the first ICCS cycle (Losito et al., 2018). Given the increased importance of immigration also in many non-European countries (e.g., as a consequence of the recent refugee crises in Latin America), ICCS 2022 measures these attitudes as part of the international student questionnaire.

Students' attitudes toward equal rights for all ethnic groups in society: This construct reflects students' beliefs about equal rights for all ethnic groups in a country. Using similar items as in CIVED 1999 (Torney-Purta et al., 2001), ICCS 2009 measured this construct with statements reflecting attitudes toward equal rights for all ethnic groups, and results showed typically high levels of agreements as well as variations across and within countries (Sandoval et al., 2018; Schulz et al., 2010). ICCS 2016 used the same set of items to measure this construct and found that support for equal rights had significantly increased in most countries that had participated in the first two cycles of this study (Schulz et al., 2018b; Schulz, 2018; Schulz & Ainley, 2018). ICCS 2022 continues to assess young people's attitudes toward equal rights for all ethnic/racial groups in society with an optional question in the international student questionnaire.

Students' perceptions of discrimination: Discrimination based on personal and/or group characteristics is perceived as a persisting issue across many societies. In European contexts, adult surveys have shown perceptions of quite high levels of discrimination, in particular regarding ethnic origin (European Commission, 2012a). However, there is evidence that people from European countries with more effective antidiscrimination laws tend to be more knowledgeable about rights regarding discrimination (Ziller, 2014). Opinion surveys among adults also highlighted that across Latin American countries there are high levels of perceived discrimination, regarding poor people, members of indigenous communities, and people of African descent (Chong & Ñopo, 2007; Ñopo et al., 2010), and perceptions of discrimination were associated with individual background (skin color and ethnicity) as well as contextual factors (Canache et al., 2014). The ICCS 2022 regional questionnaires for European and Latin American countries include sets of items measuring the extent to which students perceive specific social groups as discriminated in their countries.

Students' attitudes towards freedom of movement for European citizens within Europe: Freedom of movement for European citizens across EU member countries was an essential part of the Lisbon Strategy (European Council, 2000).[6] There is evidence that cross-border mobility leads to a stronger identification with Europe, positive attitudes toward the EU and specific visions of the EU, all of which also contribute to increased EU-related engagement (Mazzoni et al., 2017) even though challenges remain regarding the monitoring of movement of all individuals (Carrera, 2005). The European student questionnaire in ICCS 2009 measured students' perceptions of freedom of movement using positive and negative statements about the freedom of movement between EU countries for European citizens. Analyses of data based on these statements suggested the presence of two constructs reflecting support of freedom of movement and preferences for restrictions, respectively. Results showed overwhelming student support for the benefits of free movement, as well as substantial proportions in favor of restricting the movement of workers across borders (see Kerr et al., 2010). The ICCS 2016 European student questionnaire included a similar item set and results showed that majorities among students endorsed this principle (Losito et al., 2018). The topic of free movement within the EU continues to be of high relevance in public debate and ICCS 2022 assesses this construct with a modified item set to measure students' perceptions regarding freedom of movement.

Students' attitudes toward corrupt practices[7] (included in the Latin American questionnaire): Corruption is widely regarded as one of Latin America's most salient problems and, with few exceptions, countries in this region tend to have low indices of transparency in cross-national surveys as well as higher levels of acceptance of corrupt practices (Torgler & Valev, 2006; Transparency International, 2019). Citizens' perceptions of the level of corruption have also been found to be related to lower levels of trust in institutions (Lavena, 2014; Morris & Klesner, 2010) and large proportions of Latin American citizens reported personal experiences with corrupt practices (Morris & Blake, 2010). In its Latin American student questionnaire, ICCS 2009 and 2016, measured young people's attitudes toward corrupt practices, and results showed an acceptance of corrupt practices by many, albeit not by a majority of students (Schulz et al., 2011; Schulz et al., 2018a). ICCS 2022 continues to assess this construct with a slightly reduced set of items.

Students' attitudes toward disobedience to the law (included in the Latin American questionnaire): Cross-national adult surveys in Latin American countries have shown a high level of ambiguity regarding civic morality (i.e., moral behavior and accepting civil disobedience), with some countries of the region recording high proportions of acceptance in regard to law-breaking (Letki, 2006), particularly amongst young people (Torgler & Valev, 2006). The Latin American student questionnaires in ICCS 2009 and 2016 included items measuring students' acceptance of breaking the law under different circumstances, and results from both surveys showed that larger proportions of young people in the participating countries endorsed civil disobediences, in particular, in cases where it was perceived as the only way to achieve things, help the family, or when it was done without bad intentions (Schulz et al., 2011, 2018a). The Latin American student questionnaire in ICCS 2022 includes an unmodified item set to measure comparisons over time.

---

6   A recent survey showed that nearly 70% of respondents considered the Schengen Area as one of the EU's main achievements, and half of them considered easier trade and travel and absence of passport control as two of its most positive aspects (European Commission, 2018c). EU member countries tend to have the highest share of free-movement flows in total permanent migration movements (OECD, 2012) and recent statistics also showed that employments rates are higher among EU mobile citizens (EUROSTAT, 2018).

7   The attitude items concerned with corrupt practices, disobedience to the law, and homosexuality were included in the Latin American student questionnaire as a result of consultations about civic issues with participating countries during the development of ICCS 2009.

Students' attitudes toward homosexuality (included in the Latin American questionnaire): In the past, survey data from the Latin American region suggested considerable differences across countries within the region and a divided public opinion regarding attitudes toward homosexuality (Latinobarómetro, 2009; Pew Research Center, 2014a). Research has shown that attitudes towards homosexuality in the region are often associated with age, gender, socioeconomic background, education, and religious beliefs (Kelley, 2001; Navarro et al., 2019; Pew Research Center, 2014b). In both ICCS 2009 and 2016, the Latin American regional questionnaires included items asking students about their agreement with statements about homosexuality. In accordance with previous survey research among adults, the results showed considerable variation in attitudes across the participating countries. Support for legalization of gay marriage increased between 2009 and 2016 in Chile, Colombia and Mexico where large majorities among students endorsed this position (Schulz et al., 2011, 2018a). The regional instrument for Latin America in ICCS 2022 includes the same set of items measuring students' attitudes toward homosexuality which was used in ICCS 2016.

3.2.2 Attitudes toward civic issues and institutions

The following constructs reflecting student attitudes toward civic issues and institutions are measured using the international student questionnaire and the regional European and Latin American questionnaires in ICCS 2022:

- Students' perceptions of student participation at their schools (international student questionnaire)

- Students' attitudes toward the political system (international student questionnaires);

- Students' acceptance of restrictions during a national emergency (international student questionnaire)

- Students' trust in institutions (international student questionnaire);

- Students' perceptions of threats to the world's future (international student questionnaire)

- Students' attitudes toward the influence of religion in society (international student questionnaire, optional)

- Students' expectations of the future of Europe (European student questionnaire)

- Students' attitudes toward cooperation among European countries (European student questionnaire)

- Students' attitudes toward the European Union (European student questionnaire)

- Students' attitudes toward authoritarian government practices (Latin American student questionnaire)

Students' perceptions of student participation at their school: Adolescents are mostly not yet able to vote or run for office in "adult politics," but they experiment as students to determine what degree of power they have to influence the ways schools are run (Bandura, 1997). As in CIVED 1999 (Torney-Purta et al., 2001), ICCS 2009 and 2016 assessed students' attitudes toward the value of student participation in civic-related activities at school. Results showed high levels of

student support for the value of participating at their schools and that females tended to be more supportive of participation than male students (Schulz et al., 2010, 2018b). ICCS 2022 continues to measure aspects related to this topic, with a modified item set focusing on perceptions of the value of student participation at their schools.

Students' attitudes toward the political system: Recent years have witnessed signs of increasing political instability in many societies, amongst them even long-established democracies (Diamond, 2015, 2021; Mair, 2002). More voters have been reported to have abandoned their loyalties to established political parties and are turning to populist parties or candidates (Boogards, 2017). Frequently, these developments have been linked to the increased alienation of citizens from civic institutions, in particular, from traditional political parties, increasing economic inequalities, and as a response to growing globalization and migration (Hobolt et al., 2016). Across different countries, supporters of populist candidates, movements, and parties tend to support democracy as well as to express dissatisfaction with its implementation, however, there is also evidence of cross-national differences in the sociodemographic profiles and political features (Rovira Kaltwasser & Van Hauwaert, 2019). In particular in the Latin American region, the role of social movements has been emphasized in its importance for mobilizing citizens in support for social change (Donoso, 2017). For ICCS 2022, the student questionnaire asks about students' agreement or disagreement with different statements related to the political system, its institutions, and its representatives, encompassing both positive and negative perceptions.

Student acceptance of restrictions during a national emergency: The outbreak of the COVID-19 pandemic in early 2020 became an unprecedented challenge to democratic governance in terms of a wide range of restrictions placed on individual freedom and the suspension of citizen rights and democratic processes (Marzocchi, 2020; Landman & Di Gennaro Splendore, 2020). There is also evidence that it affected public perceptions of government and society (Krastev & Leonard, 2020). To assess the views of young people regarding these issues, ICCS 2022 includes a question about students' acceptance of restrictions imposed by governments during a national emergency.

Students' trust in institutions: As in earlier IEA studies of civic and citizenship education (Torney et al., 1975; Torney-Purta et al., 2001), ICCS asked students about their trust in a range of institutions. Across countries, results from 2009 showed that students tended to express the lowest levels of trust in political parties and the highest levels of trust in courts of justice (Schulz et al., 2010). Furthermore, in countries with relatively high levels of perceived corruption, and low scores on indices of government efficiency, students with higher levels of civic knowledge expressed less trust in civic institutions, while positive correlations between civic knowledge and trust were recorded in countries with low indices of corruption (Lauglo, 2013). Results from the second ICCS cycle found, in several countries, increases in trust in institutions (Schulz et al., 2018b). ICCS 2022 continues to assess students' trust in groups and institutions with a largely unmodified item set, which will allow the measurement of changes over time. Furthermore, it includes two new additional items reflecting trust in scientists and the students' teachers.

Students' perceptions of threats to the world's future: It has been reported that students express concern about global issues including those regarding poverty, hunger, wars, overpopulation, and the environment (Holden, 2007; Oscarsson, 1996; Rubin, 2002). In ICCS 2016, students were asked to rate the seriousness of a broad range of threats to key aspects of civilization. More than half the students considered pollution, terrorism, water shortages, food shortages, infectious diseases, climate change, and poverty as threats to the world's future. These aspects are also reflected in writings concerned with global education that aim to broaden student perspectives beyond national contexts (Burnouf, 2004; Hicks, 2003). Overall, these ratings provide an indication of student optimism or pessimism, and responses to individual items provide a perspective on profiles of concern. Results from ICCS 2016 showed that concerns about these issues tended to

be influenced by local contexts in participating countries (Schulz et al., 2018b). The ICCS 2022 student questionnaire uses a slightly revised set of items but will allow measuring perceptions over time for some of the issues, including those related to threats due to infectious diseases (such as COVID-19) and climate change.

Students' attitudes toward the influence of religion in society: There is evidence about associations between religious beliefs and attitudes toward social issues (van der Toorn et al., 2017), and it has also been identified as an important catalyst of civic participation (see Ekström & Kwalem, 2013; Guo et al., 2013; Pancer, 2015; Putnam & Campbell, 2010; Storm, 2015; Verba et al., 1995). However, comparative research has also indicated that while political engagement is positively associated with active engagement in religious organizations, religiosity in itself can also be a deterrent for political action (Omelicheva & Achmed, 2018). Results from an international option for ICCS 2009 and 2016 showed that most students did not endorse religious influence on society, and that endorsement was higher among those with lower levels of civic knowledge and higher levels of attendance of religious services (Schulz et al., 2010, 2018b). ICCS 2022 continues to measure students' attitudes toward religious influence as part of an international option within the international student questionnaire.

Students' expectations of the future of Europe: Recent opinion surveys among European citizens have shown that majorities expect that their children's life will be more difficult than their own (European Commission, 2014). Further, adult citizens expected Europe's influence to be stronger in comparison with countries like Brazil, India, and Japan but also weaker when compared with the influence of China or the United States (European Commission, 2018a). The ICCS 2016 European student questionnaire contained a question with possible scenarios for the European future, and students tended to be most concerned about increased terrorism and the influence of non-European powers (Losito et al., 2018). ICCS 2022 continues to assess perceptions of European future with a modified item set.

Students' attitudes toward cooperation among European countries: Recent opinion polls have indicated that, despite a general surge in anti-European sentiment in some member countries, majorities among European citizens support decision-making about important issues at the European level, especially in relation to migration and refugees, fighting terrorism, security and defense policy, energy policy, and the environment (European Commission, 2018a). In addition to this, results from the Standard Eurobarometer survey showed that European citizens consider immigration as one of the major challenges that the EU is currently facing (European Commission, 2018b). The European student questionnaire in ICCS 2009 included a question measuring students' perception of harmonization in the European context, and results showed high levels of agreement with common European policies (Kerr et al., 2010). The European ICCS 2016 student questionnaire included a question measuring students' endorsement of cooperation between European countries regarding a range of different issues, and most students tended to be supportive of European cooperation (Losito et al., 2018). The ICCS 2022 European student questionnaire continues to ask about views on European cooperation. Furthermore, the instrument includes an additional question asking students about their views on European cooperation in relation to environmental issues.

Students' attitudes toward the European Union: According to recent opinion surveys, majorities among Europeans perceived the EU as a safe place in a troubled world (European Commission, 2018a), and associated the EU with possibilities to travel, study, and work anywhere with the Euro as a common currency and with lasting peace (European Commission, 2018b). The European regional survey of ICCS 2009 showed that support for the establishment of centralized European institutions was not particularly strong, and that support for further enlargement varied considerably across participating countries (see Kerr et al., 2010). The European student

questionnaire for ICCS 2016 included a question containing statements about the EU, and the surveyed lower-secondary students tended to express positive attitudes toward the EU (Losito et al., 2018). Attitudes toward the EU continue to be of interest and are part of ICCS 2022 and will be measured through an item set in the European student questionnaire, which combines items from the previous survey with newly developed ones.

Students' attitudes toward authoritarian government practices in Latin America: Surveys in the Latin American region have shown considerable support for authoritarian government practices among adults and adolescents, and majorities among adult citizens supported non-democratic governments if they solved economic problems (United Nations Development Programme, 2004) and that support for non-democratic government was lowest among more educated citizens (Cox, 2010). The Latin American student questionnaire, in ICCS 2009, included items measuring the endorsement of authoritarian government practices and the justification of dictatorships (see Schulz et al., 2011). Results showed that considerable proportions of lower secondary students in all participating countries showed support for non-democratic government practices, and that majorities saw dictatorships justified in case they provided economic benefits or more security. The Latin American student questionnaires in ICCS 2016, including the same item set and results, showed that levels of support for authoritarian government and justification of dictatorship remained largely unchanged since 2009 (Sandoval-Hernández et al., 2019; Schulz et al., 2018a). ICCS 2022 measures students' endorsement of authoritarian government practices with a reduced set of identical items.

3.2.3 Attitudes toward civic roles and identities

The following constructs reflecting student attitudes toward civic identities are measured as part of the international student questionnaire or the European and Latin American student questionnaires in ICCS 2022:

- Perceptions of good citizenship behavior

- Students' sense of European identity (European student questionnaire)

- Students' expectations of their own individual future (European and Latin American student questionnaires)

Students' perceptions of good citizenship behavior: Similar to earlier IEA studies of civic and citizenship education (Torney et al., 1975; Torney-Purta et al., 2001, p. 77f), ICCS 2009 measured students' perceptions of the importance of different types of behaviors for "good citizenship" and identified subdimensions concerned with conventional and with social-movement-related citizenship behavior (Schulz et al., 2010). Based on data from CIVED 1999 and ICCS 2009, Hooghe and Oser (2015) observed an increase in the support of engaged citizenship norms while duty-based citizenship norms became less widely supported. Following Kennedy's (2006) distinction between active (conventional and social-movement-related) from passive citizenship elements (national identity, patriotism, and loyalty), ICCS 2016 used additional items to measure more passive forms of citizenship behavior adding a third factor that reflected personally responsible citizenship (Schulz et al., 2018b). Re-analyses of ICCS 2016 data also showed considerable variation across and within countries in terms of students' citizenship profiles (Treviño et al., 2021). In addition to asking students' views about the importance of citizen behavior related to the two first dimensions (conventional and social-movement-related citizenship), ICCS 2022 includes new items reflecting students' perceptions of the importance of global citizenship behavior (such as showing interest in other cultures and languages or engaging in support of global issues).

Students' sense of European identity: European identity has been an important theme of debate over the past decade within the EU (Alnæs, 2013; Checkel & Katzenstein, 2009; European Commission, 2012; Delanty & Rumford, 2005; Duchesne, 2008; Herrmann et al., 2004; Karolewski & Kaina, 2006, 2013; Spannring et al., 2008), in particular following the establishment of European institutions, the integration of EU member countries, and the Treaty on the European Union (Treaty of Maastricht) and their implications on European identity and citizenship (Osler & Starkey 2008). ICCS 2009 showed that, while most students regarded themselves as Europeans, relatively few students viewed their European identity as more important than their national identity (Kerr et al., 2010). Based on a comparable set of items, the European ICCS 2016 questionnaire showed considerable increases in young people's identification with Europe between 2009 and 2016 (Losito et al., 2018). ICCS 2022 continues to measure young European's perceptions of their identification with Europe as a region.

Students' expectations of their own individual future: In a previous part of the framework, we drew attention to the need to examine students' expectations regarding their own individual future. There is a body of literature concerned with the measurement of beliefs about, and perceptions of the future or future time perspectives (Husman & Shell, 2008; Rizzo & Chaoyun, 2017), including those that go beyond dispositional optimism and pessimism (Lemola et al., 2010). The ICCS 2016 European student questionnaire asked students about the likelihood of finding employment and better financial conditions in the future, and results showed that most students had positive perceptions of their own life in the future (Losito et al., 2018). ICCS 2022 includes measures of students' perceptions of their own individual future in both the European and Latin American student questionnaires. In addition, the European student questionnaire includes a question asking students about the importance of some aspects of their life in the future (e.g., to have the opportunity to work abroad, to have friends).

3.3 Engagement

In ICCS 2022, the affective-behavioral area *engagement* refers to students' self-beliefs about their interest and capacity to engage, expectations of future civic action, past and present engagement, and also include constructs such as preparedness to participate in forms of civic protest and anticipated future political participation as adults. In addition, due to active involvement in civic practices open to this age group (such as school-based activities, youth organizations, or community groups), young people may now also become involved in virtual networks through social media. These newer forms of engagement receive more explicit recognition in ICCS 2022 than in previous cycles. Furthermore, it is also of interest to distinguish between engagement with different levels of the contextual framework (or organizational levels), which may range from participation in activities at a local level to activities that are organized at national or supra-national levels. At the same time, it is important to keep in mind that issues triggering engagement do not necessarily coincide with the levels that are the focus of engagement, for example, activities related to national or global issues may be undertaken at a local level.

Ekman and Amnå (2012) regarded civic participation (latent political participation) as distinct to the manifestation of political participation and argued for distinguishing individual forms from collective forms of engagement. Given that political passivity has been identified in many societies as a growing phenomenon, especially among young people, it is important to further distinguish unengaged from disillusioned citizens (Amnå and Ekman, 2014). While unengaged passive citizens are keeping themselves informed and are willing to consider civic engagement if needed, disillusioned passive citizens have lost faith in the possibility of influencing and have become alienated. Therefore, in addition to active engagement, basic dispositions toward engagement (interest or self-efficacy) and behavioral intentions (underlying preparedness to act) are of crucial importance when studying young people's engagement.

ICCS 2022 conceptualizes the constructs and measures related to *engagement* according to the following subareas, which all cover similar aspects to those included in the content domain civic participation in the civic knowledge framework:

- *Experiences of engagement*: examples include students' engagement with social media for civic-related activities, involvement in community groups or organizations, or civic-related activities at school.

- *Dispositions toward engagement:* examples include students' sense of citizenship, self-efficacy, and their interest in political and social issues.

- *Expected future engagement:* examples include expected student participation in legal or illegal activities to express opinions or expected electoral and active political participation.

3.3.1 Experiences with engagement

When studying students in lower-secondary education, it is important to keep in mind that there are limitations for this age group in terms of access to many forms of citizenship participation in society. However, there is evidence of links between youth participation and later engagement as adult citizens (Verba et al., 1995). Furthermore, having been part of civic-related activities at school has been suggested as an influencing factor for future citizenship engagement (Pancer, 2015; Putnam, 2000). In view of the latter, it needs to be acknowledged that current or past involvement in youth groups, school governance, or campaigns may play a role as a contextual factor in shaping civic-related learning outcomes.

ICCS 2022 includes measures of the following types of active students' civic engagement:

- Students' engagement in organizations and groups (outside of school)

- Students' engagement in school activities

- Students' engagement using digital technologies

- Students' reports on behaviors related to political and ethical consumerism and on their sustainable behaviors (European student questionnaire)

Students' civic participation in organizations and groups: Citizens' involvement in organizations and groups can be seen as a clear indicator of civic engagement (Putnam, 2000; Van Deth et al., 1999). However, it can also be regarded as a resource for future engagement (Putnam, 1993), and in recent years a growing involvement of young people in global movements such Fridays for Future has been observed (De Moor et al., 2020). ICCS 2009 asked students about their current or past participation in organizations in their communities, such as human-rights groups, religious associations, and/or youth clubs. Similar to the findings of the CIVED study in 1999 (Amadeo et al., 2002; Torney-Purta et al., 2001), ICCS 2009 results showed that only smaller proportions among students reported that they had participated in these organizations or groups (Schulz et al., 2010). ICCS 2016 assessed students' participation in the community with a slightly modified set of 10 items (including three optional items). Results confirmed that relatively few young people in this age group had been involved in organizations and groups in the community (Schulz et al., 2018b; Schulz, 2018). ICCS 2022 includes a set consisting of old and new items to measure past and current student engagement.

Students' civic participation in school activities: Numerous scholars have underlined the importance of students' experience at school for developing a sense of power to influence matters in the community (Bandura, 1997). Research has provided evidence that more democratic forms of school governance can contribute to higher levels of political engagement (see for example, Pasek et al., 2008). ICCS 2009 and 2016 included questions about a wide range of civic-related participation at school (for example, in school councils/parliaments, or in student debates) and results showed that majorities of students reported past or current participation in many of these activities at school. The findings further suggested positive relationships with civic knowledge and engagement (Schulz et al., 2010; 2018b; Schulz, 2018). ICCS 2022 continues to measure past or current civic engagement within the school context using a modified set of items.

Students' civic engagement using digital technologies: The importance of social media has risen greatly over the past years (Banaji & Buckingham, 2013; Kahne et al., 2014; Mihailidis, 2011; Rainie et al., 2012; Segerberg & Bennett, 2011) and research suggests a potential enhancement of civic participation among people when content is interactive (for example, via chat rooms or message boards) instead of the one-way communication of more traditional media (Bachen et al., 2008; Kahne et al., 2012). The ICCS 2016 student questionnaire included items that measured the extent to which students engaged with political and social issues via social media. Results showed that more active civic engagement through these channels was still limited and varied considerably across participating countries (Schulz et al., 2018b). ICCS 2022 measures students' engagement with social media using a modified and, compared to ICCS 2016, broader set of items.

Students' reports on behaviors related to political and ethical consumerism in Europe: The promotion of sustainable behaviors, together with the development of knowledge, skills, and values, is one of the most relevant aspects of education for sustainable development (UNESCO, 2005). As such, it is becoming increasingly recognized as an important aspect of education as a whole and is part of UNESCO's Strategic Development Goal 4.7 (Smart et al., 2019; UNESCO, 2015). Sustainable behavior can be defined as the extent to which decisions are driven to benefit or reduce the impact on the environment (Stern, 2000). The ICCS 2022 European questionnaire includes a question asking students about their or their parents'/guardians' consumer behaviors related to expressions of political beliefs. Another question in this instrument asks about students' reports on the frequency of undertaking a range of sustainable behaviors.

3.3.2 Dispositions toward engagement

With regard to students' *dispositions toward civic engagement*, ICCS 2022 distinguishes the following:

- Students' interest in political and social issues

- Students' sense of citizenship self-efficacy

Students' interest in political and social issues: Research has shown that interest in politics is strongly influenced by socialization at home (Neundorf et al., 2017). Earlier IEA civic and citizenship education studies already included measures of student interest, which turned out to be a positive predictor of civic knowledge and participation (Torney et al., 1975; Torney-Purta et al., 2001; Amadeo et al., 2002). ICCS 2009 used a list of items covering students' interest in a broader range of six different political and social issues, and results showed that students tended to have considerable interest in social and also political issues in their own countries but were less interested in international politics (Schulz et al., 2010). ICCS 2016 measured students' (overall) interest in political and social issues in conjunction with a question about their parents' interest in these issues. Results showed that students' interest was positively associated with expected civic engagement in the future (Schulz et al., 2018b). Students' interest in political and social issues continues to be measured in ICCS 2022 with the same item as in ICCS 2016.

Students' sense of citizenship self-efficacy: This construct reflects students' self-confidence in active citizenship behavior. Individuals' "judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391) are deemed to have a strong influence on individual choices, efforts, perseverance, and emotions related to the tasks. The concept of self-efficacy constitutes an important element of Bandura's social cognitive theory about the learning process, in which learners direct their own learning (Bandura, 1993). ICCS 2009 and 2016 included seven items reflecting different activities that were relevant for students of this age group, and results from 2016 showed that students' confidence to participate in civic activities tended to be stronger than in the previous cycle (Schulz et al., 2018b). ICCS 2022 continues to measure students' citizenship self-efficacy with a modified and broader set of items.

3.3.3 Expected future engagement

Given the limitations for young people in their eighth year of schooling to actively participate in society, many aspects of civic and citizenship engagement can only be assessed by asking about expected future behavior. The theory of planned behavior (Ajzen, 2001; Ajzen & Fishbein, 2000) links attitudes to behaviors through intentions, and posits that attitudes influence actions through reasoned processes (that are manifested as intentions).

While political participation is one central aspect of possible future civic engagement (Verba et al., 1995), it is also important to view civic engagement as broader and reflective of all "people's connections with the life of their communities, not merely politics" (Putnam 1993, p. 665). In view of political developments throughout the 1970s and 1980s, scholars introduced a distinction between "conventional" (voting, running for office) from "unconventional (social movement)" activities (grass-root campaigns, protest activities) (Barnes & Kaase, 1979), with the latter type potentially including legal as well as illegal forms of engagement (Kaase, 1990).

With the recent rapid expansion of new types of political activities, Van Deth (2014) further identified problem- or community-oriented forms of participation as well as individualized and creative modes of participation (see also Theocharis & Van Deth, 2018; Weiss, 2020).

ICCS 2022 distinguishes between the following three types of *expected future engagement:*

- Expectations of participating in future school-based activities

- Expectations to participate in legal and illegal forms of civic action in support of, or in protest against, important issues

- Expectations of political participation as adults

Students' expectations of participating in future school-based activities: Keating and Janmaat (2015) presented results from longitudinal data in the United Kingdom suggesting that participation in school-based political activities has a positive influence on future electoral and political engagement. ICCS 2016 developed questions assessing students' beliefs about their expectations of undertaking future civic activities within the school context (for example, voting in school elections or engaging in a public debate about school-related issues), and results showed that students' willingness to become involved at school was higher among females and students with more interest in civic issues (Schulz et al., 2018b). ICCS 2022 continues to gather data on students' expectations of civic engagement at school with an identical item set.

Students' expectations of participation in forms of civic action: In ICCS 2009 a set of nine items reflected students' expectations for future involvement in protest activities (such as collecting petitions, participating in protest marches, or blocking traffic). The items related to two different dimensions of protest behavior: legal and illegal activities. Using a similar but modified question, ICCS 2016 measured forms of civic action, including those against and in support of issues. The items also included actions in support of environmental sustainability. Results confirmed earlier findings that legal activities were much more widely expected than illegal activities (Schulz et al., 2010, 2018b). Both dimensions continue to be assessed as part of ICCS 2022 with a slightly modified set of student questionnaire items that also includes new items measuring the students' expected engagement in support of environmental causes.

Students' expectations of political participation as adults: Young people who intend to participate in political activities have been shown to be much more likely to participate at a later point in time (Eckstein et al., 2013). ICCS 2009 and 2016 asked students about these types of behavioral intentions using a set of nine items (two of which were optional for countries) reflecting on two different constructs (expected electoral participation and expected participation in political activities). While majorities of students across participating countries expected to participate in elections, relatively few students expressed intentions to engage in more active forms of political participation (Schulz et al., 2010, 2018b). ICCS 2022 continues to assess students' expectations of participating in political participation as adults, with an identical item set as in ICCS 2016.

4. CONTEXTUAL FRAMEWORK

4.1 Framework scope and structure

IEA studies of civic and citizenship education have always focused on the individual student's acquisition of knowledge, attitudes and dispositions for engagement, which is influenced by their connections with multiple civic communities. This was explicitly expressed in the theoretical model underlying the IEA CIVED study in 1999, which asserted that young people's learning of civic and citizenship issues was not limited to instruction at school but dependent on different "agents" of socialization (Torney-Purta et al., 2001, p. 21). This conceptual view is influenced by and consistent with theories of ecological systems (Bronfenbrenner, 2004; Ettekal & Mahoney, 2017; Neal & Neal, 2013) and situated cognition (Anderson et al., 2000; Barsalou, 2016). It strongly emphasizes the importance of capturing relevant contextual information as part of this study in addition to measuring students' cognitive and affective-behavioral learning outcomes.

While ICCS broadened the conceptual framework underpinning the IEA CIVED study in 1999 through the inclusion of further aspects (see Schulz, 2021), it maintained the conceptual view of regarding the civic learning of young people as a result of interactions with multiple civic communities, in addition to formal education (Schulz et al., 2008). The ICCS 2022 contextual framework describes the variables that are important to consider when studying learning outcomes of civic and citizenship education. ICCS assumes that the individual student is located within overlapping contexts of school and home. Both these contexts form part of the local community which, in turn, is embedded in the wider sub-national, national, and international contexts.

As in previous ICCS frameworks, the contextual framework for ICCS 2022 distinguishes the following four levels:

- The *context of the wider community* comprises the broader context within which schools and home environments operate (ranging from local to global levels). Factors can be found at local, regional, and national levels. For a number of countries, the supra-national level has also become relevant as, for example, for member countries of the European Union. Given the increased importance of digital technologies for communication and engagement, virtual communities connected through the internet also form part of this context.

- The *context of schools and classrooms* comprises factors related to teaching and learning, the school culture, and the general school environment.[8]

- The *context of home and peer environments* comprises factors related to the home background and the immediate social out-of-school environment of the student (for example, peer-group activities).

- The *context of the individual* refers to the individual characteristics of the student (for example, their gender or educational aspiration).

---

8   Because of the sampling design for ICCS, school level and classroom level cannot be disentangled. Generally, only one class-room will be selected within each sampled school.

ICCS also groups contextual variables into the following types of variables:

- *Antecedents* are pre-existing variables that shape how student learning and acquisition of civic-related understandings and perceptions takes place. Note that these factors are level-specific and may be influenced by antecedents or processes at a higher level. For example, civic-related training of teachers may be affected by historical factors and/or policies implemented at the national level.

- *Processes* are those variables related to civic-related learning and the acquisition of understandings, competences, and dispositions. They are constrained or enabled by antecedents and possibly influenced by variables relating to the higher levels of the multi-level structure.

Antecedents and processes are variables that have potential impact on outcomes at the level of the individual student. Learning outcomes related to civic and citizenship education at the student level also can be viewed as aggregates at higher levels (school, country) where they can affect factors related to processes. For example, having higher levels of civic understanding and engagement among students may influence the way schools and educators teach content or organize activities related to civic and citizenship education.

Figure 1 illustrates which contextual variables might influence the learning outcomes of civic and citizenship education. It is important to emphasize that "feedback" may occur between civic-related learning outcomes and processes in terms of a reciprocal relationship between these two types of variables. For example, students with higher levels of civic knowledge and engagement would be expected to participate more frequently in activities (at school, at home, and within the community) that, in turn, promote these outcomes.

There is a unidirectional relationship between antecedents and processes at each level. However, higher-level processes may influence antecedents, and it is likely that, from a long-term perspective, outcomes may affect variables that are antecedents for learning processes.

Figure 1: Contexts for the development of learning outcomes related to civic and citizenship education

This contextual framework for ICCS makes it possible to map variables for which data are collected on a three-by-four grid, with antecedents, processes, and outcomes as columns, and the levels of country/community, school/classroom, student, and home environment, as rows (Table 1). Although the last column for outcomes is not split into levels, it is important to recognize that, for the analysis of ICCS data, aggregates can also be used at wider community or school/classroom levels[9].

Table 1 shows examples of potential variables (or groups of variables) collected with different ICCS instruments for each cell in this grid. Variables related to the context of country/community are collected primarily through the national contexts survey and other possible data sources. Variables related to the context of schools and classrooms are collected through the school and teacher questionnaires. The student questionnaire provides information on antecedents of the individual student and the home environment as well as some process-related variables (for example, learning activities). The student test and the student perceptions questionnaire collect data on outcomes. In addition, the student background questionnaire includes questions regarding student participation in civic-related activities that will provide indicators of active citizenship related to content domain 3 (*civic participation*).

Table 1: Mapping of variables to contextual framework (examples)

Level of ...	Antecedents	Process	Outcomes
Wider community	NCS and other sources: Democratic history Structure of education	NCS and other sources: Intended curriculum Political developments	StT, StQ, StE & StL: Civic knowledge, attitudes and engagement
School/ classroom	ScQ and TQ: School characteristics Resources	ScQ and TQ: Implemented curriculum Policies and practices	
Student	StQ: Gender Age	StQ: Civic learning Practiced engagement	
Home and peer enviroment	StQ: Socio-economic background Language use at home Country of birth	StQ: Family communication Communication with peers Media information	

Note: NCS = national contexts survey; ScQ = school questionnaire; TQ = teacher questionnaire; StE = European student questionnaire; StL = Latin American student questionnaire; StQ = student questionnaire; StT = student test.

---

9   Note that similar conceptualizations have been used for the planning of other international studies (see, for example, Harvey-Beavis, 2002; OECD, 2005; Travers & Westbury, 1989; Travers et al., 1989).

Some potential variables can be measured at one level pertaining to another level (such as school principals' perceptions of the local community) and are not included in the mapping shown in Table 1. It is also important to note that student observations of learning practices in the classroom can be aggregated and used as classroom or school variables. Furthermore, student, school, and teacher questionnaire data might also provide civic-related information about the context of the local community.

4.2 The context of the wider community

ICCS views the context of the wider community as consisting of different levels because the students, their schools, home, and peer environments are located in their local communities, which in turn are embedded within broader contexts of regional, national, and supranational contexts. Within the scope of this study, at the level of the wider community, contexts related to local and national levels are of particular relevance. However, due to increasing globalization, connectedness via digital technologies and the growing importance of supranational organizations, it is important to consider contexts beyond the nation-state within the scope of ICCS.

4.2.1 The context of the educational system

For an investigation of how young people in lower-secondary education develop civic-related dispositions and competences and acquire understandings with regard to their role as citizens, it is crucial to give proper consideration to the national level. Historical background, the political system, the structure of education, and the curriculum are important contextual variables that need to be considered when interpreting results from an international assessment of civic and citizenship education. Data from official statistics provide a range of relevant contextual data at the country level; regarding the structure of the education system, the nature of the political system, and the economic and social context of the society.

As in previous cycles, the national contexts survey for ICCS 2022 is designed to provide for a systematic collection of relevant data based on expertise provided by the national research centers. These data include information on the structure of national education systems, education policies, approaches to civic and citizenship education, teacher training in general and for civic and citizenship education in particular, and approaches to assessment and quality assurance regarding the area of civic and citizenship education. The survey also collects information on recent or current debates and reforms related to this learning area.

The structure of the education system

Despite a number of global trends in education that have increasingly led to many common features in policies and structures across countries (Benavot et al., 1991; Frank & Meyer, 2021; Wiseman & Baker, 2005), differences between education systems continue to have a considerable effect on the outcomes of education (Baker & LeTendre, 2005; Woessmann, 2016).

To capture such basic differences at the national level, the ICCS 2022 national contexts survey collects system-level data on the structure of school education (study programs, public/private school management, types of lower-secondary education institutions), the autonomy of educational providers with regard to different aspects, and the length of compulsory schooling. Further, it also gathers information about changes in the structure since the previous ICCS cycle in 2016.

Education policies and developments regarding civic and citizenship education

Previous reviews of educational policies regarding civic and citizenship education have indicated the presence of a wide range of objectives related to the area (Birzea et al., 2004; European Commission/EACEA/Eurydice, 2012, 2017; Lee et al., 2004; Torney-Purta et al., 1999). Despite this presence, results from previous cycles of ICCS (Ainley et al., 2013; Schulz et al., 2010, 2018b) showed the priority assigned to civic and citizenship education was frequently reported as low across participating countries. While civic goals tended to be reported as important in principle, there were substantial differences in the approaches toward the delivery of curricular content across countries. Findings from the two previous cycles of the study also highlighted the fact that explicit civic and citizenship education in many countries tends to commence after students reach the age of 14.

It is important to acknowledge that between study cycles there may be educational reforms in countries, typically designed to improve educational provision and outcomes or better reflect government priorities, and that such changes potentially also affect aspects of civic and citizenship education. Many of these educational reforms tend to be implemented in response to the challenges of learning and living in modern societies, as well as changes in political systems (Ainley et al., 2013; Cox et al., 2005).

The ICCS 2022 national contexts survey collects data on the definition of, and the priority given to, civic and citizenship education in the educational policy and its provision in each participating country at the time of the data collection. National centers provide information about the official definition of civic and citizenship education, its formal implementation in lower-secondary education, and its main goals. National centers are also asked about the potential influence of historical, cultural, political, and other contexts on the character of, and approach to, civic and citizenship education, whether there have been major national or international studies about this learning area since 2005, and whether there have been any substantial changes since the previous survey from 2016.

In view of the recent educational disruptions across countries due to the COVID-19 pandemic, the national contexts survey also gathers data about the extent to which teaching and learning, in general, and regarding civic and citizenship education, was affected, and whether there has been formal support for the development of digital resources in this learning area. Furthermore, the national contexts survey collects information about the effects of the 2022 Ukraine crisis on civic and citizenship participation in ICCS 2022 countries.

Civic and citizenship education and school curriculum approaches

Countries take different approaches to the implementation of civic and citizenship education in their curricula and the ways it is implemented tend to vary considerably across countries (Ainley et al., 2013; Cox et al., 2005; European Commission/EACEA/Eurydice, 2017). Some educational systems have included civic and citizenship education in their curricula as a compulsory or optional (stand-alone) subject, whereas others include it through integration into other subjects. Alternative approaches to civic and citizenship education, typically chosen in addition to learning based on subject matter, are the implementations of civic-related cross-curricular themes or the adoption of a *whole school approach*, where all aspects of schooling are considered to be contributing to this learning area. Previous cycles of ICCS showed that in many education systems and/or schools, combinations of different approaches are implemented at the same time (Ainley et al., 2013; Schulz et al., 2017).

With regard to school curriculum approaches for civic and citizenship education, a Eurydice report from 2012 (European Commission/EACEA/Eurydice, 2012) distinguished between (i) promotion through steering documents such a national curricula or other recommendations/regulations, (ii) support for school-based programs and projects, and (iii) the establishment of political structures (such as school parliaments). In this context it is also important to review the extent to which schools in different countries provide support for civic and citizenship education through school culture or ethos, democratic school governance, and the establishment of links with the wider community (Birzea et al., 2004; European Commission/EACEA/Eurydice, 2012; Council of Europe, 2018). Results from ICCS 2009 showed that many countries include recommendations for the establishment of democratic school practices in their educational policies (see Ainley et al., 2013).

The national contexts survey in ICCS 2022 gathers data on the inclusion of civic and citizenship education (as a separate subject, or integrated into different subjects, or as cross-curricular approach) in the formal curriculum at different stages of schooling and in distinct study programs. The survey also captures the names of specific curriculum subjects and whether these are compulsory or optional at each educational level (primary, lower and upper secondary). Furthermore, the national contexts survey collects data regarding the aims of the national or official curricula for civic and citizenship education related to specific contexts such as whole school and school curriculum approaches, student participation or parental involvement, and links to the wider community.

Because ICCS surveys students in a specific target grade in lower secondary programs (typically Grade 8), the national contexts survey gathers more detailed information about the curricular context for civic and citizenship education for this particular grade. In addition, national centers report on the specification of topics, objectives, and processes when implementing the school curriculum, as well as the amount of instructional time given to civic and citizenship education. The national context survey for ICCS 2022 includes content reflecting changes to the framework including questions about global citizenship values, the presence of policies for intercultural education, addressing diversity at school, inclusive education, the promotion of democratic ideals in schools, and the use of digital technologies to encourage civic engagement. This is further reflected in additional questions related to curricula contents on the new or further developed focus areas for ICCS 2022.

Teachers and civic and citizenship education

The teacher survey undertaken as part of the CIVED survey showed a great deal of diversity in the subject-matter background, professional development, and work experience of those teachers involved in civic and citizenship education (Losito & Mintrop, 2001). In relation to teacher training in this field, research showed a rather limited and inconsistent approach to in-service training and professional development (Birzea et al., 2004; European Commission/EACEA/Eurydice, 2005, 2012, 2017). The results of previous national contexts surveys showed that, while in most participating countries, pre-service and in-service training was provided, in most cases, this provision was typically reported as non-mandatory (Schulz et al., 2010, 2018b). In some countries, data from previous cycles of ICCS have contributed to improving teacher education in terms of pre- and in-service training (Malak-Minkiewicz & Torney-Purta, 2021).

To assess the variety of different approaches to teacher education in the field at the level of education systems, the national contexts survey in ICCS 2022 collects data about the general requirements for becoming a teacher and about licensing or certification procedures for teachers. More specifically, the survey gathers data about the characteristics of teachers of civic

and citizenship education in terms of their subject area, the extent to which civic and citizenship education is part of pre-service or initial teacher education, and the availability of in-service or continuing professional development education, as well as the type of providers available for continuing education and professional development. Furthermore, the ICCS 2022 national contexts survey gauges whether different civic-related topics and skills are specified as goals for initial teacher education programs.

Assessment and quality assurance in civic and citizenship education

Comparisons of assessment and quality assurance for civic and citizenship education are difficult and complex due to the diversity of approaches to teaching this subject area across countries. Research in Europe shows that, in most countries, compared to other subject areas, monitoring and quality assurance in civic and citizenship education are often unconnected and carried out on a small scale (Birzea et al., 2004). However, over the last decade, some countries have started to implement nationwide assessments of civic and citizenship education (Ainley et al., 2013; European Commission/EACEA/Eurydice, 2017; Malak-Minkiewicz & Torney-Purta, 2021).

The national contexts survey includes questions about the extent and methods for assessment in the area of civic and citizenship education at the country's target grade, and how parents are informed about current aims and approaches regarding this field of learning.

4.3   The contexts of schools and classrooms

As in previous survey cycles, ICCS 2022 views students' learning outcomes in the field of civic and citizenship education not only as a result of teaching and learning processes but also as a result of their daily experiences at school (Council of Europe, 2018; European Commission/EACEA/ Eurydice, 2017; Scheerens, 2009, 2011). School experiences and their impact on learning outcomes are of particular importance in the context of civic and citizenship education, as they develop learning outcomes that are not confined to the area of cognitive achievement but also include attitudes and dispositions for engagement.

The possibility of establishing and experiencing relationships and behaviors based on openness, mutual respect, and respect for diversity, as well as the possibility of giving and asserting personal opinions, allow students to practice a democratic lifestyle, to begin exercising their own autonomy, and to develop a sense of self-efficacy (see Mosher et al., 1994; Pasek et al., 2008). Three key areas need to be considered for making the schools a *democratic learning environment:* teaching and learning, school governance and culture, and cooperation with the community. Creating a democratic learning environment in this way is referred to as the *whole school approach*, which aims to integrate democratic values into teaching and learning practices, decision-making processes and school governance, and the general school atmosphere (Council of Europe, 2018).

In view of the importance of school and classroom contexts for civic and citizenship education, ICCS 2022 administers the following types of questions to school principals, teachers, and students:

- Questions that measure principals' perceptions of school contexts and characteristics (school questionnaire)

- Questions about the background of teachers (age, gender, and their teaching of subject areas in general, and at the target grade) as well as a wide range of perceptions of school and classroom contexts (teacher questionnaire)

- Questions about students' perceptions of school and classroom contexts (student questionnaire)

As in ICCS 2016, several questions included in the school and teacher questionnaires are similar, with the aim of collecting data on the same issues from the perspective of teachers and school principals. In ICCS 2022, one question included in the student questionnaire was also included in the teacher questionnaire (*teachers' perceptions of good citizenship*).

4.3.1 The relations between schools and their local communities

There is evidence that students from non-urban school contexts often perform at lower achievement levels than those from urban schools (see, for example, Istrate et al., 2006; Webster & Fisher, 2000; Williams, 2005), although studies also observed variations in student achievement within urban contexts (Ramlackhan & Wang, 2021; Shores et al., 2020). Data on school location (urbanization) were used in multi-level analyses carried out in ICCS 2009 and in a few countries, urbanization was associated with student knowledge (see Schulz et al., 2010). In Latin American countries, there were significant differences in civic knowledge between rural and urban schools, however, these were largely due to differences in socioeconomic background of individual students and their schools (Schulz et al., 2011). As in previous ICCS surveys, the ICCS 2022 school questionnaire includes a question about the *size of the community* in which the school is located.

Schools and homes of students are located in communities that vary in their economic, cultural, and social resources, and in their organizational features. Inclusive communities that value community relations and facilitate active citizen engagement, especially if they are well resourced, may offer civic and citizenship opportunities for partnerships and involvement to schools and individuals. Social and cultural stimuli arising from the local community, as well as the availability of cultural and social resources, may influence young people's civic and citizenship knowledge, dispositions, and competences in relation to their roles as citizens (Jennings et al., 2009). The ICCS 2022 school questionnaire includes a question asking about principals' reports on *collaboration between the school and their local community*.

Differences in the quantity and quality of resources for citizenship learning available in the local area may have a dual effect. On the one hand, they may favor the organization of community-oriented projects and student participation in projects, which require the development of activities involving the community, both of which can contribute to developing skills and competences related to civic and citizenship education. On the other hand, community participation in the life of the school and in its various levels can be a factor for greater openness and democratization of the school itself. Furthermore, the level of resources may influence the provision of local support to schools, which in turn may impact the possibilities for school improvement (Reezigt & Creemers, 2005; Verhelst et al., 2020). In several countries participating in ICCS 2009 differences regarding the *availability of resources in the local community* were associated with students' civic knowledge (see Schulz et al., 2010). As in previous cycles, ICCS 2022 continues to measure the availability of resources in the local community in the school questionnaire.

As part of the community within which it is located, the school may be affected by issues and problems existing at the community level. Issues of social tension within the local community may influence students' social relationships and the quality of their social lives and everyday experiences, both outside and inside the school (L'Homme & Jerez Henríquez, 2010). In addition to that, students' actual opportunities to volunteer or participate in civic-related activities in the communities may be influenced by cultural, economic, political, and social factors at the local community level within which schools are located. A safe social environment is likely to enhance students' activities and participation in the local community. Conversely, issues creating

social tensions and conflicts in the local community may discourage students' involvement in civic activities. In ICCS 2009 and 2016, principals were asked about their *perceptions of social tensions in the community*, and the results showed a negative association between higher levels of perceived social tension and students' civic knowledge (Schulz et al., 2010). The ICCS 2022 school questionnaire continues to collect data on these aspects.

Research has illustrated the importance of *students' activities in the community* and their reflection on them for the construction and the development of knowledge and skills for active citizenship (Annette, 2008; Henderson et al., 2013). Schools' interactions with their local communities, and the links that have been established with other civic-related and political institutions, also have the potential of influencing student perceptions of their relationship with the wider community and of the different roles they may play in it (Annette, 2000, 2008; Potter, 2002; Torney-Purta & Barber, 2004). ICCS 2009 and 2016 showed that most of the students in almost all the participating countries had at least some opportunities to participate in such activities (Schulz et al., 2010, 2018b). ICCS 2022 continues to collect data reflecting principals' perceptions of the opportunities' students have to participate in activities carried out by the school in cooperation with external groups or organizations.

The teacher questionnaires from previous cycles also included a question on student participation in civic-related activities in the local community, which was similar to the question included in the school questionnaire about principals' view of students' opportunities to engage in the community. Results were generally consistent with those associated with principals' answers (Schulz et al., 2010; Schulz et al., 2018b). Comparisons between the principals' and teachers' reports provided a broader picture of what schools actually do in terms of community-related activities from two different perspectives and viewpoints. The ICCS 2022 teacher questionnaire uses a similar question as in the previous surveys, which asks teachers whether they had participated with their students in activities in *cooperation with external groups or organizations.*

4.3.2 The school as a learning environment

Students', teachers' and parents' participation in the school life and governance

Students' experience with civic learning at school not only depends on the teaching and learning developed at a classroom level, but also on the possibilities they have to experience schools and classrooms as a "democratic learning environment". Relevant factors include participation at the school level, the school and classroom climate, and the quality of the relationships within the school, between teachers and students as well as among students (Bäckman & Trafford, 2007; Council of Europe, 2018; Huddleston, 2007; Korkmaz & Erden, 2014; Thapa et al., 2013; Trafford, 2003). Results from ICCS 2016 showed substantial differences between countries in the extent to which students participated in school elections and to which they had opportunities to participate in school-decision making (Schulz et al., 2018b). ICCS 2022 asks principals to provide information about *students' participation in school governance, students' opportunities to contribute to decision-making processes at school* (e.g., opportunities to express views on matters of concern or attend meetings), and, as in previous cycles, *students' participation in school elections.* Furthermore, it gathers teachers' perceptions of *students' participation in decision-making processes at classroom level.*

Teachers' participation in school governance can be regarded as an important part of democratic governance processes at school and as a factor that potentially contributes to the characterization of the school as a democratic learning environment (Bäckman & Trafford, 2007; Council of Europe, 2018). Both the ICCS 2009 and 2016 teacher questionnaires comprised questions asking teachers about their participation in school governance. The ICCS 2022 teacher questionnaire

measures *teachers' willingness to take on responsibilities besides teaching*, as well as their *reflections on the extent to which they were willing to cooperate with other teachers to cooperate in conflict resolution within the school*, and to *engage in guidance and counselling activities*.

Empowering teachers to participate in decision-making at schools may contribute to active citizenship behavior within schools (Bogler & Somech, 2005). Since ICCS 2009, the school questionnaire included a question concerned with principals' perceptions of teacher participation in school governance. As in previous cycles, the ICCS 2022 school questionnaire collects information about principals' perceptions of *teacher participation in the school governance*.

Parental involvement and empowerment have been reported as positive factors in their contribution to students' academic achievement at school in general (Griffith, 1996). ICCS 2016 results showed that while there were high levels of parental involvement in communication processes, much lower levels were recorded for parental participation in decision-making processes (Schulz et al., 2018b). The ICCS 2022 school questionnaire asks principals about *parents' participation in decision-making processes*. Furthermore, the instrument contains a question about the *schools' provision of types of information for parents or guardians*.

School and classroom climate

School climate is widely regarded as an important factor in explaining student learning outcomes (Bryk et al., 2010; Wang & Degol, 2015). Scheerens and Bosker (1997) viewed school climate as a synonym for a school culture that is reflected in a range of variables related to student engagement, student absenteeism, student conduct and behavior, staff motivation, and relationships among students and between students and teachers within schools. More recent conceptualizations characterize school climate as encompassing four aspects: (1) academic climate and the prioritizing of successful learning, (2) interpersonal relationships within the school and with parents, (3) physical and emotional safety, and (4) organizational effectiveness (Powell et al., 2015; Wang & Degol, 2015).

The school climate and the quality of the relations within the school (student-teacher relations and student-student relations) may influence student academic achievement (Bear et al., 2014), their sense of belonging to the school community (Knowles & McCafferty-Wright, 2015). The importance of a positive school climate for engaging students in civic-related learning experiences has also been emphasized in research about civic learning (see, for example, Homana et al., 2006). Both ICCS 2009 and 2016 included items measuring students' perceptions of school climate. Results from ICCS 2016 showed perceptions of positive student-teacher relations with students' civic knowledge and support for gender equality and equal rights for all ethnic/racial groups in society (Schulz et al., 2018b; Schulz & Ainley, 2018). ICCS 2022 continues to gather data on students' perceptions of aspects related to their school climate including *students' perceptions of student-teacher relations* and *student interaction at school*. Furthermore, the ICCS 2022 teacher survey includes a question measuring *teachers' perceptions of issues of social tension at school*.

Classroom climate is a general concept, where definitions focus mainly on the level of cooperation in teaching and learning activities, fairness of grading, and social support. Democratic classroom climate focuses mainly on the implementation of democratic and liberal values in the classroom (Ehman, 1980; Hahn, 1999). A democratic classroom climate may help students to understand the advantages of democratic values and practices and may have a positive effect on their active assimilation (Perliger et al., 2006). Some studies have pointed out that, while teachers' or principals' perceptions of the classroom climate often tend to be unrelated to the students' intentions of future engagement, students' views of classroom climate are of critical importance

(Hooghe & Quintelier, 2013). Several studies have further shown that a positive school climate may encourage students to share their opinions and is important for the academic and civic development of students (Mager & Nowak, 2012).

Research findings have emphasized the importance of school and classroom contexts when investigating student engagement (see, for example, Reichert et al., 2018). According to Barber et al. (2015), students who perceive a favorable classroom climate are more likely to be interested in politics, to trust civic institutions, to feel politically efficacious, and to aim to participate in legal forms of political behavior.

The first IEA civic education study in 1971 measured the classroom climate among students and found evidence for an association with civic learning outcomes including civic knowledge (Torney et al., 1975). The CIVED survey also included a set of items measuring students' perceptions of what happened in their civic education classes. Six items were used to measure an index of open climate for classroom discussion (see Schulz, 2004) that had earlier been identified as a positive predictor of civic knowledge, and students' expectations to vote as an adult (Torney-Purta et al., 2001). The ICCS 2009 and 2016 surveys used a similar instrument that measured students' perceptions of what happens in their classrooms during discussions of political and social issues. Results of multivariate analyses confirmed the association of this construct with civic-related learning outcomes (Lin, 2014; Schulz et al., 2010, 2018b). The ICCS 2022 student questionnaire includes identical questions from previous surveys that are designed to measure *students' perceptions of openness in classroom discussions.*

The ICCS 2009 teacher questionnaire included a set of items measuring *teachers' perceptions of the classroom climate* and results showed positive associations with civic knowledge in a number of countries (Schulz et al., 2010). ICCS 2022 continues to collect data on these aspects.

Dealing with diversity at school

In view of the growing diversity of student populations, schools are increasingly requested to develop institutional and instructional strategies and practices that allow students from different backgrounds to develop positive attitudes toward diversity (Treviño et al., 2018). The ICCS 2022 school questionnaire collects data related to *strategies and initiatives to foster students' respect for different forms of diversity and to develop their intercultural skills.*

Research has shown how school principals and teachers play a key role in guaranteeing an inclusive school for all students regardless of their ethnic or cultural background (Billot et al., 2007; Leeman, 2003; Taylor & Kaur Sidhu, 2012), and has also emphasized how teacher education is essential for preparing teachers to work with diverse students (Álvarez Valdivia & Montoto, 2018; DeJaeghere & Zhang, 2008; Mushi, 2004; Tarozzi, 2014). The ICCS 2022 teacher questionnaire includes a question asking teachers about the frequency of different *activities to address diversity within classrooms.* In addition, the teacher questionnaire gathers data on perceptions of the *impact of having students from different cultural and ethnic backgrounds* and *having students from different social and economic backgrounds* in classrooms on teaching activities and the learning environment.

4.3.3 Delivery of civic and citizenship education at school

Literature on school improvement shows that enabling some degree of autonomy favors the success of improvement efforts (Honig & Rainey, 2012; Reezigt & Creemers, 2005; Steinberg, 2014). Research findings have highlighted that school autonomy, together with accountability measures at the national level, may support effective teaching and learning (Cheng et al., 2016; OECD, 2020). Studies also pointed out that, apart from the existence of regulations to foster

school autonomy at the national level, its effects also depend on the ways in which it is implemented by individual schools, and in particular school principals, within school contexts (Agasisti et al., 2013; Neeleman, 2019). The level of autonomy provided to schools may influence the way civic and citizenship education is delivered at the school level (in terms of curriculum planning, choice of textbooks and teaching materials, or assessment procedures and tools). The existence of national legislation, regulations, and standards concerning the results that students should achieve, does not necessarily imply that schools deliver similar programs and approaches to teaching (European Commission/ EACEA/Eurydice 2007, 2012), and the time allocated to citizenship education, teacher qualifications, and the support principals provide to civic and citizenship education within schools may vary (Keating & Kerr, 2013; Keating et al., 2010; Malak-Minkiewicz & Torney-Purta, 2021). As in previous cycles, the ICCS 2022 school questionnaire continues to include items measuring *principals' reports on school autonomy for the delivery of civic and citizenship education.*

Many studies have shown that curricular approaches to the teaching of civic and citizenship education vary considerably across countries. Civic and citizenship education is taught as a separate subject, is integrated in subjects related to human and social sciences or taught in all school subjects and is intended as a cross-curricular area (Ainley et al., 2013; Birzea et al., 2004; Cox et al., 2005; Council of Europe, 2018; European Commission/ EACEA/Eurydice, 2005, 2012, 2017). ICCS 2009 and 2016 results illustrated that these different approaches may coexist within the same schools (Schulz et al., 2010, 2018b). Principals from schools surveyed in ICCS 2009 and in ICCS 2016 also provided interesting information on how they rated the most important aims of civic and citizenship education. Results showed notable differences across participating countries, however, school principals tended to regard the most relevant aims of civic and citizenship education to be those related to the development of knowledge and skills (Schulz et al., 2010; Schulz et al. 2018b). A similar question was also included in the teacher questionnaire and the results were very similar to those from the survey of school principals (Schulz et al. 2010, 2018b).

As in previous survey cycles, the ICCS 2022 school questionnaire includes a set of items asking principals about *how civic and citizenship education is delivered at their schools* and about their *perceptions of the importance of aims for civic and citizenship education.* This question about the importance of different aims for civic and citizenship education is also included in the ICCS 2022 teacher questionnaire.

The ICCS 2009 teacher questionnaire included two set of items related to the way civic and citizenship education is delivered at the school level. ICCS 2009 also included two questions asking teachers about their perceptions of the importance of the aims of civic and citizenship education, and about how specific responsibilities for civic and citizenship education are assigned within the school. As in previous survey cycles, the ICCS 2022 teacher questionnaire includes a set of items measuring *teachers' perceptions of the delivery of civic and citizenship education at school.*

Secondary analyses of ICCS 2009 data, have shown how different profiles of teachers' beliefs are associated with teacher background and national contexts, and that only a small proportion of teachers believe that it is important to encourage students to participate in political or civic activities (Reichert & Torney-Purta, 2019). ICCS 2022 asks teachers to rate the importance of different behaviors to become good adult citizens, using identical items as those used to measure students' perceptions of good citizenship behaviors in the student questionnaire.

CIVED 1999 asked students to report how much they had learned about civic issues at school. Students' answers to how much they had learned about the importance of voting at school were used as a (positive) predictor to explain variation in expected participation in elections (Torney-Purta et al., 2001). The ICCS 2016 student questionnaire included a question asking students to assess how much they have learned in school about seven different political or social issues, and results showed associations with their civic interest, educational aspirations, and civic knowledge (Schulz et al., 2018b). ICCS 2022 continues to gather data on *students' perceptions of civic learning* with slightly modified item sets.

The European student questionnaire in ICCS 2009 and 2016 asked students about their *opportunities to learn about Europe at school,* and results showed that majorities of students across participating countries reported learning about a wide range of issues (Kerr et al., 2010; Losito et al., 2018). The same question is included in the European student questionnaire in ICCS 2022.

Global citizenship education (GCED) which aims at developing the learner's competence as a community member and a global citizen, is increasingly viewed as an important aspect of citizenship education (Davies, 2006; Guo, 2014). GCED is intended to be interdisciplinary and holistic, and therefore should be represented throughout the curriculum. In view of this aim, it is argued that it needs to involve the whole school community rather than just being a teacher-driven activity (UNESCO, 2015). ICCS 2022 collects data from principals about *school activities related to global citizenship.*

Increasingly, school activities related to environmental sustainability are viewed as an important part of citizenship education (Huckle, 2008). The concept of "sustainable schools" (Henderson & Tilbury, 2004) refers to initiatives to establish learning environments that respect the principles of sustainable development and aim to enable students to experience these principles directly. Adopting school-level measures to make schools more climate-friendly is noteworthy as an initiative within the context of UNESCO's activities to promote education for sustainable development (Gibb, 2016). The ICCS 2016 school questionnaire asked principals about the initiatives undertaken by the schools in order to become more environmentally friendly *(Principals' reports on environment-friendly practices at school).* The ICCS 2022 school questionnaire includes a modified version of this question with an increased focus on education for sustainable development.

In view of an increased recognition of the importance of raising awareness of the impact of human behavior on the environment (Kyburz-Graber, 2013; Lundholm et al., 2013), the ICCS 2016 teacher questionnaire included a question that asks about teachers' involvement in initiatives and programs related to environmental sustainability (UNESCO, 2012a). Results from ICCS 2016 showed that the most common activities, across countries, were those related to water and energy consumption, while lower percentages were recorded for signing a petition, writing letters to a magazine/newspaper, and posting on social networks (Schulz et al., 2018b). ICCS 2022 continues to gather data reflecting *teachers' perceptions of activities related to environmental sustainability.*

Research has shown widespread use of ICT in secondary education, as well as considerable differences in the equipment of schools with ICT resources (see Fraillon et al., 2014, 2019; Law et al., 2008). ICCS 2022 asks principals about training activities undertaken at school, on the use of digital technologies for civic and citizenship education, and teachers about *undertaking activities with target grade students related to a critical and responsible use of digital technologies for civic and citizenship education.*

4.3.4 Teaching of civic-related subjects

As in previous cycles, the ICCS 2022 teacher questionnaire includes an international option with questions about civic and citizenship education at school and the teaching practices the teacher adopted in this learning area. This part of the questionnaire is only completed by teachers of subjects that national centers defined as related to civic and citizenship education by considering their national curricula for this learning area.

Studies have shown that teacher preparation is one of the most important factors influencing student achievement (see OECD, 2009, 2014b). Within civic and citizenship education, the provision of teacher training constitutes an ongoing challenge for educational policies, as in many countries no specific training is provided to teachers in this area (Birzea et al., 2004; European Commission/EACEA/Eurydice, 2005, 2012, 2017). Following a classification developed by Shulman (1986, 1987), teacher knowledge may either be related to topics in the area of civic and citizenship education (content knowledge), or to teaching methods and approaches (pedagogical knowledge) of which there are a wide range of in this learning area (Munn et al. 2012). ICCS 2016 included a question on teachers' participation in professional development activities relating to the teaching of civic and citizenship education and ICCS 2022 continues to collect data on teachers' self-reported *initial preparation and in-service training to teach civic-related topics* and their *attendance at training courses on teaching approaches and methods.*

Results from ICCS 2009 showed that teachers of civic-related subjects tended to be most confident about teaching citizens' rights and responsibilities, and human rights, while they were less confident in teaching topics related to the economy, business, and legal institutions (Schulz et al., 2010). Results from ICCS 2016 suggested that, on average, most teachers felt very well or reasonably well prepared to teach almost all the topics and skills they were asked about. As in ICCS 2009, the highest average percentages across countries were recorded for teaching "citizens' rights and responsibilities" and "equal opportunities for men and women". The lowest percentages were recorded for teaching "the global community and international organizations" and "the constitution and political systems". The study also found evidence of large variation in these percentages across participating countries. ICCS 2022 continues to gather data on teachers' *sense of preparedness to teach civic-related topics.* A question using the same teaching topics, aims to measure teachers' reports on *opportunities to learn about civic-related topics* students at the target grade have at school.

It has been suggested that the delivery of civic and citizenship education should entail innovative pedagogies, engaging and interactive learning environments, and the use of different sources to develop students' knowledge skills and attitudes related to this area of learning (European Commission/EACEA/Eurydice, 2017; Council of Europe, 2018). ICCS 2016 asked teachers about their use of specific training methods during their lessons in civic-related subjects. ICCS 2022 continues to ask teachers about their *civic-related teaching and learning activities* in their classrooms (such as "interactive teaching," "traditional teaching," and discussing controversial issues) and about the *use of different sources in the planning of civic and citizenship education.* In addition to this, the ICCS 2022 teacher questionnaire also includes a question focused on teacher reports on classroom *activities that address global issues* (such as collective engagement to achieve worldwide improvements or social and economic interactions at the international level).

Assessment is a complex issue for civic and citizenship education: the wide range of learning objectives and topics included in this area and the different contexts and approaches for its delivery, imply the need to adopt different assessment methods to measure students' knowledge, skills, the development of values and attitudes, and their active engagement in school life and in the local community (European Commission/EACEA/Eurydice, 2012, 2017; Torney-Purta et al.,

2015). The ICCS 2009 and 2016 teacher questionnaires included a question about the *use of different assessment tools in the teaching of civic and citizenship education.* ICCS 2022 continues to gather this information as part of its teacher survey.

4.4 The home and peer context

There are many variables related to home and peer contexts that potentially could influence the development of young people's knowledge, attitudes, and dispositions for engagement. Relevant factors include interactions with family and peers, educational resources in the home (including digital technologies), culture, religion, values, use of the test language at home, the relationship status the young person has within the family, parental education, income and employment levels, access to different forms of media, and the quality of school–home connections. Furthermore, it is also important to consider opportunities for civic-related activities that young people can exercise.

4.4.1   Family background

Numerous research findings have emphasized the crucial role family background plays in the development of dispositions toward engagement and participation of young people in citizenship activities (Bengston et al., 2002; Ekman & Zetterberg, 2011; Grusec & Kuczynski, 1997; Janoski &Wilson, 1995; Lauglo, 2011; Renshon, 1975; Vollebergh et al., 2001). There is a general consensus that family background influences the political development of adolescents (Castillo et al., 2014; Sherrod et al., 2010). Higher levels of socioeconomic background can potentially provide a more stimulating environment for developing civic-related dispositions and enhance the educational attainment of adolescents. These factors, in turn, foster political involvement.

Many studies of political socialization and participation have highlighted the importance of the extent to which families and individuals can access different forms of capital. According to Bourdieu (1986), economic capital can increase other forms of capital, and it is possible to distinguish between human, cultural, and social capital. Whereas *human capital* refers to an individual's skills, knowledge, and qualifications, *cultural capital* refers to those "widely shared, high-status cultural signals (attitudes, preferences, formal knowledge, and behaviors) used for social and cultural exclusion" (Lamont & Lareau, 1988, p. 156). *Social capital* is conceptualized as a societal resource that links citizens to one another so that they can achieve goals more effectively (see Stolle, 2002).

Putnam (1993, p. 185) viewed social capital as the "key to making democracy work" and built on Coleman's (1988) concept of social capital as being generated by the relational structure of interactions inside and outside the family, which in turn facilitate the success of an individual's actions as well as learning outcomes. [10] Putnam (1993) regarded three components of social capital (social trust, social norms, and social networks) as a "virtuous cycle" that provides a context for an individual's successful cooperation with others and participation in a society.

The concept of social capital has been criticized for its lack of clarity (Woolcock, 2001) given the wide range of factors it includes and the problems of establishing suitable indicators. Within the context of ICCS, however, the concept of social capital is viewed as helpful because it describes mechanisms that help to explain why some students have higher levels of civic knowledge and engagement than others. Measures of different aspects of social capital (trust, norms, and social

---

10   Putnam's view of social capital, however, is narrower and more specific than Coleman's concept. Putnam saw social capital as a collective resource and stated that horizontal interactions tend to foster trust and participation, whereas vertical relationships lead to distrust and disengagement (Stolle, 2002).

interaction) include both attitudinal and background variables. Some variables reflecting social capital are related to the home environment, in particular interactions with parents, peers, and media. Other relevant variables are interpersonal trust and voluntary participation in civic-related organizations (Chapter 3, Civic Attitudes and Engagement Framework).

Variables related to the home environment that are antecedents of student learning and development and are measured through the student background questionnaire include: (i) parental socioeconomic status, (ii) cultural and ethnic background, (iii) parental interest in political and social issues, and (iv) family composition. As in previous cycles, ICCS 2022 collects data on process-related variables that reflect social interactions outside of school (for example, discussing political and social issues with parents and peers, as well as accessing information through media).

Socioeconomic status

Socioeconomic status (SES) is widely regarded as an important explanatory factor that influences learning outcomes in many different and complex ways (Sirin, 2005). There is a general consensus that SES is represented by income, education, and occupation (Gottfried, 1985; Hauser, 1994) and that using all three variables is better than using only one indicator (White, 1982). However, there is no consensus among researchers regarding which measures should be used in any one analysis (Entwistle & Astone, 1994; Hauser, 1994) and there have been calls for a more theory-based approach to the measurement of SES (Harwell, 2018). In international studies, the additional caveats imposed on the validity of background measures and the cross-national comparability of family background measures present ongoing challenges for researchers in this area (see Buchmann, 2002; Brese & Mirazchiyski, 2013; Caro & Cortés, 2012).

There is evidence from national studies of civic and citizenship education that student's civic knowledge is positively associated with their socioeconomic home background (ACARA [Australian Curriculum, Assessment and Reporting Authority], 2017; Lutkus & Weiss, 2007; Niemi & Junn, 1998). Similarly, international studies of civic and citizenship education conducted by the IEA illustrated the consistent relationship between socioeconomic background and civic learning (Torney et al., 1974; Torney-Purta et al., 2001; Schulz et al. 2010, 2018b). As in previous study cycles, the student questionnaire for ICCS 2022 includes three different types of data collection to measure the *students' parental socioeconomic background*:

- Data on *parental occupation* are collected through open-ended student reports on mother's and father's jobs and coded according to the International Standard Classification of Occupations (ISCO-08) framework (International Labour Organisation, 2012). Subsequently, the codes will be scored using the international socioeconomic index (SEI) of occupational status, in order to obtain measures of socioeconomic status (Ganzeboom et al., 1992).

- Data on *parental education* are collected through closed questions in which educational levels are defined by the International Standard Classification of Education (ISCED-2011) (UNESCO, 2012b) and then adapted to the national context.

- Data on *home literacy environment* are collected through a question about the number of books at home.

Cultural and ethnic background

International studies have confirmed differences based on language and immigrant status in reading (see, for example, Elley, 1992; Stanat & Christensen, 2006) and mathematics (Mullis et al., 2000). Research in Western industrialized countries has shown that students from immigrant families, especially those who have arrived recently, may tend to lack proficiency in the language of instruction and are unfamiliar with the cultural norms of the dominant culture. However, studies have also shown that these effects strongly depend on the national contexts. Research also suggests that immigrant status, ethnic background, and language can have effects on learning outcomes even after controlling other contextual variables such as socio-economic background (see, for example, Dimitrova et al., 2016; Dronkers et al., 2012; Fuligni, 1997; Kao, 2001; Lehmann, 1996; Schulz et al., 2010; Stanat & Christensen, 2006). Results from ICCS 2009 and 2016 showed that immigrant background and language use were both associated with civic-related learning outcomes, in particular, in countries with relatively large proportions of immigrant students (see Schulz et al., 2010, 2018b). ICCS 2022 continues to collect data on the cultural/ethnic background in its student questionnaire:

- *Country of birth* (mother, father, and student): This information can be used to distinguish "native," "first-generation" (parents born abroad, but student born in country), and "immigrant" (student and parents born abroad) students.

- *Language of use at home:* Students are asked which language they use mainly at home, and responses provide an indicator of the dominant use of the assessment language or another language.

- *Students' use of multiple languages at home:* Students are asked whether they use more than one language at home (optional question for countries).

- *Student self-reports on ethnicity:* Students are asked whether they belong to ethnic groups that exist in society (optional question for countries).

Parental interest in political and social issues

There is evidence that parental involvement may play a role in mediating socioeconomic inequalities in its effect on promoting young people's learning (Caro, 2018). With regard to civic learning, it has also been shown that those students whose parents engage with them in discussions about political and civic issues tend to have higher levels of civic knowledge and engagement (see, for example, Lauglo & Øia, 2008; Richardson, 2003). The ICCS 2009 survey asked students to assess the extent of their *parents' interest in political and social issues*, and results showed positive associations with some learning outcomes, particularly those related to expected political engagement as adults (Schulz et al., 2010, 2015). ICCS 2016 included the same question, complemented by an item measuring the students' own interest in political and social issues, and data showed associations with several indicators of engagement (Schulz et al., 2018b). ICCS 2022 continues to gather data about parental interest in political and social issues using the same items as in the previous cycle.

Family composition

Family structure represents an important factor of socialization that may affect learning outcomes. For example, research in the United States has shown that students from single-parent families perform less well on measures of achievement than those from two-parent households, a finding

which has been interpreted as being associated with economic stress and lack of human or social capital in the household (McLanahan & Sandefur, 1994; Seltzer, 1994). However, the effects of single-parent upbringing on learning outcomes have been generally considered as relatively small (for a review, see Ginther & Pollak, 2004; Marjoribanks, 1997).

Using a question that was an option for countries, ICCS 2009 and 2016 measured *family composition* by asking students about the composition of their respective household, that is, parents, guardians, siblings, relatives, and/or other persons. As in the previous surveys, the same question (with modifications) continues to be included as an international option in the ICCS 2022 student questionnaire.

4.4.2 Student activities out of school

Students' discussion of political and social issues with parents and peers

Research has shown associations between the frequency of political discussions and learning outcomes (Lauglo, 2011; Schulz, 2005; Richardson, 2003). Analyses of ICCS 2009 and 2016 data also suggested associations between the frequency of participation in discussions about political and social issues, civic knowledge, as well as civic interest (Lauglo, 2016; Schulz et al., 2010; Schulz et al., 2018b). The ICCS 2022 student questionnaire continues to collect data on the *level of political communication* among lower-secondary students.

Media information

One popular explanation for the waning of civil society in the United States is the negative effect of television viewing (Putnam, 2000), which, it is argued, leads to decreasing interest, sense of efficacy, trust, and participation (see also Gerbner, 1980; Robinson, 1976, Van Aelst, 2017). However, research also shows that media use (in particular, for accessing information) tends to be positively related to political participation and that there is no conclusive evidence for a negative relationship between media use and political participation or political trust (Aarts et al., 2012; Norris, 2000). More recent research indicates that use of social media has more consistent effects on political mobilization than television (see, for example, Boulianne et al., 2020). Further, there is evidence that while consumption of news from information/news websites tends to be associated with higher levels of political trust, use of social media for information is linked to lower trust levels (Ceron, 2015).

Data from the CIVED study in 1999 showed that media information obtained from television news reports is a positive predictor of civic knowledge and indicates expected participation in elections (Torney-Purta et al., 2001). ICCS 2009 results also suggested that students' civic knowledge was positively associated with viewing television news, reading newspapers, and getting information from the internet (Schulz et al., 2010). The student questionnaire for ICCS 2016 included several items measuring the frequency of students' use of media to obtain information about political and social issues. ICCS 2016 results showed decreases in the use of newspapers as a way of accessing information, since 2009 (Schulz et al., 2018b). ICCS 2022 includes items designed to measure *students' use of media for obtaining information* about civic-related issues. Given its more active nature, students' civic involvement through social media is described as an indicator of engagement in *civic attitudes and engagement framework* (Chapter 3).

Students' use of digital devices

Given the increasing importance of ICT for civic engagement, it is also of interest to gather information about the frequency with which students use digital devices. Data derived from this type of question may be influenced by family background and home resources (see Fraillon et al., 2014, 2019). The ICCS 2022 student questionnaire includes an optional question asking about *students' frequency of using different types of digital devices* (computer, tablets, and smartphones) at home.

Religious affiliation and engagement

Researchers have suggested that religious affiliation may help to foster political and social engagement (see Guo et al., 2013; Perks & Haan, 2011; Verba et al., 1995), because religious organizations provide networks focused on political recruitment and motivation. However, there is also evidence for negative effects of religious affiliation on democratic citizenship, as reflected in lower levels of political knowledge and engagement, and feelings of efficacy among strongly religious people (Porter, 2013; Scheufele et al., 2003). In the case of young people, religious affiliation and participation can be seen as part of the home environment that may influence the process of civic-related learning.

Results from ICCS 2009 and 2016 showed that students reporting more frequent attendance of religious services were more supportive of religious influence in society (Schulz et al., 2009, 2018b). As part of its international option about religion, ICCS 2022 continues measuring *students' religious affiliation* and *students' attendance at religious services* using the same questions as in the two previous survey cycles.

4.5 Student characteristics

Individual students' development of civic understandings, attitudes, and dispositions can be influenced by a number of characteristics, some of which link to family background. Antecedents at this level, collected through the student questionnaire, include age, gender, and expected educational qualifications.

Students' age

Research has found that, during adolescence, civic knowledge and (at least some forms of) engagement increase with age (Amadeo et al., 2002; Hess & Torney, 1967). However, there is also evidence that feelings of trust in the responsiveness of institutions and willingness to engage in conventional forms of active political participation decrease toward the end of secondary school (Schulz, 2005). ICCS 2009 and 2016 confirmed earlier cross-sectional research based on data from within grade sample data, which showed age to be negatively correlated with students' civic knowledge, particularly in countries with higher rates of grade repetition, because the students in the class who are older are typically those who have repeated a grade because of previous low achievement (Schulz et al., 2010). While the study is not designed to address age effects on the development of civic knowledge, attitudes, and engagement, ICCS 2022 continues to gather data about *students' age* as part of the collected information on their background.

Students' gender

The first IEA Civic Education Study in 1971 found considerable differences between male and female students regarding cognitive achievement, with male students tending to have higher civic knowledge scores (Torney et al., 1975). The IEA's 1999 CIVED survey, however, presented a different picture: whereas in some countries males showed (slightly and not significantly) higher average scores, in other countries females were performing better (although only one country reported the difference as significant). Interestingly, greater differences in favor of males were found in the follow-up study of upper secondary students (Amadeo et al., 2002). CIVED also showed that differences between male and female students were usually larger on indicators of civic engagement: in most countries, males tended to have higher levels of political interest and expected participation. Gender differences were also important with regard to attitudes toward immigrants' and women's rights (Amadeo et al., 2002; Torney-Purta et al., 2001).

ICCS 2009 showed a difference in favor of female students having higher civic knowledge scores (Schulz et al., 2010), which was a change from CIVED 1999. This change might be interpreted as associated with the broadening of the assessment framework to include a greater emphasis on aspects of reasoning. Similar differences in the civic knowledge of male and female students were reported in ICCS 2016 (Schulz et al., 2018b). ICCS 2009 and 2016 also confirmed findings from CIVED 1999 that showed gender differences for indicators of civic attitudes and engagement (Fraillon et al., 2014; Kerr et al., 2010; Schulz et al., 2010, 2011, 2018b). ICCS 2022 continues to gather data about *students' gender*. However, in view of possible changes in requirements for the collection of information about gender, countries will have the option of adapting this question by including a third gender category.

Students' expected educational attainment

In the first two IEA studies of civic education, expected years of future education were important predictors of civic knowledge (Amadeo et al., 2002; Torney et al., 1975, 2001). This variable reflects individual aspirations. However, responses can also be influenced by parent or peer expectations and/or, in some education systems, by limitations brought about by students studying in programs that do not give access to university studies.

ICCS 2009 and 2016 used a similar question that asked students to indicate their expected level of education. Results from the two first ICCS cycles confirmed that this variable is positively associated with civic knowledge (Schulz et al., 2010, 2018b). The ICCS 2022 student questionnaire includes the same question as previous ICCS surveys to gather data about *students' educational aspirations*.

5. ASSESSMENT DESIGN

5.1 The ICCS 2022 instruments

The ICCS 2022 instruments collect outcome data, as well as contextual variables. Given the specific nature of a study on civic and citizenship education, outcome variables are assessed through cognitive test materials and a student questionnaire. Contextual data that explain variation in outcome variables are collected through student, teacher, and school questionnaires, as well as through the national contexts survey.

Table 2 shows the instruments used in ICCS 2022 together with their respective assessment mode (computer-based assessment = CBA; paper-based assessment = PBA), length and type of respondent. For student instruments, countries chose the standard assessment mode (computer or paper) for all respondents. For teacher and school questionnaires, countries decided for each instrument whether to administer them only on paper, only in online mode, or depending on the respondent's preference, in either of the two modes. The national contexts survey was only offered in online format to national centers.

Table 2: ICCS 2022 instruments

Instrument	Mode	Length	Respondent
International cognitive test	CBA or PBA	45 min	Student
International student questionnaire	CBA or PBA	40-50 min	Student
European questionnaire	CBA or PBA	~20 min	Student
Latin American questionnaire	CBA or PBA	~10 min	Student
Teacher questionnaire	Online and/or paper	~30 min	Teacher
School questionnaire	Online and/or paper	~30 min	Principal
National contexts survey	Online	N/A	NRC

Note: NRC = national research coordinator or designate.

The ICCS 2022 test of civic knowledge also includes 55 items from five clusters that were used in ICCS 2016 in order to estimate changes over time for those countries participating in both surveys. These 55 items were integrated across the eleven ICCS 2022 test item clusters (comprising 121 items in total) that are common to both computer-based and paper-based assessments. This was done to ensure an appropriate content balance within each cluster given that, for this cycle, approximately one-half of the newly developed items related to two areas of increased focus: global citizenship and sustainable development. Larger numbers of items reflecting these two areas have also been included in the student, teacher, and school questionnaires.

The computer-based test instrument included three clusters of items in addition to the eleven clusters common to both the computer-base and paper-based tests. The computer-based test instrument consequently comprised 14 clusters and the paper-based instrument comprised 11 clusters. Each of the three clusters of items, unique to the computer-based instrument, comprised five items associated with a narrative theme. In each cluster, at least

one item provided some form of dynamic feedback to students that could not be achieved in a paper-based testing environment.

Table 3 shows the numbers and percentages of items from ICCS 2016 and those newly developed for ICCS 2022. For the student test and the European student questionnaire more than half of the item material was newly developed for the third ICCS cycle. For the teacher and school questionnaires slightly less than half of the content was added in ICCS 2022. For the student questionnaire, about one third of the item material addresses the areas of global citizenship and sustainable development. Due to delays with the implementation of the field trial in all Latin American ICCS 2022 countries caused by the COVID-19 pandemic, no field trial data were available for an evaluation of newly developed item material for the ICCS 2022 Latin American student questionnaire. For this reason, this regional instrument consists almost entirely of material that was included in the previous cycle.

Table 3   Numbers and percentages of items from ICCS 2016 and those newly developed for ICCS 2022 contained within the main survey instruments

Instruments	ICCS 2016 link items	New ICCS 2022 items	Total
International student test (PBA)	55 (45%)	66 (55%)	121
International student test (CBA)	55 (40%)	81 (60%)	136
International student questionnaire	125 (68%)	60 (32%)	185
European student questionnaire	42 (48%)	46 (52%)	88
Latin American student questionnaire	38 (84%)	7 (16%)	45
International teacher questionnaire	54 (55%)	45 (45%)	99
International school questionnaire	75 (58%)	54 (42%)	129

Note: The table does not include optional instrument parts (such as questions for teachers of civic–related subjects or other optional items). The ICCS 2022 new CBA test items comprise 66 items common to the PBA test and 15 items unique to the CBA test.

5.2 Item types

The ICCS 2022 instruments include a range of different item types in order to assess a diversity of cognitive, affective-behavioral or contextual aspects, which vary across instruments.

The cognitive test contains the following item types:

- *Multiple-choice items* (MC): Each item has four response options, one of which is the correct response and the other three of which are distractors.

- *Open-ended response items* (OR): Students are requested to write a short response to an open-ended question. The responses are scored by scorers working for the national centers according to international scoring guides.

- *Drag & Drop items* (DD): Students are requested to drag elements within a computer-based environment and drop them in other places in response to a question.

- *Large-task items* (LT): Students provide answers by selecting different options on a computer in response to more complex tasks (e.g., through putting together web-page information) and receive some form of dynamic feedback based on their selections.

Table 4   Item formats in the ICCS 2022 student test

Item format	Common items across modes	Computer-enhanced items
MC	108	3
OR	13	9
DD		1
LT		3
Total	121	16

Table 4 illustrates the distribution of item formats in the ICCS 2022 survey. For this cycle, the option for a computer-based delivery also includes a number of computer-enhanced items that are only delivered on a computer and will not be comparable with any paper-based items. For items in clusters that are common across both delivery modes (computer- and paper-based) about 10 percent of the items are constructed response items and 90 percent have a multiple-choice format, DD and LT formats are only found as part of the computer-enhanced items that also include items with an MC or CR format.

As in ICCS 2009 and ICCS 2016, the student, teacher, and school questionnaires for ICCS 2022 include the following item types that were displayed in similar ways on both computer and on paper:

- *Likert-type items* (LK): For each item, respondents are asked to rate a number of statements, typically on a four-point scale. For most of these items, the rating scale ranges from (1) strongly agree to (4) strongly disagree. The rating scales for other questions indicate frequencies (never, rarely, sometimes, often) or levels of interest, trust, or importance.

- *Multiple-response items* (MR): Respondents are asked to indicate the three aspects they view as most important.

- *Categorical response items* (CR): Respondents are required to choose one out of two or more response categories that they view as most appropriate. These questions are primarily used for collecting contextual information (for example, on gender, educational level of parents, books in the home, subjects taught at school, and public or private school management).

- *Open-ended response items* (OR): Respondents are asked to write a short response that is coded by the national centers; these items are used only for collecting information on parental occupation as part of the international student questionnaire.

5.3 Coverage of framework domains

The ICCS 2022 item material was developed to provide adequate coverage of the different types of domains and areas specified in the assessment framework. Given that in ICCS 2022 there are distinct frameworks for cognitive and affective-behavioral measures, the coverage is reviewed separately for each of these two types of measures.

The coverage of cognitive and content domains shown in Table 5 illustrates how many of the items in both paper-based assessments (PBA) and computer-based assessments (CBA) relate to each cognitive and content domain. The highest number of items is related to the content domain *civic principles*, followed by *civic institutions and systems* and *civic participation*, while the lowest number of items is related to *civic roles and identities*. About two thirds of the common items relate to the cognitive domain *reasoning and applying* and one third to *knowing*. The 15 computer-enhanced items are all related to the content domain *civic participation* and the cognitive domain *reasoning and applying*.

Table 5   Coverage of cognitive and content domains in ICCS 2022 test

	Civic institutions and systems	Civic principles	Civic participation	Civic roles and identities	Total in cognitive domain
Knowing	9	22	5	6	42
Reasoning and applying	21	29	PBA: 22 CBA: 38	7	PBA: 79 CBA: 95
Total in content domain	30	51	PBA: 27 CBA: 43	13	PBA:121 CBA: 137

Note: Where not displayed separately, item numbers are equal for CBA and PBA.

Table 6 illustrates the coverage of affective-behavioral areas across the three student questionnaires (international, European, and Latin American). Within the area *attitudes*, for both the international and European student questionnaires, most items relate to the subarea *attitudes toward civic issues and institutions*, in the Latin American questionnaire most items pertain to the subarea *attitudes toward civic principles*. Generally, the subarea *attitudes* toward civic role and identities has somewhat less coverage across instruments. For the area *engagement*, most items reflect *expected future engagement*, followed by *experiences with engagement*, while the lowest number of items is related to *dispositions toward engagement*.

Table 6   *Coverage of affective-behavioral areas and subareas in the ICCS 2022 student questionnaires*

Affective-behavioral areas and subareas	International student questionnaire	European student questionnaire	Latin American student questionnaire
Attitudes			
Attitudes toward civic principles	24	24	30
Attitudes toward civic issues and institutions	49	41	7
Attitudes toward civic roles and identities	13	18	8
Engagement			
Experiences with engagement	17	-	-
Dispositions toward engagement	8	-	-
Expected future engagement	26	-	-

Note: Optional items are not included.

5.4 The ICCS 2022 test design and the described achievement scale

For the student test, ICCS 2022 uses rotated designs for test administration, making it possible to include more test material and thus ensure greater coverage of the assessment framework without increasing the testing time for each student. This procedure also enables enough score points to be generated to provide the basis for comprehensive descriptions of the scale. Rotating the clusters throughout the booklets (or modules when delivered on a computer) ensures that the different tests are linked.

In countries conducting paper-based delivery, eleven test clusters are administered in a rotated design across eleven booklets, with each cluster appearing in one of the three possible positions at the beginning, in the middle, or at the end of the booklet (Table 7). The design for computer-based delivery follows the same principles, however, only 14 clusters are administered (including three clusters consisting of computer-enhanced items, displayed on a shaded background in Table 8), each also appearing once in each of the three possible positions (Table 8).

As ICCS 2022 is the first cycle of ICCS to include computer-based administration, it is necessary to review and adjust for mode effects across paper-and computer-based delivery (both across ICCS 2022 participants and compared to the paper-based assessment in ICCS 2016). After a first review using data from a mode-effects study as part of the ICCS 2022 field trial, results showed some limited mode effects. Consequently, it will be necessary to confirm these results and provide a basis for estimating potential adjustments to make data across modes fully comparable. Therefore, the ICCS 2022 main survey includes a bridging study: In countries completing the computer-based assessment that also participated in the previous cycle, an additional separate sample of students complete the test on paper. The paper-based test instrument used in the bridging study comprises only the first eight clusters of the paper-based assessments, which are administered in a similarly rotated design (Table 9).

Table 7   Main survey test booklets design (paper-based assessment)

Booklet	Position		
	First	Second	Third
1	C1	C2	C6
2	C2	C3	C7
3	C3	C4	C8
4	C4	C5	C9
5	C5	C6	C10
6	C6	C7	C11
7	C7	C8	C1
8	C8	C9	C2
9	C9	C10	C3
10	C10	C11	C4
11	C11	C1	C5

Table 8   Main survey test booklets design (computer-based assessment)

Booklet	Position		
	First	Second	Third
1	C1	C12	C9
2	C2	C13	C10
3	C3	C14	C11
4	C4	C1	C12
5	C5	C2	C13
6	C6	C3	C14
7	C7	C4	C1
8	C8	C5	C2
9	C9	C6	C3
10	C10	C7	C4
11	C11	C8	C5
12	C12	C9	C6
13	C13	C10	C7
14	C14	C11	C8

Table 9   Main survey test booklets design (bridging study)

Booklet	Position		
	First	Second	Third
1	C1	C2	C4
2	C2	C3	C5
3	C3	C4	C6
4	C4	C5	C7
5	C5	C6	C8
6	C6	C7	C1
7	C7	C8	C2
8	C8	C1	C3

Test items will be scaled using IRT (item response theory) (Bond & Fox, 2007; Hambleton et al., 1991) specifically with the One-Parameter Rasch model (Rasch, 1960). The cognitive test items for ICCS 2022 will be scaled to obtain *civic knowledge scores*. This scale will cover student knowledge and understanding encompassing the four content domains (*civic systems and society*, *civic principles*, *civic participation*, and *civic roles and identities*) and the two cognitive domains (*knowing* and *reasoning and applying*). Items will be used to describe students' knowledge and understanding at different levels of student proficiency. ICCS 2016 trend items will provide the basis for equating civic knowledge scores across cycles.

As in the previous survey cycles, ICCS 2022 test items were designed to provide the basis for deriving a described scale of civic knowledge, which has consisted, since ICCS2016, of four levels of proficiency. The proficiency-level descriptions are syntheses of the item descriptors within each level. They describe a hierarchy of civic knowledge in terms of increasing sophistication of content knowledge and cognitive process. Because the scale was derived empirically rather than from a specific model of cognition, increasing levels on the scale represent increasingly complex content and cognitive processes as demonstrated through performance. The scale does not, however, simply extend from simple content at the bottom to reasoning and analyzing at the top.

The cognitive processes of *knowing* and of *reasoning and applying* can be seen across all four levels of the scale, depending on the content issues to which they apply. The scale includes a synthesis of the common elements of civic and citizenship content at each level and the typical ways in which students use that content. Each level of the scale references the degree to which students appreciate the interconnectedness of civic systems, as well as the sense students have of the impact of civic participation on their communities. The scale broadly reflects development encompassing the concrete, familiar, and mechanistic elements of civics and citizenship through to the wider policy and institutional processes that determine the shape of our civic communities, with the following four levels (see Appendix C for a more detailed description):

- *Level D:* Students with civic knowledge at this level are expected to demonstrate basic familiarity with concrete, explicit content and examples relating to the basic features of democracy, to identify intended outcomes of simple examples of rules and laws, and to recognize the explicit function of key civic institutions and the rights of others.

- *Level C:* Students with civic knowledge at this level are able to understand fundamental principles and broad concepts underpinning civics and citizenship, are familiar with some of the "big ideas" of civics and citizenship, recognize social justice issues in familiar contexts, and demonstrate an understanding of the basic operations of civic and civil institutions.

- *Level B:* Students with civic knowledge at this level are expected to demonstrate specific knowledge and understanding of the most pervasive civic and citizenship institutions, systems, and concepts, and to understand the interconnectedness between civic and civil institutions as well as the processes and systems through which they operate.

- *Level A:* Students with civic knowledge at this level demonstrate integrated rather than segmented knowledge and understanding of civic and citizenship concepts. They have the ability to make evaluative judgments with respect to the merits of specific policies and behaviors in view of different perspectives, to provide justifications for positions or propositions, and to hypothesize expected outcomes based on their understanding of civic and citizenship systems and practices.

5.5 Questionnaire scales

ICCS 2022 will report on outcomes of civic and citizenship education and contexts based on several scales derived from the international and regional student questionnaires and the teacher and school questionnaires. Typically, items will be scaled using the IRT Rasch partial credit model (Masters & Wright, 1997).

The international student questionnaire includes items that will be used to obtain the following expected constructs (new aspects are displayed in *italics*):

Attitudes

- *Students' perceptions of the value of student participation at their schools (5 items)*

- *Students' attitudes toward the political system (9 items, two dimensions expected: cynicism and support for political system)*

- *Students' perceptions of threats to democracy (9 items)*

- Students' perceptions of good citizenship (13 items, three dimensions expected: conventional behavior, social-movement-related behavior and *global citizenship behavior*)

- *Students' attitudes toward restrictions in national emergencies (9 items)*

- Students' attitudes toward equal rights for immigrants and non-immigrants (5 items)

- Students' attitudes toward gender equality (7 items)

- *Students' attitudes toward environmental protection (5 items)*

- Students' attitudes toward equal rights for all ethnic groups (international option, 5 items)

- Students' trust in institutions (14 items, six items for measuring construct: trust in civic institutions)

- Students' perceptions of threats to the world's future (11 items)

- Students' attitudes toward the influence of religion in society (international option, 6 items)

Engagement

- *Students' engagement with digital media (5 items)*

- Students' (past or present) involvement in organizations and groups outside of school (5 items)

- Students' (past or present) involvement in school activities (7 items)

- Students' sense of citizenship self-efficacy (7 items)

- Students' expectations of future school participation (4 items)

- Students' expectations to participate in civic action to express opinions about important issues (13 items, three dimensions expected: Expected legal activities, *expected pro-environmental activities*, expected illegal activities)

- Students' expectations of participation as adults (10 items, two dimensions expected: expected electoral participation and expected active political participation)

Home and school contexts

- Students' reports on media consumption and discussions about political and social issues (7 items, 4 items to measures political discussions with parents and peers)

- Students' perceptions of open classroom climates for discussion of political and social issues (6 items)

- Students' reports on civic learning at school (9 items)

- Students' perceptions of their school climate (9 items, two dimensions expected: perceptions of teacher-student relationships at school and perceptions of social interaction between students at school)

The European regional student questionnaire includes items that will be used to obtain the following indices (new aspects are displayed in *italics*):

- Students' sense of European identity (4 items)

- Students' reports of learning opportunities about Europe at school (5 items)

- Students' attitudes toward freedom of movement for European citizens within Europe (6 items, two dimensions expected: endorsement of freedom of movement and endorsement of restrictions)

- Students' attitudes toward cooperation among European countries (7 items)

- *Students' attitudes toward environmental cooperation in Europe (5 items)*

- *Students' perceptions of discrimination in Europe (10 items)*

- Students' expectations regarding the future of Europe (13 items, two dimensions expected: positive and negative perceptions)

- Students' expectations regarding their own individual future (5 items)

- *Students' perceptions of the importance of aspects for their future life (9 items)*

- Students' reports of political and ethical consumerism behaviors (6 items)

- *Students' reports of their sustainable behaviors (8 items)*

- Students' attitudes toward the European Union (10 items)

The Latin American regional student questionnaire includes items that will be used to obtain the following indices (new aspects are displayed in *italics*):

- *Students' perceptions of their own individual future (8 items)*

- Students' attitudes toward authoritarian government practices (7 items)

- Students' attitudes toward corrupt practices (5 items)

- Students' attitudes toward disobedience to the law (10 items)

- Students' attitudes toward homosexuality (5 items)

- Students' perception of discrimination of minorities in Latin American societies (10 items)

The teacher questionnaire includes items to derive the following contextual indices (new aspects are displayed in *italics*):

- Teachers' participation in school governance (6 items)

- Teachers' perceptions of social problems at school (9 items)

- Teachers' perceptions of student activities in the community (10 items)

- Teachers' perceptions of classroom climate (4 items)

- *Teachers' perceptions of student participation in decision-making processes at classroom level (6 items)*

- *Teachers' reports of activities to deal with diversity among students (6 items)*

- *Teachers' perceptions of the effects of cultural and ethnic diversity on teaching and class contexts (6 items)*

- *Teachers' perceptions of the effects of social and economic diversity on teaching and class contexts (6 items)*

- Teachers' reports of activities related to environmental sustainability (6 items)

- *Teachers' reports of activities related to the use of digital technologies (4 items)*

- *Teachers' perceptions of good citizenship (13 items, three dimensions expected: conventional, social-movement-related and global citizenship behavior)*

- Teachers' reports of class activities related to civic and citizenship education (international option, 10 items)

- *Teachers' reports of activities related to global issues (international option, 5 items)*

- Teachers' preparation for teaching topics related to civic and citizenship education (international option, 13 items)

- Teachers' reports of their participation in training courses about topics related to civic and citizenship education (international option, 13 items)

- *Teachers' perceptions of students' opportunities to learn about topics related to civic and citizenship education (international option, 13 items)*

- Teachers' reports of their training in teaching methods (international option, 6 items)

The school questionnaire includes items to derive the following contextual indices (new aspects are displayed in *italics*):

- Principals' perceptions of teacher participation in school governance (5 items)

- *Principals' perceptions of school community participation (10 items, two dimensions expected: students' and parents' participation in decision-making at school)*

- *Principals' perceptions student contributions to decision-making processes at school (5 items)*

- *Principals' reports on communication between school and parents/guardians (4 items)*

- *Principals' reports of collaboration between the school and the local community (4 items)*

- Principals' perceptions of student opportunities to participate in community activities (10 items)

- *Principals' reports of activities related to diversity at school (6 items)*

- Principals' reports of activities related to environmental sustainability (9 items)

- *Principals' reports of the extent to which activities related to global citizenship education and education for sustainable development (6 items)*

- *Principals' reports on training activities undertaken at school on the use of digital technologies for civic and citizenship education (6 items)*

- Principals' perceptions of the availability of resources in the local community (11 items)

- Principals' perceptions of social tension in the community (12 items)

- Principals' perceptions of school autonomy for the delivery of civic and citizenship education (7 items)

6. REFERENCES

Aarts, K., Fladmoe, A., & Strömbäck, J. (2012). Media, political trust and political knowledge: A comparative perspective. In T, Aalberg & J. Curran (Eds.). *How Media Inform Democracy: A Comparative Approach* (pp. 98-118). Routledge.

Agasisti, T., Catalano, Sibiano, P. (2013). Can schools be autonomous in a centralised educational system? On formal and actual school autonomy in the Italian context. *International Journal of Educational Management, 27*(3), 292–310. https://doi.org/10.1108/09513541311306495

ACARA. (2017). *NAP Sample Assessment Years 6 and 10. Civics and Citizenship Report.* Australian Curriculum, Assessment and Reporting Authority [ACARA]. https://nap.edu.au/docs/default-source/default-document-library/nap-cc-report-2016-final-081217.pdf?sfvrsn=0

Agrusti, G., Ainley, J., Losito, B., & Schulz, W. (2018). ICCS questionnaire development. In W. Schulz, R. Carstens, B. Losito, & J. Fraillon (Eds.). *ICCS 2016 technical report* (pp. 21-32). International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/technical-reports/iccs-2016-technical-report

Ainley, J., Schulz, W., & Friedman, T. (Eds.) (2013). *ICCS 2009 Encyclopedia. Approaches to civic and citizenship education around the world.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/index.php/publications/encyclopedias/iccs-2009-encyclopedia

Ajzen, I. & Fishbein, M. (2000). Attitudes and the attitude-behavior relation: Reasoned and automatic processes. *European Review of Social Psychology, 11*(1), 1–33. https://doi.org/10.1080/14792779943000116

Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology, 52*, 27–58. https://doi.org/10.1146/annurev.psych.52.1.27

Alnæs, K. (2013). Roots of European identity. Challenges and threats. In: Council of Europe. *We Need to talk about Europe. European Identity Debates at the Council of Europe 2013-14* (pp. 21-36). Council of Europe https://rm.coe.int/090000168046e771

Álvarez Valdivia, I. M. & Montoto, I. G. (2018). Teachers' intercultural competence: a requirement or an option in a culturally diverse classroom? *International Journal of Inclusive Education, 22*(5), 510-526. https://doi.org/10.1080/13603116.2017.1377298

Amadeo, J., Torney-Purta, J., Lehmann, R., Husfeldt, V., & Nikolova, R. (2002). *Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/civic-knowledge-and-engagement

Amnå, E., & Ekman, J. (2014). Standby citizens: diverse faces of political passivity. *European Political Science Review, 6*(2), 261-281. https://doi.org/10.1017/S175577391300009X

Amnå, E., Ekström, M., Kerr, M., & Stattin, H. (2009). Political socialization and human agency. The development of civic engagement from adolescence to adulthood. *Statsvetenskaplig Tidskrift, 111*(1), 27–40. https://www.researchgate.net/publication/270790092_Political_Socialization_and_Human_Agency_The_Development_of_Civic_Engagement_from_Adolescence_to_Adulthood

Anderson, J. R., Greeno, J. G., Reder, L. M., & Simon, H. A. (2000). Perspectives on learning, thinking, and activity. *Educational Researcher 29*(4), 11–13. https://doi.org/10.2307/1176453

Anderson, L. W. & Krathwohl, D. A. (Eds.). (2001). *A taxonomy for learning, teaching and assessing: A Revision of Bloom's taxonomy of educational objectives.* Longman.

Anduiza, E., Jensen, M. J., & Jorba, L. (Eds.) (2012). *Digital media and political engagement worldwide: A comparative study.* Cambridge University Press. https://doi.org/10.1017/S1537592715001838

Annette, J. (2000). Education for citizenship, civic participation and experiential service learning in the community. In R. Gardner et al. (Eds.), *Education for Citizenship 2000.* Continuum.

Annette, J. (2008). Community involvement, civic engagement and service learning. In J. Arthur, I. Davies, & C. Hahn (Eds.), *The SAGE handbook of education for citizenship and democracy* (pp. 388–397). SAGE Publications. https://doi.org/10.4135/9781849200486.n31

Bachen, C., Raphael, C., Lynn, K., McKee, C., & Philippi, J. (2008). Civic engagement, pedagogy, and information technology on web sites for youth. *Political Communication, 25*(3), 290–310. https://doi.org/10.1080/10584600802197525

Bäckman, E., & Trafford, B. (2007). *Democratic governance of schools.* Council of Europe Publishing. https://theewc.org/resources/democratic-governance-of-schools/

Baker, D., & LeTendre, G. (2005). *National differences, global similarities: World culture and the future of schooling.* Stanford University Press. https://www.sup.org/books/title/?id=7192

Banaji, S., & Buckingham, D. (2013). *The civic web: Young people, the Internet, and civic participation.* Cambridge, Massachusetts Institute of Technology (MIT) Press.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, Prentice-Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist, 28*(2), 117–148. https://doi.org/10.1207/s15326985ep2802_3

Bandura, A. (1997). *Self-efficacy: The exercise of control.* H. Freeman and Company.

Banks, A. M. (2021) *Civic education in the age of mass migration: Implications for theory and practice.* Teachers College Press. https://www.tcpress.com/civic-education-in-the-age-of-mass-migration-9780807765791

Banks, J. A. (2001). Citizenship education and diversity. Implications for teacher education. *Journal of Teacher Education, 52*(1), 5-16. https://doi.org/10.1177/0022487101052001002

Banks, J. A. (2017). Failed citizenship and transformative civic education. *Educational Researcher, 46*(7), 366–377. https://doi.org/10.3102/0013189X17726741

Banks, J. A. (2020) *Diversity, transformative knowledge, and civic education.* Routledge. https://www.routledge.com/Diversity-Transformative-Knowledge-and-Civic-Education-Selected-Essays/Banks/p/book/9780367863197

Banks, J. A., & McGee Banks, C. A. (Eds.) (2009). *Multicultural education: Issues and perspectives* (7th ed.). Wiley.

Barber, C., Sweetwood, S. O., & King, M. (2015). Creating classroom-level measures of citizenship education climate. *Learning Environments Research*, 18, 197–216. https://doi.org/10.1007/s10984-015-9180-7

Barnes, S. H., & Kaase, M. (Eds.). (1979). *Political action: Mass participation in five Western democracies.* SAGE Publications.

Barsalou, L. W. (2016). Situated conceptualization: Theory and applications. In Y. Coello & M. H. Fischer (Eds.), *Foundations of embodied cognition: Perceptual and emotional embodiment* (pp. 11-37). Routledge/Taylor & Francis Group.

Bartels, L. M., & Jackman, S. (2014). A Generational model of political learning. *Electoral Studies*, *33*(1), 7–18. https://doi.org/10.1016/j.electstud.2013.06.004

Bauman, Z. (2016). *Strangers at Our Door.* Polity Press.

Bear, G., Yang, C., Pell, M., & Gaskins, C. (2014). Validation of a brief measure of teachers' perceptions of school climate: Relations to student achievement and suspensions. *Learning Environments Research*, *17*(3), 339–354. https://doi.org/10.1007/s10984-014-9162-1

Beller M. (2013) Technologies in large-scale assessments: New directions, challenges, and opportunities. In von Davier M., Gonzalez E., Kirsch I., Yamamoto K. (eds) *The Role of International Large-Scale Assessments: Perspectives from Technology, Economy, and Educational Research.* Springer, Dordrecht. https://doi.org/10.1007/978-94-007-4629-9_3

Benavot, A. (2014). *Education for sustainable development in primary and secondary education.* Background paper for the Decade for ESD. UNESCO. https://doi.org/10.13140/RG.2.1.1978.9283

Benavot, A., Cha, Y., Kamens, D., Meyer, J., & Wong, S. (1991). Knowledge for the masses: World models and national curricula, 1920–1986. *American Sociological Review*, *56*, 85–100. https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9780203990247-8/knowledge-masses-world-models-national-curricula-1920%E2%80%931986-aaron-benavot-yun-kyung-cha-david-kamens-john-meyer-suk-ying-wong

Bengston, V. L., Biblarz, T. J., & Roberts, R. L. (2002), How families still matter. A longitudinal study of youth in two generations. *Ageing & Society, (23)*6, 821 – 822. https://doi.org/10.1017/S0144686X03251576

Billot, J., Goddard, J. T., & Cranston, N., How principals manage ethno-cultural diversity: learnings from 3 countries. *International studies in educational administration*, *35*(2) 2007, 3-19. http://hdl.handle.net/10292/5826

Birzea, C., Kerr, D., Mikkelsen, R., Pol, M., Froumin, I., Losito, B., & Sardoc, M. (2004). *All-European study on education for democratic citizenship policies.* Council of Europe. https://book.coe.int/en/human-rights-democratic-citizenship-and-interculturalism/3009-all-european-study-on-education-for-democratic-citizenship-policies.html

Bogler, R., & Somech, A. (2005). Organizational citizenship behavior in school: How does it relate to participation in decision-making? *Journal of Educational Administration*, *43*(5), 420–438. https://doi.org/10.1108/09578230510615215

Bond, T. B., & Fox, C.M. (2007). *Applying the Rasch model: Fundamental Measurement in the Human Sciences* (2nd ed.). Lawrence Erlbaum Associates.

Boogards, M. (2017). Lessons from Brexit and Trump: populism is what happens when political parties lose control. *Zeitschrift für Vergleichende Politikwissenschaft, 11*(4), 513–518. https://doi.org/10.1007/s12286-017-0352-y

Bott, S., Guedes, A., Goodwin, M., & Adams Mendoza, J. (2012). *Violence against women in Latin America and the Caribbean: A comparative analysis of population-based data from 12 countries.* Pan American Health Organization and Centers for Disease Control and Prevention. https://iris.paho.org/handle/10665.2/3471

Boulianne, S., Lalancette, M., & Ilkiw, D. (2020). "School Strike 4 Climate": Social media and the International Youth Protest on climate change. *Media and Communication, 8*(2), 208–218. https://doi.org/10.17645/mac.v8i2.2768

Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology and education* (pp. 241–248). Greenwood Press.

Bourdieu, P. (1996). On the family as a realized category. *Theory, Culture and Society, (13)*3, 19-26. https://doi.org/10.1177/026327696013003002

Bourn, D., Hunt, F., & Bamber, P. (2017). *A review of education for sustainable development and global citizenship education in teacher education.* (UNESCO GEM Background Paper). UNESCO. http://gem-report-2017.unesco.org/en/background-papers/

Brennan, G. (2018). How digital media reshapes political activism: mass protests, social mobilization, and civic engagement. *Geopolitics, History, and International Relations, 10*(2), 76–81. https://www.jstor.org/stable/26802343

Brese, F., & Mirazchiyski, P. (2013). *Measuring students' family background in large-scale education studies.* IERI Monograph Series. Issues and Methodologies in Large-Scale Assessments (Special Issue 2).

Brodie, J. (2004) Introduction: globalization and citizenship beyond the national state. *Citizenship Studies, 8*(4), 323–332. https://doi.org/10.1080/1362102052000316945

Bromley, P., Lerch, J., & Jimenez, J. (2016). *Education for global citizenship education & sustainable development: Content in social science textbooks.* Background paper for the 2016 Global Education Monitoring Report, UNESCO. https://doi.org/10.1111/ejed.12240

Bronfenbrenner, U. (2004). *Making human beings human: Bioecological perspectives on human development.* SAGE Publications. https://us.sagepub.com/en-us/nam/making-human-beings-human/book225589

Bryk, A., Bender Sebring, P., Allensworth, E., Luppescu, S., & Easton, J. Q. (2009). *Organizing schools for improvement. Lessons from Chicago.* University of Chicago Press. https://doi.org/10.7208/chicago/9780226078014.001.0001

Buchmann, C. (2002). Measuring family background in international studies of education: Conceptual issues and methodological challenges. In A. C. Porter, & A. Gamoran (Eds.), *Methodological advances in cross-national surveys of educational achievement* (pp. 150–197). National Academy Press.

Burnouf, L. (2004). Global awareness and perspectives in global education. *Canadian Social Studies, 38*(3).

Cabrera, A.F., Nora, A., Terenzini, P.T., Pascarella, E., & Hagedorn, L.S. (1999) Campus racial climate and the adjustment of students to college. *The Journal of Higher Education, 70*(2), 134–160. https://doi.org/10.1080/00221546.1999.11780759

Canache, D., Hayes, M., Mondak, J. J., & Seligson, M. A. (2014). Determinants of perceived skin-color discrimination in Latin America. *Journal of Politics, 76*, 506–520. https://www.journals.uchicago.edu/doi/10.1017/S0022381613001424

Caro, D. H. (2018). Socio-economic gaps in subject interest: the mediating role of parental cognitive involvement. *Large-Scale Assessment in Education, 6*(13), 1-38. https://doi.org/10.1186/s40536-018-0067-9

Caro, D. H., & Cortés, D. (2012). Measuring family socioeconomic status: an illustration using data from PIRLS 2006. *IERI Monograph Series. Issues and Methodologies in Large-Scale Assessments, 5*, 9–33.

Caro, D. H., & Schulz, W (2012). Ten hypotheses about tolerance among Latin American adolescents. *Citizenship, Social and Economics Education, 11*(3), 213–234. https://doi.org/10.2304/csee.2012.11.3.213

Carrera, S. (2005). What does free movement mean in theory and practice in an enlarged EU? *European Law Journal, 11*(6), 699–721. https://doi.org/10.1111/j.1468-0386.2005.00283.x

Castillo, J. C., Miranda, D., Bonhomme, M., Cox, C., & Bascopé, M. (2014). Social inequality and changes in students' expected political participation in Chile. *Education, Citizenship and Social Justice, 9*(2), 140-156. https://doi.org/10.1177/1746197914520650

Ceron, A. (2015). Internet, news, and political trust: The difference between social media and online media outlets. *Journal of Computer-Mediated Communication, 20* (5), 487–503. https://doi.org/10.1111/jcc4.12129

Chaban, N., Elgström, O., Kelly, S., & Suet Yi. (2013). Images of the EU beyond its borders: Issue-specific and regional perceptions of European Union power and leadership. *Journal of Common Market Studies, 51*(3), 433–451. https://doi.org/10.1111/jcms.12004

Chan, J., To, H.-P., & Chan, E. (2006). Reconsidering social cohesion: Developing a definition and analytical framework for empirical research. *Social Indicators Research, 75*(2), 273-302. https://doi.org/10.1007/s11205-005-2118-1

Chaux, E. (2009). Citizenship competencies in the midst of a violent political conflict: The Colombian educational response. *Harvard Educational Review, 79*(1), 84–93. https://doi.org/10.17763/haer.79.1.d2566q027573h219

Chaux, E., & Velásquez, A. M. (2009). Peace education in Colombia: The promise of citizenship competencies. In V. Bouvier (Ed.), *Colombia: Building peace in a time of war* (pp. 159–171). United States Institute of Peace. https://lib.ugent.be/catalog/rug01:001674186

Chaux, E., Lleras, J., & Velásquez, A. M. (2004). *Competencias ciudadanas: de los estándares al aula. Una propuesta de integración a las áreas académicas* [Citizenship competencies: From the standards into the classroom. A proposal for integrating learning areas]. Ministry of Education. http://journals.openedition.org/revestudsoc/24449

Checkel, J. T., & Katzenstein, P. J. (2009). *European identity.* Cambridge University Press. https://doi.org/10.1017/S0090599200040198

Cheng, Y. C., Ko, J., & Lee, T. T. H. (2016). School autonomy, leadership and learning: A reconceptualisation. *International Journal of Educational Management, 30*(2), 177–196. https://doi.org/10.1108/IJEM-08-2015-0108

Cho, A. (2020) *Digital civic engagement by young people.* Office of Global Insight and Policy, UNICEF. https://www.unicef.org/globalinsight/reports/digital-civic-engagement-young-people

Choi, M. (2016). A concept analysis of digital citizenship for democratic citizenship education in the internet age. *Theory & Research in Social Education, 44*(4), 565-607. https://doi.org/10.1080/00933104.2016.1210549

Chong, A., & Ñopo, H. (2007). *Discrimination in Latin America: An Elephant in the Room?* Working Paper No. 516. Inter-American Development Bank. https://ssrn.com/abstract=1820904 or http://dx.doi.org/10.2139/ssrn.1820904

Christensen I.R., Biseth H., Huang L. (2021) Developing digital citizenship and civic engagement through social media use in Nordic schools. In, Biseth H., Hoskins B., Huang L. (eds) *Northern Lights on Civic and Citizenship Education.* IEA Research for Education (A Series of In-depth Analyses Based on Data of the International Association for the Evaluation of Educational Achievement (IEA)), vol 11. Springer. https://doi.org/10.1007/978-3-030-66788-7_4

Cochran, M. M., & Brassard, J. A. (1979). Child development and personal social networks. *Child Development, 50*(3), 601–616. https://doi.org/10.2307/1128926

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94* (supplement), 95–120. https://doi.org/10.1086/228943

Campos, C., Hargreaves Heap, S., & Lopez de Leon, F. (2017) The political influence of peer groups: experimental evidence in the classroom, *Oxford Economic Papers, 69*(4), 963–985, https://doi.org/10.1093/oep/gpw065

Conover, P. J. (1995). Citizen identities and conceptions of the self. *Journal of Political Philosophy, 3*(2), 133-165. https://doi.org/10.1111/j.1467-9760.1995.tb00032.x

Copeland-Linder, N., Johnson, S. B., Haynie, D. L., Chung, S. E., & Cheng, T. L. (2012). Retaliatory attitudes and violent behaviors among assault-injured youth. *Journal of Adolescent Health, 50*(3), 215-220. https://doi.org/10.1016/j.jadohealth.2011.04.005

Côté, R.R., & Erickson, B.H. (2009) Untangling the roots of tolerance: How forms of social capital shape attitudes toward ethnic minorities and immigrants. *American Behavioral Scientist, 52*(12), 1664–1689. https://doi.org/10.1177/0002764209331532

Council of Europe (2018). *Reference Framework of Competences for Democratic Culture.* Council of Europe. https://www.coe.int/en/web/campaign-free-to-speak-safe-to-learn/reference-framework-of-competences-for-democratic-culture

Council of the European Union (2021). *Council Resolution on a Strategic Framework for European Cooperation in Education and Training towards the European Education Area and beyond (2021–2030)*. Council of Europe. https://www.consilium.europa.eu/media/48584/st06289-re01-en21.pdf

Cox, C. (2010). *Informe de Referente Regional 2010: Oportunidades de aprendizaje escolar de la ciudadanía en América Latina: currículos comparados* [Report on regional references 2010: opportunities for learning about citizenship in Latin America. A comparison of curricula]. Regional System for the Development and Evaluation of Citizenship Competencies.

Cox, C., Jaramillo, R., & Reimers, F. (2005). *Education for citizenship and democracy in the Americas: An agenda for action.* Inter-American Development Bank. https://publications.iadb.org/publications/english/document/Education-for-Democratic-Citizenship-in-the-Americas-An-Agenda-for-Action.pdf

Dalton, R. (1980). Reassessing parental socialization: Indicator unreliability versus generational transfer. *American Political Science Review, 74*(2), 421–431. https://doi.org/10.2307/1960637

Dalton, R. (2002). The decline of party identifications. In R. Dalton & M. Wattenberg (Eds.), *Parties without partisans* (pp. 19–36). Oxford University Press. https://doi.org/10.1093/0199253099.003.0002

Daniels, H. and Garner, P. (Eds) (1999). *Inclusive Education*, World Yearbook of Education. Routledge. https://doi.org/10.4324/9780203080245

Davies, L. (2006). Global citizenship: Abstraction or framework for action? *Educational Review, 58*(5), 5-25. https://doi.org/10.1080/00131910500352523

DeJaeghere, J. G., & Zhang, Y. (2008). Development of intercultural competence among US American teachers: professional development factors that enhance competence. *Intercultural Education, 19*(3), 255-268. https://doi.org/10.1080/14675980802078624

Delanty, G. (2007). European citizenship: A critical assessment. *Citizenship Studies, 11*(3), 64–72. https://doi.org/10.1080/13621020601099872

Delanty, G., & Rumford, C. (2005). *Rethinking Europe. Social theory and the implications of Europeanization.* Routledge. https://doi.org/10.4324/9780203640050

De Moor, K. U., Wahlström, M., Wennerhag, M., & De Vydt, M. (Eds.) (2020). *Protest for a future II: Composition, mobilization and motives of the participants in Fridays For Future climate protests on 20-27 September, 2019, in 19 cities around the world.* https://gup.ub.gu.se/publication/290509

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education.* Macmillan.

Diamond, L. (2015). Facing up to democratic recession. *Journal of Democracy, 26*(1), 141–155. https://doi.org/10.1353/jod.2015.0009

Diamond, L. (2021) Democratic regression in comparative perspective: scope, methods, and causes. *Democratization, 28*(1), 22-42, https://doi.org/10.1080/13510347.2020.1807517

Dimitrova, R., Chasiotis, A., & van de Vijver, F. (2016). Adjustment outcomes of immigrant children and youth in Europe: A meta-analysis. *European Psychologist, 21*(2), 150-162. https://doi.org/10.1027/1016-9040/a000246

Dinas, E. (2013). Opening 'Openness to Change': Political Events and the increased sensitivity of young adults. *Political Research Quarterly. 66*(4), 868–882. https://doi.org/10.1177/1065912913475874

Domerath, I. (2012). The three dimensions of solidarity in the EU legal order: Limits of the judicial and legal approach. *European Integration, 35*(4), 459-475. https://doi.org/10.1080/07036337.2012.704630

Donoso, S. (2017). Democracy and social movements in Latin America. In P. Rigorizzi and C. Wylde (Eds.), *Handbook of South American governance* (pp. 334-347). Routledge.

Dronkers, J., van der Velden, R., & Dunne, A. (2012). Why are migrant students better off in certain types of educational systems or schools than in others? *European Educational Research Journal, 11*(1), 11-44. https://doi.org/10.2304/eerj.2012.11.1.11

Duchesne, S. (2008). Waiting for a European identity. Reflections on the process of identification with Europe. *Perspectives on European Politics and Society 9*(4) 397-410. https://doi.org/10.1080/15705850802416796

Durkheim, E. (1969). The Division of Labor in Society. New York: Free Press.

Eckstein, K., Noack, P., & Gniewosz, B. (2013). Predictors of intentions to participate in politics and actual political behaviors in young adulthood. *International Journal of Behavioral Development, 37*(5), 428–435. https://doi.org/10.1177/0165025413486419

Ehman, L. H. (1980). Change in high school pupils' political attitudes as a function of social studies classroom climate. *American Educational Research Journal, 17,* 253–265. https://doi.org/10.3102/00028312017002253

Eisenberg, N. (1995). Prosocial development: A multifaceted model. In W. M. Kurtines, & J. L.Gerwitz (Eds.), *Moral development: An introduction* (pp. 401–429). Prentice Hall.

Ekman, J., & Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. *Human Affairs, 22*(3), 283–300. https://doi.org/10.2478/s13374-012-0024-1

Ekman, J., & Zetterberg, P. (2011). Schools and democratic socialization: Assessing the impact of different educational settings on Swedish 14-year olds' political citizenship. *Politics, Culture and Socialization, 2*(2), 171-192. https://www.budrich-journals.de/index.php/pcs/article/view/19731

Ekström, G., & Kvalem, T. A. (2013). *Religion and Youths' Political Engagement: A Quantitative Approach* (Bachelor thesis). Göteborg University: School of Business, Economics and Law. http://hdl.handle.net/2077/32496

Elley, W. B. (1992). *How in the world do students read?* International Association for the Evaluation of Educational Achievement.

Entwistle, D. R. A., & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. *Child Development, 65*(6), 1521–1540. https://doi.org/10.1111/j.1467-8624.1994.tb00833.x

Estellés, M., & Castellví, J. (2020). The educational implications of populism, emotions and digital hate speech: A dialogue with scholars from Canada, Chile, Spain, the UK, and the US. *Sustainability, 12*(15), 6034. https://doi.org/10.3390/su12156034

Ettekal, A. & Mahoney, J. (2017). Ecological systems theory. In K. Peppler (Ed.), *The SAGE encyclopedia of out-of-school learning* (Vol. 1, pp. 239-241). SAGE Publications, Inc. https://doi.org/10.4135/9781483385198.n94

eTwinning (2016). *Growing digital citizens.* eTwinning. https://www.etwinning.net/eun-files/book2016/eTwinningBook_2016.pdf

European Commission. (2010). *EU citizens' attitudes towards alcohol.* Commission of the European Communities. https://www.drugsandalcohol.ie/13045/

European Commission. (2012). *The development of European identity/identities: Unfinished business. A policy review.* European Commission. http://www.mela-project.polimi.it/publications/920.htm

European Commission. (2014). *Future of Europe. Report on Eurobarometer 413.* European Commission https://europa.eu/eurobarometer/surveys/detail/2038

European commission (2016). Understanding and tackling the migration challenge: The role of research. European Commission. https://knowledge4policy.ec.europa.eu/publication/understanding-tackling-migration-challenge-role-research_en

European Commission (2018a). *Special Eurobarometer 479.* Future of Europe. https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/yearFrom/1974/yearTo/2018/surveyKy/2217

European Commission (2018b). *Standard Eurobarometer 90. Public opinion in the European Union.* European Commission. https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/yearFrom/1974/yearTo/2018/surveyKy/2215

European Commission (2018c). *Special Eurobarometer 474. Europeans' perceptions of the Schengen Area.* European Commission. https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/yearFrom/1974/yearTo/2018/surveyKy/2218

European Commission (2018d). *Council Recommendation of 22 May 2018 on promoting common values, inclusive education, and the European dimension of teaching* (2018/C 195/01). European Commission. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0607(01)&from=EN

European Commission (2019). *Special Eurobarometer 493.* Discrimination in the European Union. European Commission. https://webgate.ec.europa.eu/ebsm/api/public/deliverable/download?doc=true&deliverableId=71116

European Council. (2000). Lisbon strategy. European Parliament. https://www.europarl.europa.eu/meetdocs/2009_2014/documents/empl/dv/lisbonstrategybn_/lisbonstrategybn_en.pdf

Eurostat (2018). *Migration and migrant population statistics. EU citizens living in another Member State.* Eurostat. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_citizens_living_in_another_Member_State_-_statistical_overview

European Commission/EACEA/Eurydice (2005). *Citizenship education at school in Europe.*

European Commission, European Education and Culture Executive Agency. https://doi.org/10.2797/778483

European Commission/EACEA/Eurydice (2007). *School autonomy in Europe: Policies and measures.* Eurydice European Unit. https://doi.org/10.2766/34099

European Commission/EACEA/Eurydice (2012). *Citizenship education in Europe.* Publications Office. https://data.europa.eu/doi/10.2797/83012

European Commission/EACEA/Eurydice (2017). *Citizenship Education at School in Europe* – 2017. Eurydice Report. Publications Office. https://data.europa.eu/doi/10.2797/818387

European Commission/EACEA/Eurydice (2019). *Integrating Students from Migrant Backgrounds into Schools in Europe: National Policies and Measures. Eurydice Report.* Publications Office. https://data.europa.eu/doi/10.2797/222073

Evans, N.S.; Stevenson, R.B.; Lasen, M.; Ferreira, J.A.; Davis, J. (2017). Approaches to embedding sustainability in teacher education: A synthesis of the literature. *Teaching and Teacher Education*, *63*, 405–417. https://doi.org/10.1016/j.tate.2017.01.013

Frank, D. J. & Meyer, J. W. (2021). Expanded education and global integration: solidarity and conflict on education. *Journal for research and debate, 4*(10), 1-5. https://www.oneducation.net/no-10_april-2021/3954/

Fishbein, B., Martin, M.O., Mullis, I.V.A., & Foy, P. (2018). The TIMSS 2019 Item Equivalence Study: examining mode effects for computer-based assessment and implications for measuring trends. *Large-scale Assessment in Education, 6:*11. https://doi.org/10.1186/s40536-018-0064-z

Fligstein, N. (2009). *Euroclash: The EU, European identity, and the future of Europe.* Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199580859.001.0001

Fozdar, F., & Matin, C. (2020). Constructing the postnational citizen?: Civics and citizenship education in the Australian National Curriculum. *Journal of Curriculum Studies, 52*(3), 372-394. https://doi.org/10.1080/00220272.2020.1727018

Fraillon, J., Ainley, J., Schulz, W., Friedman, T., & Gebhardt, E. (2014). *Preparing for life in a digital age. The IEA International Computer and Literacy Information Study International Report.* Springer. https://doi.org/10.1007/978-3-319-14222-7

Fraillon, J., Ainley, J., Schulz, W., Duckworth, D., & Friedman, T. (2019). *IEA International Computer and Information Literacy Study 2018 International Report.* Springer. https://doi.org/10.1007/978-3-030-19389-8

Fraillon, J., Schulz, W., & Ainley, J. (2012). ICCS 2009 *Asian Report. Civic knowledge and attitudes among lower secondary students in five Asian countries.* Amsterdam, The Netherlands: IEA. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/iccs-2009-asian-report

Frau-Meigs, D., O'Neill, B., Soriani, A., & Tome, V. (2017). *Digital citizenship education: Volume 1: Overview and new perspectives.* Council of Europe Publishing: Strasbourg.

Frey, C. B., Chen, C., & Presidente, G. (2020). Democracy, culture, and contagion: Political regimes and countries' responsiveness to Covid-19. *COVID Economics: Vetted and Real-Time Papers,* 18, 222-238. https://ora.ox.ac.uk/objects/uuid:06808503-78e4-404f-804f-1f97ab2c7d7e

Fuligni, A. J. (1997). The academic achievement of adolescents from immigrant families: The roles of family background, attitudes, and behavior. *Child Development, 68*(2), 351–363. https://doi.org/10.2307/1131854

Fundar (2016). Beyond domestic violence laws in Latin America: Challenges for protection services for survivors. ELLA regional evidence paper. Fundar, Centre of Analysis and Research. http://ella.practicalaction.org/wp-content/uploads/2016/06/20160414-Fundar_Domestic-Violence-REP.pdf

Ganzeboom, H. B. G., de Graaf, P. M., & Treiman, D. J. (1992). A standard international socio-economic index of occupational status. *Social Science Research, 21*(1), 1–56. https://doi.org/10.1016/0049-089X(92)90017-B

Gasser, U., Cortesi, S., Malik, M., & Lee, A. (2012). *Youth and digital media: From credibility to information quality.* Berkman Center for Internet & Society. http://ssrn.com/abstract=2005272

Geboers, E., Geijsel, F., Admiraal, W., & ten Dam, G. (2013). Review of the effects of citizenship education. *Educational Research Review, 9*, 158-173. https://doi.org/10.1016/j.edurev.2012.02.001

Gerbner, G. (1980). The mainstreaming of America. *Journal of Communication, 30*(3), 19–29. https://doi.org/10.1111/j.1460-2466.1980.tb01987.x

Gibb, N. (2016). Getting climate-ready. A guide for schools on climate action. UNESCO. https://www.unesco.de/sites/default/files/2019-03/Getting_Climate-Ready-Guide_Schools.pdf

Gidron N., & Hall, P. A. (2020). Populism as a Problem of Social Integration. *Comparative Political Studies, 53*(7), 1027-1059. https://doi.org/10.1177/0010414019879947

Ginther, D. K., & Pollak, R.A. (2004). Family structure and children's educational outcomes: Blended families, stylized facts, and descriptive regressions. *Demography, 41*(4), 671–696. https://www.jstor.org/stable/1515225

Goleman, D. (2007). Social Intelligence. Random House.

Gottfried, A. W. (1985). Measures of socioeconomic status in child development research: Data and recommendations. *Merrill-Palmer Quarterly, 31*(1), 85–92. https://www.jstor.org/stable/23086136

Gould, J. (Ed.). (2011). *Guardian of democracy: The civic mission of schools.* Washington, DC, USA: National Conference on Citizenship. https://www.csuchico.edu/iege/_assets/documents/susi-guardian-of-democracy-the-civic-mission-of-schools.pdf

Green, A., & Janmaat, J. G. (2011). *Regimes of social cohesion: Societies and the crisis of globalization.* Palgrave Macmillan. https://doi.org/10.1057/9780230308633

Griffith, R. L., Wolfeld, L., Armon, B. K., Rios, J. & Liu, O. L. (2016). Assessing intercultural competence in higher education: Existing research and future directions. *ETS Research Report Series, 2016*(2), 16-25. https://doi.org/10.1002/ets2.12112

Grusec, J. E., & Kuczynski, L. (Eds.). (1997). *Parenting and children's internalization of values: A handbook of contemporary theory.* John Wiley.

Guo, L. (2014). Preparing teachers to educate for 21st century global citizenship: Envisioning and enacting. *Journal of Global Citizenship & Equity Education*, 4(1), 1-23. https://journals.sfu.ca/jgcee/index.php/jgcee/article/view/121/168

Guo, C., Webb, N. J., Abzuq, R., & Peck, L. R. A. (2013). Religious affiliation, religious attendance, and participation in social change organizations. *Nonprofit and Voluntary Sector Quarterly, 42*(1), 34–58. https://doi.org/10.1177/0899764012473385

Hahn, L. (1999). Citizenship education: An empirical study of policy, practices and outcome. *Oxford Review of Education, 25*, 231–250. https://doi.org/10.1080/030549899104233

Hambleton, R. K., Swaminathan, H., & Rogers, H. J. (1991). *Fundamentals of item response theory.* SAGE Publications.

Harvey-Beavis, A. (2002). Student and school questionnaire development. In R. Adams, & M. Wu (Eds.), *PISA 2000 technical report* (pp. 33–38). OECD Publications.

Harwell, M. (2018). *Don't Expect Too Much: The Limited Usefulness of Common SES Measures and a Prescription for Change.* Boulder, CO: National Education Policy Center. http://nepc.colorado.edu/publication/SES

Haste, H. (2010). Citizenship education: A critical look at a contested field. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 161–188). John Wiley & Sons, Inc.. https://doi.org/10.1002/9780470767603.ch7

Hattam, R. (2018). Diversity, Global citizenship and the culturally responsive school. In   Davies, I., Li-Ching Ho, Kiwan, D., Peck, C. L., Peterson, A., Sant, E., & Waghid, Y. (Eds.), *The Palgrave Handbook of Global Citizenship Education* (pp. 257-275). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-59733-5_17

Hauser, R. M. (1994). Measuring socioeconomic status in studies of child development. *Child Development, 65*(6), 1541–1545. https://doi.org/10.2307/1131279

Heath, A., & Richards, L. (2016). *Attitudes towards Immigration and their Antecedents: Topline Results from Round 7 of the European Social Survey.* ESS Topline Results Series 7. https://www.europeansocialsurvey.org/docs/findings/ESS7_toplines_issue_7_immigration.pdf

Heflin, K. (2015). The Internet is not the antidote. *Journalism History, 41*(3), 165–175. https://doi.org/10.1080/00947679.2015.12059127

Henderson, A., Pancer, S. M., & Brown, S. D. (2013) Creating effective civic engagement policy for adolescents: Quantitative and qualitative evaluations of compulsory community service. *Journal of Adolescent Research, 29*(1), 120–154. https://doi.org/10.1177/0743558413502532

Henderson, K. and Tilbury, D. (2004) *Whole-school approaches to sustainability: An international review of sustainable school programs.* Report prepared by the Australian Research Institute in Education for Sustainability (ARIES) for The Department of the Environment and Heritage, Australian Government. http://aries.mq.edu.au/projects/whole_school/files/international_review.pdf

Henn, M., & Weinstein, M. (2006). Young people and political (in)activism: Why don't young people vote?. *Policy & Politics, 34*(3), 517-534. https://doi.org/10.1332/030557306777695316

Herrmann, R. K., Risse, T., & Brewer, B. M. (Eds.) (2004). *Transnational identities: Becoming European in the EU*. Rowman E Littlefield Publishers Inc.

Hess, R. D., & Torney, J. (1967). *The development of political attitudes in children*. Anchor.

Hicks, D. (2003). Thirty years of global education: A reminder of key principles and precedents. *Educational Review, 55*(3), 265–275. https://doi.org/10.1080/0013191032000118929

Hobolt, S., Anduiza, E., Carkoglu, A., Lutz, G., & Sauger, N. (2016). *Democracy divided? People, politicians and the politics of populism.* CSES Planning Committee Final Report. https://cses.org/wp-content/uploads/2019/03/CSES5_ContentSubcommittee_FinalReport.pdf.

Hoffman, M. L. (1981). The development of empathy. In J. P. Rushton & R. M. Sorrentino (Eds.), *Altruism and helping behavior* (pp. 41–63). University of Nebraska Press.

Holden, C. (2007). Young people's concerns. In D. Hicks, & C. Holden (Eds.), *Teaching the global dimension: Key principles and effective practice* (pp. 31–42), Routledge Falmer. https://doi.org/10.4324/9780203962770

Homana, G., Barber, C., & Torney-Purta, J. (2006). *Assessing school citizenship education climate: Implications for the social studies* (Circle Working Paper 48). https://circle.tufts.edu/sites/default/files/2019-12/WP48_SchoolCitizenshipImplicationsfortheSocialStudies_2006.pdf

Honig,I., & Rainey, L. R. (2012). Autonomy and school improvement: What do we know and where do we go from here?. *Educational Policy, 26*(3), 465–495. https://doi.org/10.1177/0895904811417590

Honnety, A. (1996). *The Struggle for recognition. The moral grammar of social conflicts*. MIT Press. https://mitpress.mit.edu/books/struggle-recognition

Hooghe, M., & Oser, J. (2015). The rise of engaged citizenship: The evolution of citizenship norms among adolescents in 21 countries between 1999 and 2009. *International Journal of Comparative Sociology, 56*(1), 29-52. https://doi.org/10.1177/0020715215578488

Hooghe, M., & Quintelier, E. (2013). The relationship between political participation intentions of adolescents and a participatory democratic climate at school in 35 countries. *Oxford Review of Education, 39*(5), 567–589. https://doi.org/10.1080/03054985.2013.830097

Hoskins, B., Janmaat, J. G., & Melis, G. (2017) Tackling inequalities in political socialisation: A systematic analysis of access to and mitigation effects of learning citizenship at school. *Social Science Research, 68*, 88-101, https://doi.org/10.1016/j.ssresearch.2017.09.001

Howard, J. (2000). Social psychology of identities. *Annual Review of Sociology, 26*, 367-393. https://doi.org/10.1146/annurev.soc.26.1.367

Howard, P. N., & Hussain, M. M. (2011). The upheavals in Egypt and Tunisia: The role of digital media. *Journal of Democracy, 22*(3), 35-48. https://doi.org/10.1353/JOD.2011.0041

Huckle, J. (2008). Sustainable development. In J. Arthur, I. Davies, & C. Hahn (Eds.), *The Sage Handbook of Education for Citizenship and Democracy* (pp.342–354). SAGE Publications. https://uk.sagepub.com/en-gb/eur/sage-handbook-of-education-for-citizenship-and-democracy/book230964

Huddleston, T. (2007). *From student voice to shared responsibility: Effective practice in democratic school governance in European schools.* Citizenship Foundation. https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016802f7046

Husman, J., & Shell, D. (2008). Beliefs and perceptions about the future: A measurement of future time perspective. *Learning and Individual Differences, 18*(2), 166–175. https://doi.org/10.1016/j.lindif.2007.08.001

Inglehart, R. F., & Norris, P. (2016). *Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash* (July 29 2016). HKS Working Paper No. RWP16-026. https://ssrn.com/abstract=2818659

International Labour Organization. (2012). *International standard classification of occupations: ISCO-08.* Geneva, Switzerland: International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf

Istrate, O., Noveanu, G., & Smith, T. M. (2006). Exploring sources of variation in Romanian science achievement. *Prospects: Quarterly Review of Comparative Education, 36*(4), 475–496. https://doi.org/10.1007/s11125-006-9006-6

Janoski, J., & Wilson, J. (1995). Pathways to voluntarism: Family socialization and status transmission models. *Social Forces, 74*(1), 271–292. https://doi.org/10.2307/2580632

Jennings, M. K., & Niemi, R. (1981). *Generations and Politics.* Princeton University Press. https://press.princeton.edu/books/hardcover/9780691642734/generations-and-politics

Jennings, M. K., Stoker, L., & Bowers, J. (2009). Politics across generations: Family transmission reexamined. *The Journal of Politics, 71*(3), 782-799. Institute of Governmental Studies. https://doi.org/10.1017/S0022381609090719

Kaase, M. (1990). Mass participation. In M. K. Jennings, J. W. van Deth et al. (Eds.), *Continuities in Political Action* (pp. 23–67). Walter de Gruyter. https://readbookpage.com/pdf/continuities-in-political-action/

Kahne, J., & Bowyer, B. (2019). Can media literacy education increase digital engagement in politics?, *Learning, Media and Technology, 44*(2), 211-224. https://doi.org/10.1080/17439884.2019.1601108

Kahne, J., Hodgin, E. & Eidman-Aadahl, E. (2016). Redesigning civic education for the digital age: Participatory politics and the pursuit of democratic engagement. *Theory & Research in Social Education, 44*(1), 1-35. https://doi.org/10.1080/00933104.2015.1132646

Kahne, J., Lee, N., & Feezell, J. T. (2012). The civic and political significance of online participatory cultures among youth transitioning to adulthood. *Journal of Information Technology & Politics, 10*(1), 1-20. https://doi.org/10.1080/19331681.2012.701109

Kahne, J., Middaugh, E., & Allen, D. (2014). *Youth, new media and the rise of participatory politics.* YPP Research Network Working Paper #1. Youth and Participatory Politics Research Network. https://clalliance.org/wp-content/uploads/files/ypp_workinpapers_paper01_1.pdf

Kao, G. (2001). Race and ethnic differences in peer influences on educational achievement. In D. Massey, & E. Anderson (Eds.) *The problem of the century: Racial stratification in the US at the millennium* (pp. 437–460). Russell Sage. https://www.jstor.org/stable/10.7758/9781610448390

Karolewski, I. P., & Kaina, V. (2006). *European identity. Theoretical perspectives and empirical insights.* LIT Verlag.

Karolewski, I. P., & Kaina, V. (2013). EU governance and European identity. *Living Reviews in European Governance*, *8*(1), 5–59. http://www.livingreviews.org/lreg-2013-1

Keating, A., & Janmaat, J. G. (2015). Education through citizenship at school: Do school activities have a lasting impact on youth political engagement?. *Parliamentary Affairs 69*(2), 1–21. https://doi.org/10.1093/pa/gsv017

Keating, A., & Kerr, D. (2013). Putting participation into practice. Re-evaluating the implementation of the Citizenship curriculum in England. In R. Hedtke, & T. Zimenkova (Eds.), *Education for civic and political participation. A critical approach* (pp. 117–132). Routledge.

Keating, A., Kerr, D., Benton, T., Mundy, E., & Lopes, J. (2010). Citizenship education in England 2001–2010: *Young peoples' practices and prospects for the future, the eighth and final report from the Citizenship Education Longitudinal Study (CELS)*. Department for Education.

Kelley, J. (2001). Attitudes towards homosexuality in 29 nations. *Australian Social Monitor, 4*, 15–22. http://hdl.handle.net/1885/93208

Kennedy, K. (2006). *Towards a conceptual framework for understanding active and passive citizenship.* Unpublished report. http://www.academia.edu/1243639/_towards_a_conceptual_framework_for_active_citizenship

Kennedy, K. (2012). Global trends in civic and citizenship education: What are the lessons for nation states?. *Education Sciences*, *2*(3), 121–135. https://doi.org/10.3390/educsci2030121

Kerr, D., Schulz, W., & Fraillon, J. (2011). The development of regional instruments. In W. Schulz, J. Ainley, & J. Fraillon (Eds.), *ICCS 2009 technical report* (pp. 45–49). The Netherlands: International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/technical-reports/iccs-2009-technical-report

Kerr, D., Sturman, L., Schulz, W., & Burge, B. (2010). *ICCS 2009 European Report. Civic knowledge, attitudes and engagement among lower secondary school students in twenty-four European countries.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/iccs-2009-european-report

Knowles, R.T., & McCafferty-Wright, J. (2015). Connecting an open classroom climate to social movement citizenship: A study of 8th graders in Europe using IEA ICCS data. *The Journal of Social Studies Research*, *39*(4), 255–269. https://doi.org/10.1016/j.jssr.2015.03.002

Knowles, R., Torney-Purta, J. & Barber, C. (2018). Enhancing citizenship learning with international comparative research: Analyses of IEA civic education datasets. *Citizenship Teaching and Learning*, *13*(3), 7-30. https://doi.org/10.1386/ctl.13.1.7_1

Kopnina, H. & Meijers, F. (2014). Education for sustainable development (ESD): Exploring theoretical and practical challenges. *International Journal of Sustainability in Higher Education*, *15*(2), 188-207. https://doi.org/10.1108/IJSHE-07-2012-0059

Korkmaz, H. E., & Erden, M. (2014). A Delphi Study: The Characteristics of Democratic Schools. *The Journal of Educational Research, 107*(5), 365–373. https://doi.org/10.1080/00220671.2013.823365

Koyama, J. (2017). Competing and contested discourses on citizenship and civic praxis. *Education Policy Analysis Archives*, 25, 28. http://dx.doi.org/10.14507/epaa.25.2730

Krastev, I. & Leonard, M. (2020). Europe's pandemic politics: how the virus has changed the public's worldview. European Council on Foreign Relations Policy Brief. https://www.ecfr.eu/publications/summary/europes_pandemic_politics_how_the_virus_has_changed_the_publics_worldview

Kyburz-Graber, R. (2013). Socioecological approaches to environmental education and research. A paradigmatic response to behavioral change orientations. In: R. B. Stevenson et al. (Eds.), *International handbook of research on environmental education* (pp. 23–32). AERA-Routledge. https://www.routledgehandbooks.com/doi/10.4324/9780203813331.ch3

L'Homme, C., & Jerez Henríquez, C. (2010). *Education, youth and development. UNESCO in Latin America and the Caribbean.* UNESCO. http://www.unesco.org/santiago

Lamont, M., & Lareau, A. (1988). Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological Theory, 6*(2), 153–168. https://doi.org/10.2307/202113

Landmann, T. & Di Gennaro Splendore, L. (2020). Pandemic democracy: elections and COVID-19, *Journal of Risk Research 23*(7-8), 1060-1066. https://doi.org/10.1080/13669877.2020.1765003

Latinobarómetro (2009). *Informe 2009.* Corporación Latinobarómetro, Santiago de Chile. https://www.latinobarometro.org/documentos/latbd_latinobarometro_informe_2009.pdf

Lauglo, J. (2011). Political socialization in the home and young people's educational achievement and ambition. *British Journal of Sociology of Education, 32*(1), 53–74. https://doi.org/10.1080/01425692.2011.527722

Lauglo, J. (2013). Do more knowledgeable adolescents have more rationally based civic attitudes? Analysis of 38 countries. *Educational Psychology, 33*(3), 262–282. https://ilsa-gateway.org/papers/do-more-knowledgeable-adolescents-have-more-rationally-based-civic-attitudes

Lauglo, J. (2016). Does political socialization at home boost adolescents' expectation of higher education? An analysis of eighth-grade students in 35 Countries. *Comparative Education Review, 60*(3), 429-456. https://www.journals.uchicago.edu/doi/10.1086/687033

Lauglo, J., & Øia, T. (2008). Education and civic engagement among Norwegian youth. *Policy Futures in Education, 6*(2), 203-223. https://doi.org/10.2304/pfie.2008.6.2.203

Lavena, C. F. (2013). What determines permissiveness toward corruption? *Public Integrity, 15*(4), 345–366. https://doi.org/10.2753/PIN1099-9922150402

Law, N., Pelgrum, W., & Plomp, T. (2008). *Pedagogy and ICT use in schools around the world: Findings from the IEA SITES 2006 study.* CERC Studies in Comparative Education. Comparative Education Research Centre, University of Hong Kong/Springer. https://doi.org/10.1007/978-1-4020-8928-2

Lee, W. O., Grossman, D. L., Kennedy, K.J., & Fairbrother, G.P. (Eds.) (2004). Citizenship education in Asia and the Pacific. Concepts and issues. Springer. https://doi.org/10.1007/978-1-4020-7935-1

Lee, C. D., White, G., & Dong, D. (Eds.). (2021). Educating for civic reasoning and discourse. National Academy of Education. https://doi.org/10.31094/2021/2

Leeman, Y. (2003). School leadership for intercultural education. *Intercultural Education, 14*(1), 31–45. https://doi.org/10.1080/1467598032000044638

Lehmann, R. (1996). Reading literacy among immigrant students in the United States and former West Germany. In M. Binkley, K. Rust, & T. Williams (Eds.), *Reading literacy in an international perspective* (pp. 101–114). National Center for Education Statistics (NCES).

Lemola, S., Raikkonen, K., Mathews, K., Scheier, M., Heinonen, K., Pesonen, A., & Lahti, J. (2010). A new measure for dispositional optimism in young children. *European Journal of Personality, 24*(1), 71–84. https://doi.org/10.1002/per.742

Letki, N. (2006). Investigating the roots of civic morality: Trust, social capital, and institutional performance. *Political Behavior, 28*(4), 305–325. https://doi.org/10.1007/s11109-006-9013-6

Lin, A. R. (2014). Examining Students' Perception of Classroom Openness as a Predictor of Civic Knowledge: A Cross-National Analysis of 38 Countries, *Applied Developmental Science, 18*(1), 1–14. https://doi.org/10.1080/10888691.2014.864204

Losito, B., & Mintrop, H. (2001). The teaching of civic education. In J. Torney-Purta, R. Lehmann, H. Oswald, & W. Schulz (Eds.), *Citizenship and education in twenty-eight countries* (pp. 157–173). International Association for the Evaluation of Educational Achievement (IEA). https://www.iea.nl/publications/study-reports/international-reports-iea-studies/citizenship-and-education-twenty-eight

Losito, B., Agrusti, G., Damiani, V. & Schulz W. (2018). *Young People's Perceptions of Europe in a Time of Change IEA International Civic and Citizenship Education Study 2016 European Report.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/young-peoples-perceptions-europe-time

Lundholm, C., Hopwood, N., & Kelsey, E. (2013). Environmental learning: Insights from research Into the student experience. In: R. B. Stevenson et al. (Eds.), *International Handbook of Research on Environmental Education.* (pp. 243–252). AERA-Routledge. https://www.routledge.com/International-Handbook-of-Research-on-Environmental-Education/Stevenson-Brody-Dillon-Wals/p/book/9780415892391

Lutkus, A. D., & Weiss, A. R. (2007). *The nation's report card: Civics 2006* (NCES 2007-476). U.S. Department of Education, National Center for Education Statistics. U.S. Government Printing Office. https://nces.ed.gov/nationsreportcard/pubs/main2006/2007476.aspx

Macauley, F. (2005). Judicialising and (de) criminalising domestic violence in Latin America. *Social Policy & Society, 5*(1), 103-114. https://doi.org/10.1017/S1474746405002782

Mager, U., & Nowak, P. (2012). Effects of student participation in decision making at school: a systematic review and synthesis of empirical research. *Educational Research Review, 7*(1), 38-61. https://doi.org/10.1016/j.edurev.2011.11.001

Mair P. (2002) Populist democracy vs party democracy. In: Mény Y., Surel Y. (Eds.) *Democracies and the Populist Challenge* (pp81-98). Palgrave Macmillan. https://doi.org/10.1057/9781403920072_5

Malak-Minkiewicz, B. & Torney-Purta, J. (Eds.) (2021). *Influences of the IEA Civic and Citizenship Education Studies: Practice, policy, and research across countries and regions.* Springer. https://doi-org.libproxy.viko.lt/10.1007/978-3-030-71102-3

Maldonado, A. (2015, June 2). Same-sex marriage resonates most strongly with young people in the Americas. *America's Barometer: Topical Brief.* Vanderbilt University. https://www.vanderbilt.edu/lapop/insights/ITB021en.pdf

Marjoribanks, K. (1997). Children of single-parent families. In L. J. Saha (Ed.), *International Encyclopedia of the Sociology of Education* (pp. 589–595). Elsevier.

Marquardt, J. (2020). Fridays for Future's disruptive potential: An inconvenient youth between moderate and radical ideas. *Frontiers in Communication, 5,* 1-48. https://doi.org/10.3389/fcomm.2020.00048

Marzocchi, O. (2020). *The impact of COVID-19 measures on democracy, the rule of law and fundamental rights in the EU* (European Parliament Briefing). European Parliament. https://data.europa.eu/doi/10.2861/47207

Masso, A. (2009). A readiness to accept immigrants in Europe? Individual and country-level characteristics. *Journal of Ethnic and Migration Studies, 35*(2), 251–270. https://doi.org/10.1080/13691830802586245

Masters, G. N., & Wright, B. D. (1997). The partial credit model. In W. J. van der Linden & R. K. Hambleton (Eds.), *Handbook of modern item response theory* (pp. 101-122). Springer. https://doi.org/10.1007/978-1-4757-2691-6_6

Mazzoni, D., Albanesi, C., Ferreira, P. D., Opermann, S., Pavlopoulos. V., & Cicognani, E. (2017): Cross-border mobility, European identity and participation among European adolescents and young adults. *European Journal of Developmental Psychology, 15*(3), 324-339. https://doi.org/10.1080/17405629.2017.1378089

McGrew, S., Breakstone, J., Ortega, T., Smith, M., & Wineburg, S. (2018). Can students evaluate online sources? Learning from assessments of civic online reasoning. *Theory & Research in Social Education, 46*(2), 165-193. https://doi.org/10.1080/00933104.2017.1416320

McGrew, S., Ortega, T., Breakstone, J., & Wineburg, S. (2017). The challenge that's bigger than fake news: Civic reasoning in a social media environment, *American Educator, 41*(3), 4-9. https://www.aft.org/ae/fall2017/mcgrew_ortega_breakstone_wineburg

McLanahan, S. S., & Sandefur, G. D. (1994). *Growing up with a single parent: What hurts, what helps.* Harvard University Press. https://doi.org/10.1093/sf/73.3.1184

Micheletti, M., & Stolle D. (2015). Concept of political consumerism. In L. R. Sherrod (Ed.), *Youth activisim: An international encyclopedia.* Greenwood Publishing.

Micheletti, M., & Stolle, D. (Eds.). (2004). Politics, products, and markets: Exploring political consumerism past and present. Transaction Publishers. https://doi.org/10.4324/9781315126937

Middaugh, E., Bowyer, B., & Kahne, J. (2016). U Suk! Participatory media and youth experiences with political discourse. *Youth & Society, 49*(7), 902–922. https://doi.org/10.1177/0044118X16655246

Mihailidis, P. (2011). New civic voices and the emerging media literacy landscape. *Journal of Media Literacy Education, 3*(1), 4–5. https://digitalcommons.uri.edu/jmle/vol3/iss1/3

Millei, Z. & Imre, R. (Eds) (2015). *Childhood and Nation: Interdisciplinary Engagements.* MacMillan.

Ministry of Education of Colombia. (2004). *Estándares básicos de competencias ciudadanas. Formar para la ciudadanía … ¡Sí es posible! Lo que necesitamos saber y saber hacer* [Basic standards of citizenship … Yes, it is possible! What we need to know and know how to do it]. Ministry of Education Colombia. https://www.oocities.org/capecanaveral/1132/Competencias_Ciudadanas.pdf

Mochizuki, Y., & Bryan, A. (2015). Climate change education in the context of education for sustainable development: Rationale and principles. *Journal of Education for Sustainable Development, 9*(1), 4–26. https://doi.org/10.1177/0973408215569109

Modood, T., & Meer, N. (2013). Contemporary citizenship and diversity in Europe: The place of multiculturalism. In Taras R. (Ed.), *Challenging Multiculturalism: European Models of Diversity* (pp. 25-51). Edinburgh University Press. https://www.jstor.org/stable/10.3366/j.ctt20q22fw

Morley, K. M. (2003) Fitting in by race/ethnicity: The social and academic integration of diverse students at a large predominantly white university. *Journal of College Student Retention: Research, Theory and Practice, 5*(2), 147–174. https://doi.org/10.2190/K1KF-RTLW-1DPW-T4CC

Morrell, G. (2008). *Multiculturalism, Citizenship and Identity.* Information Centre about Asylum and Refugees (ICAR).

Morris, S. D., & Blake, C. H. (2010). Corruption and politics in Latin America. In S. D. Morris, & C. H. Blake (Eds.), *Corruption, and politics in Latin America* (pp. 1–29). Lynne Rienner. https://doi.org/10.1017/S0022216X12000120

Morris, S. D., & Klesner, J. L. (2010). Corruption and trust: Theoretical considerations and evidence from Mexico. *Comparative Political Studies, 43*(10), 1258–1285. https://doi.org/10.1177/0010414010369072

Mosher, R., Kenny, R. A., & Garrod, A. (1994). *Preparing for citizenship: Teaching youth to live democratically.* Praeger. https://archive.org/details/preparingforciti00mosh

Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2008). *Digital citizenship. The internet, society, and participation.* The MIT Press. https://mitpress.mit.edu/books/digital-citizenship

Mullis, I. V. S., & Martin, M. O. (Eds.). (2013). *TIMSS 2015 Assessment Frameworks.* TIMSS, & PIRLS International Study Center, Boston College. https://timssandpirls.bc.edu/timss2015/frameworks.html

Mullis, I. V. S., & Martin, M. O. (Eds.). (2017). *TIMSS 2019 Assessment Frameworks.* TIMSS, & PIRLS International Study Center, Boston College. http://timssandpirls.bc.edu/timss2019/frameworks/

Mullis, I. V. S., Martin, M. O., Gonzalez, E. J., Gregory, K. D., Garden, R. A., O'Connor, K. M., Chrostowski, S, J., & Smith, T A. (2000). *TIMSS 1999 international mathematics report: Findings from IEA's repeat of the Third International Mathematics and Science Study at the eighth grade.* TIMSS, & PIRLS International Study Center, Boston College. https://timssandpirls.bc.edu/timss1999i/math_achievement_report.html

Munck, I., Barber, C. & Torney-Purta, J. (2018). Measurement invariance in comparing attitudes toward immigrants among youth across Europe in 1999 and 2009: The alignment method. *Sociological Methods and Research*, 47(4), 687-728. https://doi.org/10.1177/0049124117729691

Munn, P., Brown, J., & Ross, H. (Eds.) (2012). *Democratic citizenship in schools: Teaching controversial issues, traditions, and accountability.* Dunedin Press.

Mushi, S. (2004). Multicultural competencies in teaching: a typology of classroom activities. *Intercultural Education*, 15(2), 179-194. https://doi.org/10.1080/1467598042000225032

Neal, J. W., & Neal, Z. P. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development*, 22(4), 722–737. https://doi.org/10.1111/sode.12018

Neeleman, A. (2019). The scope of school autonomy in practice: An empirically based classification of school interventions. *Journal of Educational Change, 20,* 31-55 https://doi.org/10.1007/s10833-018-9332-5

Neundorf, A., & Smets, K. (2017). Political socialization and the making of citizens. *In Oxford Handbooks Online in Political Science.* Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199935307.013.98

Neundorf, A., Smets, K., & García-Albacete, G. M.(2013). Homemade citizens: The development of political interest during adolescence and young adulthood. *Acta Politica*, 48(1), 92-116. https://doi.org/10.1057/ap.2012.23

Neundorf, A., Niemi, R., & Smets, K. (2016). The compensation effect of civic education on political engagement: How civics classes make up for missing parental socialization. *Political Behavior*, 38(4), 1–29. https://doi.org/10.1007/s11109-016-9341-0

Nie, N. H., & Hillygus, (2001). Education and democratic citizenship. D. Ravitch & J. P. Viteritti (Eds). *In Making Good Citizens. Education and Civil Society* (pp. 30–57). Yale University Press. http://www.jstor.org/stable/j.ctt1npt8c.6

Nie, N. H., Junn, J., & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America.* University of Chicago Press. https://press.uchicago.edu/ucp/books/book/chicago/E/bo3683564.html

Niemi, R., & Junn, J. (1998). *Civic education: What makes students learn?* Yale University Press.

Nonomura, R. (2017). Political consumerism and the participation gap: are boycotting and 'buycotting' youth-based activities? *Journal of youth studies* 20(2), 234-251. https://doi.org/10.1080/13676261.2016.1206861

Norris, P. (2000). A virtuous circle: Political communication in postindustrial societies. Cambridge University Press. https://www.cambridge.org/core/journals/american-political-science-review/article/abs/virtuous-circle-political-communications-in-postindustrial-societies-by-pippa-norris-cambridge-cambridge-university-press-2000-398p-5995-cloth-21-95-paper/885FF96A931D8E92B51B7F3A49F546D5

Ñopo, H., Chong, A., & Moro, A. (2010). *Discrimination in Latin America: An economic perspective.* The Inter-American Development Bank. https://publications.iadb.org/publications/english/document/Discrimination-in-Latin-America-An-Economic-Perspective.pdf

OECD. (2005). *Technical report for the OECD Programme for International Student Assessment 2003*. OECD Publications. https://www.oecd.org/education/school/programmeforinternationalstudentassessmentpisa/35188570.pdf

OECD. (2009). *Creating effective teaching and learning environments: First results from TALIS*. OECD Publications. https://www.oecd.org/education/school/43023606.pdf

OECD. (2012). *Free movement of workers and labour market adjustment. Recent experiences from OECD countries and the European Union*. OECD Publications. https://www.oecd.org/migration/freemovementofworkersandlabourmarketadjustment.htm

OECD. (2015). *Skills for social progress. The power of social and emotional skills*. OECD Publishing. https://doi.org/10.1787/9789264226159-en

OECD (2020), *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*. OECD Publishing. https://doi.org/10.1787/ca768d40-en

Omelicheva, M, Y., & Ahmed, R. (2018). Religion and politics: Examining the impact of faith on political participation, Religion, *State and Society, 46* (1), 4-25. https://doi.org/10.1080/09637494.2017.1363345

Oscarsson, V. (1996). Pupils' views of the future in Sweden. *Environmental Education Research, 2*(3), 261–277. https://doi.org/10.1080/1350462960020301

Osler, A. (2011). Teacher interpretations of citizenship education: National identity, cosmopolitan ideals, and political realities. *Journal of Curriculum Studies, 43*(1), 1–24. https://doi.org/10.1080/00220272.2010.503245

Osler, A. (2012) Citizenship Education and Diversity. In J.A. Banks (Ed.). *Encyclopedia of Diversity in Education. Vol. 1* (pp. 353-361). Sage Publications Inc. https://sk.sagepub.com/reference/diversityineducation

Osler, A., & Starkey, H. (2001). Citizenship education and national identities in France and England: Inclusive or exclusive? *Oxford Review of Education, 27*(2), 199–215. https://doi.org/10.1080/03054980124800

Osler, A., & Starkey, H. (2008). Education for cosmopolitan citizenship. In V. Georgi (Ed.), *The making of citizens in Europe: New perspectives on citizenship education*. Bundeszentrale für politische Bildung (BPB) (German Federal Agency for Civic Education).

Oxley, L., & Morris, P. (2013). Global citizenship: A typology for distinguishing its multiple conceptions. *British Journal of Educational Studies, 61*(3), 301-325. https://doi.org/10.1080/00071005.2013.798393

Paas T., & Halapuu V. (2012). *Attitudes towards immigrants and the integration of ethnically diverse societies*. NORFACE Migration Discussion Paper No. 2012-23. https://www.norface-migration.org/publ_uploads/NDP_23_12.pdf

Pancer, S. M. (2015). *The psychology of citizenship and civic engagement*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199752126.001.0001

Pancer, S., & Pratt, M. (1999). Social and family determinants of community service involvement in Canadian youth. In M. Yates, & J. Youniss (Eds.), *Roots of Civic Identity* (pp. 32–55). Cambridge University Press. https://doi.org/10.1017/CBO9780511751820

Pashby, K., da Costa, M., Stein, S., & Andreotti, V. (2020) A meta-review of typologies of global citizenship education. *Comparative Education, 56*(2), 144-164. https://doi.org/10.1080/030500 68.2020.1723352

Pasek, J., Feldman, L., Romer, D., & Jamieson, K. (2008). Schools as incubators of democratic participation: Building long-term political efficacy with civic education. *Applied Developmental Science, 12*(1), 236–237. https://doi.org/10.1080/10888690801910526

Perks, T., & Haan M. (2011). Youth religious involvement and adult community participation: Do levels of youth religious involvement matter? *Nonprofit and Voluntary Sector Quarterly, 40*(1) 197–129. https://doi.org/10.1177/0899764009357794

Perliger, A., Canetti-Nisim, D., & Pedahzur, A. (2006). Democratic attitudes among high-school pupils: The role played by perceptions of class climate. *School Effectiveness and School Improvement, 17*(1), 119–140. https://doi.org/10.1080/09243450500405217

Pew Research Center (2014a). *The global divide on Homosexuality: Greater acceptance in more secular and affluent countries.* Pew Research Center. https://www.pewresearch.org/global/2013/06/04/ the-global-divide-on-homosexuality/

Pew Research Center (2014b). *Religion in Latin America: Widespread change in a historically Catholic region.* Pew Research Center. https://www.pewresearch.org/religion/2014/11/13/religion-in-latin-america/

Pew Research Center (2019). *Climate Change Still Seen as the top global threat, but cyberattacks a rising concern.* Pew Research Center. https://www.pewresearch.org/global/2019/02/10/climate-change-still-seen-as-the-top-global-threat-but-cyberattacks-a-rising-concern/

Piaget, J. (1965). *The moral judgment of the child.* Free Press.

Porter, T. J. (2013). Moral and political identity and civic involvement in adolescents. *Journal of Moral Education, 42*(2), 239-255. https://doi.org/10.1080/03057240.2012.761133

Potter, J. (2002). *Active citizenship in schools.* Kogan Page. https://doi.org/10.4324/9780203417058

Powell, J. E., Powell, A. I., & Petrosko, J. M. (2015). School climate as a predictor of incivility and bullying among public school employees: A multilevel analysis. *Journal of School Violence, 14*(2), 217–244. https://doi.org/10.1080/15388220.2014.906917

Putnam R. D., & Campbell D. E. (2010). *American grace: How religion divides and unites us.* Simon and Schuster. https://americangrace.org/

Putnam, R. D. (1993). *Making democracy work.* Princeton University Press. https://press.princeton.edu/books/paperback/9780691037387/making-democracy-work

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community.* Simon and Schuster.

Rainie, L., Smith, A., Schlozman, K., Brady, H., & Verba, S. (2012). *Social media and political engagement.* Pew Research Center's Internet, & American Life Project. https://www.pewresearch.org/internet/2012/10/19/social-media-and-political-engagement/

Ramlackhan, K., & Wang, Y. (2021). Urban school district performance: A longitudinal analysis of achievement. *Urban Education,* https://doi.org/10.1177/00420859211044947

Rasch, G. (1960). *Studies in mathematical psychology: Probabilistic models for some intelligence and attainment tests, Volume 1.* Denmark: Danmarks Paedagogiske Institut.

Reezigt, G. J., & Creemers, B. P. M. (2005). A comprehensive framework for effective school improvement. *School Effectiveness and School Improvement, 16*(4), 407– 424. https://doi.org/10.1080/09243450500235200

Reay, D. (1998). Cultural Reproduction: Mothers' involvement in their children's primary schooling. In Grenfell, M. & James, D. (Eds). Bourdieu and Education: Acts of Practical Theory (pp. 55-71). London: Falmer Press. https://doi.org/10.4324/9780203209455

Reichert, F., Chen, J., & Torney-Purta, J. (2018). Profiles of adolescents' perceptions of democratic classroom climate and students' influence: The effect of school and community contexts. *Journal of Youth and Adolescence, 47*(6), 1279-1298. https://doi.org/10.1007/s10964-018-0831-8

Reichert, F. & Torney-Purta, J. (2019). A cross-national comparison of teachers' beliefs about the aims of civic education in 12 countries: A person-centered analysis. *Teaching and Teacher Education, 77,* 112-125. https://doi.org/10.1016/j.tate.2018.09.005

Reichert, F., Lange D. & Chow, L. (2021). Educational beliefs matter for classroom instruction: A comparative analysis of teachers' beliefs about the aims of civic education. *Teaching and Teacher Education, 98,* Article 103248. https://doi.org/10.1016/j.tate.2020.103248

Reid, A., Gill, J., & Sears, A. (Eds.) (2010). *Globalisation, the nation-state and the citizen. Dilemmas and directions for civics and citizenship education.* Routledge. https://doi.org/10.4324/9780203855119

Reimers, F. (2007). Civic education when democracy is in flux: The impact of empirical research on policy and practice in Latin America. *Citizenship and Teacher Education, 3*(2), 5–21.

Reimers, F. (2013). Education for Improvement: Citizenship in the Global Public Sphere. *Harvard International Review, 35*(1), 56-61.

Renshon, S. A. (1975). The role of personality development in political socialization. In D. C. Schwartz, & S. Schwartz (Eds.), *New Directions in Socialization* (pp. 29–68). Free Press. https://archive.org/details/newdirectionsinp0000schw

Richardson, W. (2003). *Connecting political discussion to civic engagement: The role of civic knowledge, efficacy and context for adolescents.* Unpublished doctoral dissertation, University of Maryland, College Park, MD, USA. https://www.iea.nl/index.php/publications/award/connecting-political-discussion-civic-engagement-role-civic-knowledge-efficacy

Rizzo, A., & Chaoyun, L. (2017). How young adults imagine their future? The role of temperamental traits. *European Journal of Futures Research, 5*(9). https://doi.org/10.1007/s40309-017-0116-6

Robinson, M. J. (1976). Public affairs television and the growth of political malaise: The case of "the selling of the Pentagon." *American Political Science Review, 70*, 409–432. https://doi.org/10.2307/1959647

Rogers, C. R. (1975). Empathic: An unappreciated way of being. *Counseling Psychologist, 5*, 2–10. https://doi.org/10.1177/001100007500500202

Rovira Kaltwasser, C., & Van Hauwaert, S. (2020). The populist citizen: Empirical evidence from Europe and Latin America. *European Political Science Review, 12*(1), 1-18. https://doi.org/10.1017/S1755773919000262

Rubin, A. (2002). *Reflections upon the late-modern transition as seen in the images of the future held by young Finns*, in G. Gidley, & S. Inayatullah (Eds) Youth futures: comparative research and transformative visions (pp. 99–109). Praeger.

Rustenbach , E. (2010). Sources of negative attitudes toward immigrants in Europe: A multi-level analysis. *International Migration Review, 44*(1), 53–77. https://doi.org/10.1111/j.1747-7379.2009.00798.x

Sandoval-Hernández, A., Isac, M. M., & Miranda, D. (Eds.) (2018). Teaching Tolerance in a Globalized World. (IEA Research for Education; Vol. 4). Springer. https://doi.org/10.1007/978-3-319-78692-6

Sandoval-Hernández, A., Isac, M. M., & Miranda, D. (2019). *Measurement Strategy for SDG Global Indicator 4.7.1 and Thematic Indicators 4.7.4 and 4.7.5 using International Large-Scale Assessments in Education: Proposal.* (Information papers; No. GAML6/REF/9). UNESCO Institute for Statistics. http://gaml.uis.unesco.org/wp-content/uploads/sites/2/2019/08/GAML6-REF-9-measurement-strategy-for-4.7.1-4.7.4-4.7.5.pdf

Sandoval-Hernández, A., Miranda, D., Treviño, E., & Schmelkes, S. (2019). *Is democracy overrated? Latin American students' support for dictatorships.* IEA Compass: Briefs in Education No. 7. The International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/series-journals/iea-compass-briefs-education-series/october-2019-democracy-overrated

Sant, E. (2019) Democratic education: A theoretical review (2006–2017), *Review of Educational Research, 89*(5), 655-696. https://doi.org/10.3102/0034654319862493

Schachner, M. (2014). *Contextual conditions for acculturation and school-related outcomes of early adolescent immigrants in Germany* (doctoral thesis). University of Jena and Tilburg University. https://research.tilburguniversity.edu/en/publications/contextual-conditions-for-acculturation-and-school-related-outcom

Schachner, M. K. (2019). From equality and inclusion to cultural pluralism – Evolution and effects of cultural diversity perspectives in schools. *European Journal of Developmental Psychology, 16*(1), 1-17. https://doi.org/10.1080/17405629.2017.1326378

Schachner, M. K., Noack, P., Van de Vijver, F. J.R. and Eckstein, K. (2016). Cultural diversity climate and psychological adjustment at school: Equality and inclusion versus cultural pluralism. *Child Development, 87*(4), 1175-1191. https://doi.org/10.1111/cdev.12536

Schattle, H. (2012). *Globalization and citizenship.* Rowman & Littlefield.

Scheerens, J. (Ed.). (2009). *Informal learning of active citizenship at school: An international comparative study in seven European countries.* Springer. https://doi.org/10.1007/978-1-4020-9621-1

Scheerens, J. (2011). Indicators on informal learning for active citizenship at school. *Educational Assessment, Evaluation and Accountability, 23*(3), 201–222. https://doi.org/10.1007/s11092-011-9120-8

Scheerens, J., & Bosker, R. J. (1997). *The foundations of educational effectiveness.* Pergamon.

Scheufele, D. A., Nisbet, M. C., & Brossard, D. (2003). Pathways to political participation? Religion, communication contexts, and mass media. *International Journal of Public Opinion Research, 15*(3), 300–324. https://doi.org/10.1093/ijpor/15.3.300

Schlozman, K., Verba, S., & Brady, H. (2012). *The unheavenly chorus: Unequal political voice and the broken promise of American democracy.* Princeton University Press. https://press.princeton.edu/books/hardcover/9780691154848/the-unheavenly-chorus

Schulz, W. (2004). Scaling procedures for Likert-type items on students' concepts, attitudes and actions. In W. Schulz, & H. Sibberns (Eds.), I*EA Civic Education Study: Technical report* (pp. 193–126). International Association for the Evaluation of Educational Achievement. https://www.iea.nl/index.php/publications/technical-reports/iea-civic-education-study-technical-report

Schulz, W. (2005). Political efficacy and expected political participation among lower and upper secondary students. Paper presented at the ECPR General Conference, Budapest, September 8–10 2005.

Schulz, W. (2018). Civic knowledge, engagement and attitudes among lower-secondary students in 24 countries. Results from ICCS 2016. In J. A. Pineda-Alonso, N. De Alba, & E. Navarro-Medina (Eds.). *Handbook of Research on Education for Participative Citizenship and Global Prosperity.* IGI Global. https://doi.org/10.4018/978-1-5225-7110-0.CH001

Schulz, W. (2021). Reflections on the development of IEA civic and citizenship education studies. In J. Torney-Purta & B. Malak (Eds.). *Contributions of IEA's Civic and Citizenship Studies to Educational Discourse: Perceptions across Nations.* Springer. https://link.springer.com/content/pdf/10.1007%2F978-3-030-71102-3_23.pdf

Schulz, W. & Ainley, J. (2018). Lower secondary school students' attitudes toward equality. *CADMO, 1,* 66-81. https://doi.org/10.3280/CAD2018-001008

Schulz, W., Ainley, J., & Fraillon, J. (2015). Assessing the intended participation of young adolescents as future citizens: Comparing results from five East Asian countries. *In World Education Research Yearbook 2015* (pp. 74–93). Routledge.

Schulz, W., Ainley, J., Cox, C., & Friedman, T. (2018a). *Young people's views of government, peaceful coexistence and diversity in five Latin American countries. The International Civic and Citizenship Education Study 2016 Latin American Report.* Springer. https://doi.org/10.1007/978-3-319-95393-9

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 International Report. Civic knowledge, attitudes and engagement among lower secondary school students in thirty-eight countries.* Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/iccs-2009-international-report

Schulz, W., Ainley, J., Fraillon, J., Losito, B. & Agrusti, G. (2016). *IEA International Civic and Citizenship Education Study 2016. Assessment Framework.* Springer. https://doi.org/10.1007/978-3-319-39357-5

Schulz, W., Ainley, J., Fraillon, J., Losito, B., Agrusti, G., Friedman, T. (2018b). *Becoming Citizens in a Changing World. IEA International Civic and Citizenship Education Study 2016 International Report.* Springer. https://doi.org/10.1007/978-3-319-73963-2

Schulz, W., Ainley, J., Friedman, T., & Lietz, P. (2011). *ICCS 2009 Latin American Report: Civic knowledge and attitudes among lower secondary students in six Latin American countries.* Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA). https://www.iea.nl/sites/default/files/2019-04/ICCS_2009_Latin_American_Report.pdf

Schulz, W., Fraillon, J., Ainley, J., Losito, B., & Kerr, D. (2008). *International Civic and Citizenship Education Study. Assessment framework.* Springer. https://doi.org/10.1007/978-3-319-39357-5

Schulz, W., & Friedman, T. (2011). Scaling procedures for ICCS questionnaire items. In W. Schulz, J. Ainley, J., & J. Fraillon (Eds.), *ICCS 2009 Technical Report* (pp. 157–259). Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA). https://www.iea.nl/index.php/publications/technical-reports/iccs-2009-technical-report

Schulz, W. & Friedman, T. (2018). Scaling procedures for ICCS 2016 questionnaire items. In W. Schulz, R. Carstens, B. Losito, & J. Fraillon (Eds.). *ICCS 2016 technical report* (139-243). Amsterdam, the Netherlands: International Association for the Evaluation of Educational Achievement (IEA). https://www.iea.nl/publications/technical-reports/iccs-2016-technical-report

Searing, D., Wright, G., & Rabinowitz. G. (1976). The primacy principle: Attitude change and political socialization. *British Journal of Political Science, 6*(1), 83–113. https://doi.org/10.1017/S0007123400000533

Sears, D. O., & Levy, S. (2003). Childhood and adult political development. In D. O. Sears, L. Huddy, & R. Jervis (Eds.). *Oxford Handbook of Political Psychology* (pp. 60–109). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199760107.013.0003

Segerberg, A., & Bennett, W. L. (2011). Social media and the organization of collective action: Using Twitter to explore the ecologies of two climate change protests. *The Communication Review, 14*(3), 197–215. https://doi.org/10.1080/10714421.2011.597250

Seltzer, J. (1994). Consequences of marital dissolution for children. *Annual Review of Sociology 20,* 235–266. https://doi.org/10.1146/annurev.so.20.080194.001315

Semyonov, M., Gorodzeisky, A., & Glikman, A. (2012). Neighborhood ethnic composition and resident perceptions of safety in European countries. *Social Problems, 59*(1), 117–135. https://doi.org/10.1525/sp.2012.59.1.117

Shahibi, M.S., Thought, M., Ehsan, S.D., Mazlan, M.A., & Angsa, J.P. (2013). Perception towards the credibility of information in internet among young Malay generation. *International Journal of Education and Research*, *1*(7), 1-8. https://www.semanticscholar.org/paper/Conceptual-model-ofcontinuance-intention-to-use-of-Ibrahim-Shahibi/412ef58957f65b04179e4f8ea148ced8f2e4084f

Sherrod, L., Torney-Purta, J., & Flanagan, C. (Eds.). (2010). *Handbook of research on civic engagement in youth.* John Wiley and Sons. https://doi.org/10.1002/9780470767603

Shores, K., Kim, H. E., & Still, M. (2020). Categorical inequality in Black and White: Linking disproportionality across multiple educational outcomes. *American Educational Research Journal*, *57*(5), 2089-2131. https://doi.org/10.3102/0002831219900128

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4–31. https://doi.org/10.3102/0013189X015002004

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, *57*(1), 1–22. http://dx.doi.org/10.17763/haer.57.1.j463w79r56455411

Sibberns, H. (2020). Technology and assessment. In: Wagemaker, H. (eds) Reliability and Validity of International Large-Scale Assessment. IEA Research for Education, vol 10. Springer. https://doi.org/10.1007/978-3-030-53081-5_10

Sincer, I., Severiens, S., & Volmer, M. (2019). Teaching diversity in citizenship education: Context-related teacher understandings and practices. *Teacher and Teacher Education*, *78*, 183-192. https://doi.org/10.1016/j.tate.2018.11.015

Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, *75*(3), 417– 453. https://doi.org/10.3102/00346543075003417

Smart, A., Sinclair, M., Benavot, A., Bernard, J., Chabbott, C., Russell, S.G., & Williams J.H. (2019). NISSEM Global Briefs: Educating for the social, the emotional and the sustainable. https://www.nissem.org/sel/target-4.7/renewing-textbooks/blogs-and-news/activity/educating-social-emotional-and-sustainable

Soysal, Y. N. (1994). *Limits of citizenship: Migrants and postnational membership in Europe.* Chicago University Press. https://press.uchicago.edu/ucp/books/book/chicago/L/bo3683837.html

Spannring, R., Wallace, C., & Datler, G. (2008). What leads young people to identify with Europe? An exploration of the impact of exposure to Europe and political engagement on European identity among young Europeans. *Perspectives on European Politics and Society, 9*(4), 480–498. https://doi.org/10.1080/15705850802416929

Spohr, D. (2017). Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review, 34*(3), 150–160. https://doi.org/10.1177/0266382117722446

Stanat, P., & Christensen, G. (2006). *Where immigrant students succeed: A comparative review of performance and engagement in PISA 2003.* OECD Publications. https://www.oecd.org/education/school/programmeforinternationalstudentassessmentpisa/whereimmigrantstudentssucceed-acomparativereviewofperformanceandengagementinpisa2003.htm

Steinberg, M. P. (2014). Does greater autonomy improve school performance? Evidence from a regression discontinuity analysis in Chicago. *Education Finance and Policy, 9*(1), 1–35. https://doi.org/10.1162/EDFP_a_00118

Stern, P. C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues, 56*(3), 407–424. https://doi.org/10.1111/0022-4537.00175

Stolle, D., Hooghe, M., & Micheletti, M. (2005). Politics in the supermarket: Political consumerism as a form of political participation. *International Political Science Review, 26*(3), 245–269. https://doi.org/10.1177/0192512105053784

Stolle, D., with Lewis, J. (2002). Social capital: An emerging concept. In B. Hobson, J. Lewis, & B. Siim (Eds.), *Contested concepts in gender and European social politics* (pp. 195–229). Edward Elgar Press. https://doi.org/10.4337/9781781950340.00012

Storm, I. (2015). Civic engagement in Britain: The role of religion and inclusive values. *European Sociological Review, 31*(1), 14–29. https://doi.org/10.1093/esr/jcu077

Strayer, J. (1987). Affective and cognitive perspectives on empathy. In N. Eisenberg, & J. Strayer (Eds.), *Empathy and its development* (pp. 218–244). Cambridge University Press. https://doi.org/10.1017/S0033291700008667

Tarozzi, M. (2014). Building an 'intercultural ethos' in teacher education. *Intercultural Education, 25*(2), 128-142. https://doi.org/10.1080/14675986.2014.888804

Taylor, N., Quinn, F., Jenkins, K., Miller-Brown, H., Rizk, N., Prodromou, T., Serow, P., & Taylor, S. (2019). Education for sustainability in the secondary sector—A review. *Journal of Education for Sustainable Development, 13*(1), 102–122. https://doi.org/10.1177/0973408219846675

Taylor, S., & Kaur Sidhu, R. (2012). Supporting refugee students in schools: what constitutes inclusive education? *International Journal of Inclusive Education, 16*(1), 39-56. https://doi.org/10.1080/13603110903560085

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357–385. https://doi.org/10.3102/0034654313483907

Theocharis, Y., & Van Deth, J. W. (2018). The continuous expansion of citizen participation: A new taxonomy. *European Political Science Review, 10*(1), 139–163. https://doi.org/10.1017/S1755773916000230

Thijssen, P. (2012). From mechanical to organic solidarity, and back: With Honneth beyond Durkheim. *European Journal of Social Theory, 15*(4), 454-470. https://doi.org/10.1177/1368431011423589

Thomas, L., Briggs, P., Hart, A., & Kerrigan, F. (2017). Understanding social media and identity work in young people transitioning to university. *Computers in Human Behavior, 76*, 541-553. https://doi.org/10.1016/j.chb.2017.08.021

Torgler, B., & Valev, N. T. (2006). Corruption and age. *Journal of Bioeconomics, 8*, 133-145. https://doi.org/10.1007/s10818-006-9003-0

Torney, J., Oppenheim, A. N., & Farnen, R. F. (1975). *Civic education in ten countries: An empirical study.* John Wiley and Sons.

Torney-Purta, J. (2002). The school's role in developing civic engagement: A study of adolescents in twenty-eight countries. *Applied Developmental Science, 6*(4), 203–212. https://doi.org/10.1207/S1532480XADS0604_7

Torney-Purta, J., & Barber, C. (2004). *Democratic school engagement and civic participation among European adolescents: Analysis of data from the IEA Civic Education Study.* Council of Europe, DGIV/EDU/CIT (2004) 40. https://doi.org/10.4119/jsse-324

Torney-Purta J., Cabrera, J. C., Crotts Roohr, K., Liu, O. L., Rios, J. A. (2015). *Assessing civic competency and engagement in higher education: research background, frameworks, and directions for next-generation assessment.* Research report ETS RR-15-34. Educational Testing Service. https://doi.org/10.1002/ets2.12081

Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/citizenship-and-education-twenty-eight

Torney-Purta, J., & Schwille, J. (2011). The international civic and citizenship education study (ICCS). In C. Papanastasiou, T. Plomp & E. C. Papanastasiou (Eds.). *IEA 1958-2008: 50 years of experiences and memories Volume 1* (pp. 97-114). Cultural Center of the Kykkos Monastery.

Torney-Purta, J., Schwille, J., & Amadeo, J. A. (1999). *Civic education across countries: Twenty-four case studies from the IEA Civic Education Project.* International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/study-reports/international-reports-iea-studies/civic-education-across-countries

Torney-Purta, J., & Wilkenfeld, B. (2009). *Pathways to twenty-first century competencies through civic education classrooms: An analysis of survey results from ninth-graders.* Division for Public Education, American

Trafford, B. (2003). *School councils, school democracy, school improvement: Why, what, how.* Secondary Heads Association.

Transparency International. (2019, September 27). *Corruption perceptions index 2018.* https://www.transparency.org/en/cpi/2018

Travers, K. J., & Westbury, I. (1989). *The IEA Study of Mathematics I: Analysis of mathematics curricula.* Pergamon Press. https://eric.ed.gov/?q=new&pg=18330&id=ED306111

Travers, K. J., Garden, R. A., & Rosier, M. (1989). Introduction to the study. In: D. A. Robitaille, & R. A. Garden (Eds.), *The IEA Study of Mathematics II: Contexts and outcomes of school mathematics curricula.* Pergamon Press. https://www.iea.nl/index.php/publications/study-reports/international-reports-iea-studies/iea-study-mathematics-ii

Treviño, E., Béjares, C., Wyman, I., & Villalobos, C. (2018). Influence of Teacher, Student and School Characteristics on Students' Attitudes Toward Diversity. In A. Sandoval-Hernandez, M. M. Isac, & D. Miranda (Eds.), *Teaching Tolerance in a Globalized World* (pp. 35-65). Springer. https://link.springer.com/content/pdf/10.1007/978-3-319-78692-6_4.pdf

Treviño, E., Carrasco, D., Claes, E., & Kennedy, K. J. (Eds.)(2021). Good citizenship for the next generation. A global perspective using IEA ICCS 2016 Data. (IEA Research for Education; Vol. 12). Springer. https://doi-org.libproxy.viko.lt/10.1007/978-3-030-75746-5

Tynes, B.M., Del Toro J., & Lozada F.T. (2015). An unwelcomed digital visitor in the classroom: The longitudinal impact of online racial discrimination on academic motivation. *School Psych Rev. 2015, 44*(4), 407–424. https://doi.org/10.17105/SPR-15-0095.1

UNESCO (2005). *UNESCO and sustainable development*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000139369

UNESCO (2012a). *Education for sustainable development sourcebook*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000216383.locale=en

UNESCO (2012b). *International standard classification of education ISCED 2011*. Paris, France: UNESCO-UIS.

UNESCO (2015). *Global citizenship education: Topics and learning objectives*. UNESCO. https://en.unesco.org/sites/default/files/gcedtopicsandlearningobjectives_01.pdf

UNESCO (2017) *Education for Sustainable Development Goals: learning objectives*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000247444

UNESCO (2018). *Global education monitoring report, 2019: Migration, displacement and education: building bridges, not walls*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000265866

UNESCO (2020). *Education for sustainable development: a roadmap*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000374802

UNESCO (2021). *Berlin declaration on education for sustainable development*. UNESCO. https://en.unesco.org/sites/default/files/esdfor2030-berlin-declaration-en.pdf

UNESCO International Bureau for Education (2016). *Global monitoring of target 4.7: themes in national curriculum frameworks*. UNESCO International Bureau for Education. https://www.oneplanetnetwork.org/sites/default/files/from-crm/491245629eng.pdf

United Nations (1948). *The universal declaration of human rights*. United Nations. https://www.un.org/en/about-us/universal-declaration-of-human-rights

United Nations (1987). *Report of the World Commission on environment and development: Our common future*. United Nations. http://www.un-documents.net/our-common-future.pdf

United Nations (1992). *United Nations Framework Convention on Climate Change*. United Nations. https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

United Nations Security Council (2004). *Report of the Secretary-General on the rule of law and transitional justice in conflict and post-conflict societies*. (S/2004/616 of 23 August 2004), United Nations. https://www.un.org/ruleoflaw/files/2004%20report.pdf

United Nations General Assembly (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations. http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1

United Nations Development Programme. (2004). *La democracia en América Latina: hacia una democracia de ciudadanos y ciudadanas* [Democracy in Latin America: Towards democracy for citizens]. United Nations Development Programme.

United Nations, Department of Economic and Social Affairs, (2016). *Leaving no one behind: the imperative of inclusive development. Report on the World Social Situation* (ST/ESA/362). https://www. un.org/esa/socdev/rwss/2016/full-report.pdf

United Nations, Department of Economic and Social Affairs, Population Division (2017). I*nternational Migration Report 2017: Highlights* (ST/ESA/SER.A/404). United Nations. https:// www.un.org/en/development/desa/population/migration/publications/migrationreport/docs/ MigrationReport2017_Highlights.pdf

Van Aelst, P. (2017). Media malaise and the decline of legitimacy. Any room for good news? In C. van Ham, J. Thomassen, K. Aarts, & R. Andeweg (Eds.), *Myth and reality of the legitimacy crisis: Explaining trends and cross-national differences in established democracies* (pp. 68-114). Oxford University Press. https://doi.org/10.1093/oso/9780198793717.001.0001

Van der Toorn, J., Jost, J. T., Packer, D. J., Noorbaloochi, S., & Van Bavel, J. J. (2017). In Defense of tradition: Religiosity, conservatism, and opposition to same-sex marriage in North America. *Personality and Social Psychology Bulletin, 43*(10), 1455-1468. https://doi. org/10.1177/0146167217718523

Van Deth, J. W. (2014). A conceptual map of political participation. *Acta Politica, 49*, 349–367. https://doi.org/10.1057/ap.2014.6

Van Deth, J. W., Abendschön, S., & Vollmar, M. (2011). Early political socialization. *Political Psychology, 32*(1), 147–174. https://doi.org/10.1111/j.1467-9221.2010.00798.x

Van Deth, J. W., Maraffi, M., Newton, K., & Whiteley, P. F. (1999). *Social capital and European democracy.* Routledge. https://www.routledge.com/Social-Capital-and-European-Democracy/ Maraffi-Newton-Van-Deth-Whiteley-Keman/p/book/9780203091401

Van Deth, J.W., Abendschön, S., Rathke. J., & Vollmar, M. (2007) *Kinder und politik: Politische einstellungen von jungen kindern im ersten grundschuljahr* [Children and politics: Political orientations of young children in the first year of primary school]. Wiesbaden: VS Verlag. https://www.mzes. uni-mannheim.de/d7/en/publications/book/kinder-und-politik-politische-einstellungen-von- jungen-kindern-im-ersten-grundschuljahr

Veerman, G., Denessen, E. & Zhao, Z. (2021) Social cohesion in schools: A non-systematic review of its conceptualization and instruments, *Cogent Education, 8*(1), https://doi.org/10.1080/23311 86X.2021.1940633

Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality.* Harvard University Press.

Verhelst, D., Vanhoof, J., Boeve-de Pauw, J. & Van Petegem, P. (2020). Building a conceptual framework for an ESD-effective school organization. *The Journal of Environmental Education, 51*(6), 400-415, https://doi.org/10.1080/00958964.2020.1797615

Veugelers, W. (2011). The moral and the political in global citizenship: appreciating differences in education. *Globalisation, Societies and Education, 9*(3–4), 473–485. https://doi.org/10.1080/1476 7724.2011.605329

Vollebergh, W. A. M., Iedema, J., & Raaijmakers, Q. A. W. (2001) Intergenerational transmission and the formation of cultural orientations in adolescence and young adulthood. *Journal of Marriage and Family, 63*(4), 1185–1198. https://doi.org/10.1111/j.1741-3737.2001.01185.x

Wals, A.E.J., & Benavot, A. (2017). Can we meet the sustainability challenges? The role of education and lifelong learning. *European Journal for Education, 52*(4), 404– 413. https://doi.org/10.1111/ejed.12250

Wang, M.-T., & Degol, J. L. (2015). School climate: a review of the construct, measurement and impact on student outcomes. *Educational Psychology Review 28*, 315–352. https://doi.org/10.1007/s10648-015-9319-1

Wattenberg, Martin P. (2008). *Is Voting for Young People?* Pearson Longman.

Weber, S. (2018). Sampling design and implementation. In W. Schulz, R. Carstens, B. Losito, & J. Fraillon (Eds.). *ICCS 2016 technical report* (pp. 43–51). International Association for the Evaluation of Educational Achievement. https://www.iea.nl/publications/technical-reports/iccs-2016-technical-report

Webster, B. J., & Fisher, D. L. (2000). Accounting for variation in science and mathematics achievement: A multilevel analysis of Australian data from the Trends in International Mathematics and Science Study (TIMSS). *School Effectiveness and School Improvement, 11*(3), 339–360. https://doi.org/10.1076/0924-3453(200009)11:3;1-G;FT339

Weiss, J. (2020). What Is youth political participation? Literature review on youth political participation and political attitudes. *Frontiers in Political Science, 2*(May), 1–13. https://doi.org/10.3389/fpos.2020.00001

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity.* Cambridge University Press. https://doi.org/10.1017/CBO9780511803932

Wenger, E., White, N., & Smith, J. (2009). *Digital habitats: Stewarding technology for communities.* CPsquare Publications.

White, K. R. (1982).The relation between socioeconomic status and educational achievement. *Psychological Bulletin, 91*(3), 461–481. https://doi.org/10.1037/0033-2909.91.3.461

Williams, J. H. (2005). Cross-national variations in rural mathematics achievement: A descriptive overview. *Journal of Research in Rural Education 20*(5), 1–18. https://eric.ed.gov/?q=a&pg=21973&id=EJ692443

Wilson, T. D. (2014). Introduction: Violence against women in Latin America. *Latin American Perspectives, 41*(1), 3-18. https://doi.org/10.1177/0094582X13492143

Wiseman, A.W. & Baker, D.P. (2005). The worldwide explosion of internationalized education policy. In D.P. Baker & A.W. Wiseman (Eds.), *Global Trends in Educational Policy* (International Perspectives on Education and Society, 6, 1-21. Emerald Group Publishing Limited, https://doi.org/10.1016/S1479-3679(04)06001-3

Woessmann, L. (2016). *The importance of school systems: evidence from international differences in student achievement.* IZA Discussion Paper No. 10001. http://ftp.iza.org/dp10001.pdf

Woolcock, M. (2001). The place of social capital in understanding social and economic outcomes. *ISUMA Canadian Journal of Policy Research*, *2*(1), 11–17. http://www.social-capital.net/docs/The%20Place%20of%20Social%20Capital.pdf

Wray-Lake, L. (2019). How do young people become politically engaged? *Child Development Perspectives*, *13*(2), 127-132. https://doi.org/10.1111/cdep.12324

Ziller, C. (2014). Societal implications of antidiscrimination policy in Europe. *Research & Politics*, *1*(3), 1-9. November 2014. https://doi.org/10.1177/2053168014559537

Zuehlke, O. (2011). Sampling design and implementation. In W. Schulz, J. Ainley, & J. Fraillon (Eds.), *ICCS 2009 Technical Report* (pp. 59–68). The Netherlands: International Association for the Evaluation of Educational Achievement. https://www.iea.nl/index.php/publications/technical-reports/iccs-2009-technical-report

7. APPENDICES

Appendix A: Institutions and staff

International Study Center

The international study center is located at the Australian Council for Educational Research (ACER). ACER were responsible for designing and implementing the study in close cooperation with LPS (Laboratorio di Pedagogia Sperimentale at the Roma Tre University, Rome) and LUMSA University of Rome, and IEA.

Staff at ACER

Wolfram Schulz, *international study director*

Abigail Middel, *data analyst*

Dulce Lay, *data analyst*

Greg Macaskill, *data analyst*

John Ainley, *project researcher*

Judy Nixon, *test development*

Laila Halou, *project researcher*

Naoko Tabata, *project researcher*

Nora Kovarcikova, *project researcher*

Tim Friedman, *project coordinator*

Staff at LPS/LUMSA

Bruno Losito, *associate research co-director*

Gabriella Agrusti, *associate research co-director*

Carlo Di Chiacchio, *data analyst*

Elisa Caponera, *data analyst*

Laura Palmerio, *data analyst*

Valeria Damiani, *project researcher*

International Association for the Evaluation of Educational Achievement (IEA)

IEA provides overall support for the coordination of ICCS 2022 from both the Amsterdam and Hamburg offices. Staff at IEA Amsterdam are responsible for the coordination of translation verification, quality control monitoring, and the publication and wider dissemination of the report. Staff at IEA Hamburg are responsible for the coordination of sampling procedures, and data management and processing.

Staff at the IEA Amsterdam

Julian Fraillon, *coordinator of test development*

Dirk Hastedt, *executive director*

Andrea Netten, *director at the IEA Amsterdam*

Jan-Peter Broek, *financial manager*

Jan-Philip Wagner, *research officer*

Jasmin Schiffer, *graphic designer*

Katerina Hartmanova, *junior research officer*

Katie Hill, *head of communications*

Lauren Musu, *senior research officer*

Luiza Uerlings, *junior graphic designer*

Philippa Elliott, *publications manager*

Staff at the IEA Hamburg

Alena Becker, *co-head of international studies unit*

Christine Busch, *ICCS deputy international data manager*

Diego Cortes, *researcher (sampling)*

Falk Brese, *ICCS international data manager*

Hannah Kowolik, *ICCS international data manager*

Ralph Carstens, *senior research advisor*

Sabine Weber, *researcher (sampling)*

Umut Atasever, *researcher (sampling)*

ICCS 2022 project advisory committee (PAC)

The ICCS 2022 PAC has, from the beginning of the project, advised the international study center and its partner institutions during regular meetings.

Babara Malak-Minkiewicz, *IEA Amsterdam (retired), Netherlands*

Cristián Cox, *Diego Portales University, Chile*

Erik Amnå, *Örebro University, Sweden*

Judith Torney-Purta, *University of Maryland, United States*

Wiel Veugelers, *The University of Humanistic Studies Utrecht, Netherlands*

ICCS 2022 sampling referee

Marc Joncas is the sampling referee for the study, providing invaluable advice on all sampling-related aspects of the study.

ICCS 2022 National Research Coordinators (NRCs)

The national research coordinators (NRCs) played a crucial role in the study's development. They provided policy- and content-oriented advice on developing the instruments and were responsible for the implementation of ICCS 2022 in the participating countries.

Brazil

Aline Fernandes Muler

The Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (INEP)

Bulgaria

Natalia Vassileva

Center for Control and Assessment of the Quality in School Education

Chile

M. Victoria Martínez Muñoz

Agencia de Calidad de la Educación

Chinese Taipei

Meihui Liu

National Taiwan Normal University (NTNU)

Colombia

Natalia González Gómez

Colombian Institute for the Assessment of Education (ICFES)

Croatia

Ines Elezović

Department for Quality Assurance in Education, National Centre for External Evaluation of Education

Cyprus

Yiasemina Karagiorgi

Centre for Educational Research and Evaluation

Denmark

Jens Bruun

Danish School of Education, Aarhus University

Estonia

Meril Ümarik

Tallin University

France

Marion LeCam

Ministry of National Education

Germany (North Rhine-Westphalia and Schleswig-Holstein)

Hermann Josef Abs

University of Duisburg-Essen

Katrin Hahn-Laudenberg

Bergische Universität Wuppertal

Italy

Laura Palmerio

INVALSI

Latvia

Ireta Čekse
University of Latvia

Lithuania

Lina Pareigiene

National Examination Center

Malta

Louis Scerri

Ministry for Education and Employment

Netherlands

Remmert Daas

University of Amsterdam

Norway

Oddveig Storstad

NTNU Samfunnsforskning (NTNU Social Research)

Poland

Olga Wasilewska

Educational Research Institute (IBE)

Romania

Catalina Ulrich

University of Bucharest

Serbia

Tanja Trbojević

Institute for Education quality and Evaluation

Slovak Republic

Gabriella Kopas

National Institute for Certified Educational Measurements

Slovenia

Eva Klemenčič-Mirazchiyski
Educational Research Institute

Spain

Gala Ríos Junquera
INEE

Sweden

Ellen Almgren
Swedish National Agency for Education

Appendix B: Key terms for civic and citizenship content domains

Key terms used across all content domains

Community	A group of people who share something in common (for example, history, values, loyalties, a common goal, location). In this framework, community membership includes membership based on externally defined criteria relating to the function of the community (such as attending a school as a student) and membership defined by individuals' own belief of their membership (such as through identification with "like-minded" people regarding a political, religious, philosophical or social issue or through perceptions of shared attributes from gender identity through to humanity, relating to identification with the global community). [11]
Society	A community defined by its geographical territory and within which the population shares a common culture (which may comprise and celebrate multiple and diverse ethnic or other communities) and way of life under conditions of relative autonomy, independence, and self-sufficiency.
Globalization	a. The legal status of being a citizen of a nation state or supranational legal community (for example, the European Union).
	b. The reality of individuals' participation, or lack of participation, in their communities. The term "citizenship," unlike the term "active citizenship," does not assume certain levels of participation.
	c. Individual's citizenship identity or sense of belonging to a national or supranational entity.
Civil	Refers to the sphere of society in which the shared connections between people are at a broader level than that of the extended family, but do not include connections to the state.
Civic	Refers to any community in which the shared connections between people are at a broader level than that of the extended family (including the state). Civic also refers to the principles, mechanisms, and processes of decision-making, participation, governance, and legislative control that exist in these communities.

---

11   Note that a community may still contain a certain level of diversity.

Key terms related to Content Domain 1: Civic Institutions and Systems

Power/ authority	Listed together as concepts dealing with the nature and consequences of the right, or capacity, of bodies or individuals to make binding decisions on behalf of others and that these others are then required to accept and to adhere to.
Rules/law	Listed together as the explicit and implicit prescriptions for behavior. Rules are those prescriptions that are not required to be and are therefore not enforced by a sovereign body. Laws are considered to be those prescriptions that are enforced by a sovereign body.
Constitution	The fundamental rules or laws of principle governing the politics of a nation or subnational body.
Governance	The act and the processes of administering public policy and affairs.
Decision-making	The formal and informal processes by which decisions are made within and among civil and state institutions.
Negotiation	The processes that underpin and are evident when reaching an agreement, and the use and necessity of using such processes as a means of decision-making.
Accountability	The requirement for representatives to answer to those they represent on the conduct of their duties and use of their powers. Accountability includes the assumption that representatives are able to accept responsibility for their failures and to take action to rectify them.
Democracy	The ICCS assessment framework accepts the broadest definition of democracy "as rule by the people." This definition refers both to democracy as a system of governance and to the principles of freedom, equity, and sense of community that underpin democratic systems and guarantee respect for and promotion of human rights. Both representative democratic systems (such as national parliaments) and "direct democracy" systems (such as through referendums or systems used in some local community or school organizations) can be examined as democratic systems under the definition of democracy used in this framework.
Sovereignty	The claim of each individual state/nation to have the ultimate power in making political decisions relevant to that state/nation and recognition that this power underpins the operation and viability of international organizations, agreements, and treaties.
The economy	Systems governing the production, distribution, and consumption of goods and services within states, including industrial regulation, trade, taxation, and government spending including on social welfare. Economic conditions are both a focus of civic decisions as well as a key aspect of the environment in which decisions about other policies are made.

Treaties	Binding agreements under international law entered into by eligible bodies such as states and international organizations.
Trade	The actions, laws and policies underpinning the exchange of capital, goods, and services between countries across their international borders.
Globalization	The increasing international movement of commodities, money, information, and people; and the development of technology, organizations, legal systems, and infrastructures to allow this movement. The ICCS assessment framework acknowledges that a high level of international debate surrounds the definition, perceptions, and even the existence of globalization. Globalization has been included in the framework as a key concept for consideration by students. The definition is not a statement of belief about the existence or merits of globalization.
Dissent	In democratic societies, dissent is a central notion that allows for voicing opposition to, expressing disagreement with, or standing apart from, the policies or decisions of the governing body.

Key terms related to Content Domain 2: Civic Principles

Concern for the common good	The concept that the ultimate goal of civic and community action is to promote conditions that advantage all members of the community.
Separation of powers	The concept that three branches of government (executive, legislative, judicial) are kept separate (independent) from each other to prevent abuse of power and establish a system of checks and balances between these branches.
Human rights	A form of inalienable entitlement of all human beings that, for the purpose of the ICCS assessment framework, is framed by the contents of the United Nations Universal Declaration of Human Rights (United Nations 1948).
Social justice	The distribution of advantage and disadvantage within communities.
The welfare state	The role of a government in providing for the social and economic security of its people through support such as health care, pensions, and social welfare payments and benefits.
Equality	The notion that all people are born equal in terms of dignity and rights regardless of their personal characteristics (such as gender, race, religion).

Social equity	The concept that society has a moral imperative to support fair and equal access and treatment of citizens by the law, social services and benefits, and political agency.
Safety and security	The concept that people have the right to be protected, and to feel protected in situations of vulnerability.
Climate change	"A change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods" (United Nations 1992, p. 7).[12]
Renewable energy	For ICCS, renewable energy is defined as an energy source or fuel type that can regenerate and replenish itself virtually indefinitely, and is made available for use in ways that do not consume the Earth's natural resources or otherwise do damage to the environment. Renewable energy sources include biomass, wind, hydro, solar and geothermal.

Key terms related to Content Domain 3: Civic Participation

Civic engagement	The notion that civic communities benefit from the active engagement of their citizens. Civic communities have a responsibility to facilitate active citizenship, and citizens have a responsibility to participate actively in their civic communities.
Co-operation/ collaboration	The concept that communities benefit most when their members act together in pursuing the common goals of the community. This definition allows for disagreement within communities about the best way to achieve their goals.
Negotiation/ resolution	The concept that peaceful resolution of differences is essential to community well-being and is the best way to attempt settlements of differences in viewpoints among community members.
Digital citizenship	Membership in a community defined by their use of information and communication technology (ICT) to engage in society, politics, and government.

---

12   This definition is the one adopted by the United Nations Framework Convention on Climate Change and has been adopted for ICCS because of its international status and its reference to change associated with human activity.

Key terms related to Content Domain 4: Civic Roles and Identities

Nation-building	The process of developing among the people of a nation some form of a unified sense of national identity, with the aim of fostering long-term harmony and stability. Within the parameters of the ICCS assessment framework, nation-building is assumed to be a dynamic ongoing process in all nations rather than a process associated only with newly independent nations.
Statelessness	The circumstances of people who do not have any legal bond of nationality or citizenship with any state. Included in this concept are the causes and consequences of statelessness.
Franchise/ Voting	Listed together, these concepts refer to the rights, responsibilities, and expectations of people to vote in formal and informal settings. These concepts also refer, more broadly, to issues associated with voting and voting processes, such as compulsory and voluntary voting, and secret ballots.
Positive change	The concept that civic participation is motivated by the desire to improve aspects of a community. The scale of these improvements can be small and local through to large and global.
Inclusiveness	The concept that communities have a responsibility to act in ways that support all their members to feel valued as members of those communities.
Empathy	Intellectually or emotionally taking the role or perspective of others.
Cultural identity	The concept that society has a moral imperative to support fair and equal access and treatment of citizens by the law, social services and benefits, and political agency.
Gender identity	Gender identity reflects a deeply felt and experienced sense of one's own gender that can correspond to or differ from the sex assigned at birth.
Patriotism	An individual's love for or devotion to their country (or countries), which can lead to a willingness to act in support of that country (or countries).
Nationalism	The politicization of patriotism into principles or programs based on the premise that national identity holds precedence over other social and political principles.
Global citizenship	Individuals' sense of belonging to and concern about the global community and common humanity that transcends local and national boundaries. The concept of global citizenship "emphasizes political, economic, social and cultural interdependency and interconnectedness between the local, the national and the global" (UNESCO, 2015).
Civic and citizenship values	Individuals' central ethical and moral beliefs about their civic communities and their roles as citizens within their communities.

Appendix C: Described proficiency levels

Level A: 563 score points and above

Students working at Level A make connections between the processes of social and political organization and influence, and the legal and institutional mechanisms used to control them. They generate accurate hypotheses on the benefits, motivations, and likely outcomes of institutional policies and citizens' actions. They integrate, justify, and evaluate given positions, policies, or laws based on the principles that underpin them. Students demonstrate familiarity with broad international economic forces and the strategic nature of active participation.

Students working at Level A, for example:

- Identify likely strategic aims of a program of ethical consumption,
- Suggest mechanisms by which open public debate and communication can benefit society,
- Suggest related benefits of widespread intercultural understanding in society,
- Justify the separation of powers between the judiciary and the parliament,
- Relate the principle of fair and equal governance to laws regarding disclosure of financial donations to political parties,
- Evaluate a policy with respect to equality and inclusiveness,
- Identify a reason for having limited parliamentary terms, and
- Identify the main feature of free-market economies and multinational company ownership.

Level B: 479 to 562 score points

Students working at Level B demonstrate familiarity with the broad concept of a representative democracy as a political system. They recognize ways in which institutions and laws can be used to protect and promote a society's values and principles. They recognize the potential role of citizens as voters in a representative democracy, and they generalize principles and values from specific examples of policies and laws (including human rights). Students demonstrate understanding of the influence that active citizenship can have beyond the local community. They generalize the role of the individual active citizen to broader civic societies and the world.

Students working at Level B, for example:

- Relate the independence of a statutory authority to maintain public trust in decisions made by the authority,
- Generalize the economic risk to developing countries of globalization from a local context,
- Identify that informed citizens are better able to make decisions when voting in elections,
- Relate the responsibility to vote with the representativeness of a democracy,
- Describe the main role of a legislature/parliament,
- Define the main role of a constitution,

Level C: 395 to 478 score points

Students working at Level C demonstrate familiarity with equality, social cohesion, and freedom as principles of democracy. They relate these broad principles to everyday examples of situations in which protection of or challenge to the principles are demonstrated. Students also demonstrate familiarity with fundamental concepts of the individual as an active citizen: they recognize the necessity for individuals to obey the law; they relate individual courses of action to likely outcomes; and they relate personal characteristics to the capacity of an individual to effect civic change.

Students working at Level C, for example:

- Relate freedom of the press to the accuracy of information provided to the public by the media,
- Justify voluntary voting in the context of freedom of political expression,
- Identify that democratic leaders should be aware of the needs of the people over whom they have authority,
- Recognize that the UN Universal Declaration of Human Rights is intended to apply to all people,
- Generalize about the value of the internet as a communicative tool in civic participation,
- Recognize the value of being an informed voter,
- Recognize that governments have a responsibility to all citizens, and
- Recognize the civic motivation behind an act of ethical consumerism.

Level D: 311 to 394 score points

Students working at Level D recognize explicit examples representing basic features of democracy. They identify the intended outcomes of simple examples of rules and laws and recognize the motivations of people engaged in activities that contribute to the common good.

Students working at Level D, for example:

- Recognize national defense is a key role of the military,
- Relate the right to medical help to the motivation to work for an aid organization,
- Recognize the relationship between the secret ballot and freedom of voter choice,
- Recognize that volunteers provide a contribution to communities, and
- Recognize that all people are equal before the law.

Appendix D: Example test items

This appendix contains ten examples of test items that were used in the ICCS 2016 Main Survey and cover a range of content domains. While the items were used in 2016, for convenience, the content and cognitive domain references have been mapped to the ICCS 2022 Assessment Framework. For each example item, the following summary information is included:
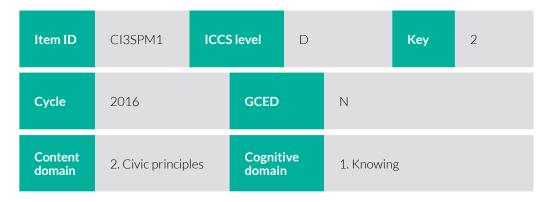
Item ID:	The unique item identifier used in the test and reported in the ICCS 2016 International Database.
ICCS level	The proficiency level on the ICCS scale in which the item is located (A, B, C, D or below Level D).
Key/Max score:	For multiple choice items, the key is the correct response. The key is numbered 1, 2, 3, or 4 to indicate the ordinal position of the correct response in the set of four response options. For the open-ended response item, the maximum score is shown.
Cycle	The ICCS cycle or cycles (2009 and/or 2016) when the item was included in the ICCS main survey instrument.
GCED	An indication of whether this item is deemed to be relevant to the theme of global citizenship education for ICSS 2022.
Content domain:	The content domain reference to the ICCS 2022 Assessment Framework.
Cognitive domain	The cognitive domain reference to the ICCS 2022 Assessment Framework.

Following the ten example items are descriptions of each of the three computer-enhanced clusters of items, including the tasks with dynamic feedback that were included in the ICCS 2022 Main Survey test instrument.

Example Item 1

Item ID	CI3REM1	ICCS level	Below Level D	Key	4
Cycle	2016	GCED	Below Level D		
Content domain	2. Civic principles	Cognitive domain	1. Knowing		

> 'Everyone has the right to education. Education shall be free…and compulsory.' The Universal Declaration of Human Rights

Q Why is education considered a human right?

☐ Because children enjoy going to school and spending time with their friends.

☐ Because education provides jobs for lots of teachers.

☐ Because children can be in school while their parents are working.

☐ Because education develops the skills people need to participate in their communities.

Example Item 2

Item ID	CI3SPM1	ICCS level	D	Key	2
Cycle	2016	GCED	N		
Content domain	2. Civic principles	Cognitive domain	1. Knowing		

A government minister in <Exland> has been caught speeding in his car. He received a fine for breaking the road laws.

Q Why does the minister have to pay the fine?

☐ Because ministers have enough money to pay fines.

☐ The law treats everyone as equal.

☐ Because he wants people to vote for him again.

☐ Because the police can arrest him if he fails to pay the fine.

Example Item 3

Item ID	CI3NWM1	ICCS level	D	Key	3
Cycle	2016	GCED	N		
Content domain	1. Civic institutions and systems	Cognitive domain	2. Reasoning and applying		

Many people in noisy workplaces in <Exland> have had their hearing damaged by the noise.

Q What is the most reasonable action the government could take to deal with the problem of noisy workplaces?

☐ immediately close down all noisy workplaces

☐ give money to the workers to help them find jobs in quieter workplaces

☐ introduce laws stating that employers must protect workers from noise

☐ arrest all owners of noisy workplaces

Example Item 4 (paired in a unit with Example Item 5)

Item ID	CI3DBM1	ICCS level	D	Key	2
Cycle	2016	GCED	Y		
Content domain	4. Civic roles and identities	Cognitive domain	2. Reasoning and applying		

Doctors Without Borders is an organization where health professionals volunteer their time in countries where people require medical assistance.

Q What is the most likely reason that people volunteer their time to such an organization?

☐ Because they want to influence international human rights laws.

☐ Because they believe all people deserve access to medical help.

☐ Because it is the only way they can get practical experience of caring for patients.

☐ Because health professionals find it difficult to get jobs.

Example Item 5 (paired in a unit with Example Item 4)

Item ID	CI3DBM1	ICCS level	D		Key	2
Cycle	2016	GCED	Y			
Content domain	4. Civic roles and identities	Cognitive domain	2. Reasoning and applying			

> Doctors Without Borders chooses to limit the amount of money it receives from governments. It receives about 80% of its money from private sources.

CI3DBM2

Q What is the most likely reason Doctors Without Borders chooses to collect most of its money from private sources rather than governments?

☐ Governments do not like organizations like Doctors Without Borders.

☐ Governments do not have enough money to give to organizations such as Doctors Without Borders.

☐ Doctors Without Borders might want to create a political party that opposes many governments.

☐ Doctors Without Borders wishes to remain independent of governments and their policies.

Example Item 6

Item ID	CI2JOM1	ICCS level	C		Key	2
Cycle	2009 & 2016	GCED	N			
Content domain	2: Civic principles	Cognitive domain	2. Reasoning and applying			

Q Why is it important that journalists are freely able to research and report the news?

☐ It builds trust in the country's government.

☐ It helps journalists to provide accurate information to the public.

☐ It ensures that there are enough journalists to report all news events.

☐ It makes sure that no individual journalist is paid too much money for their work.

Example Item 7

Item ID	CI2BCM1	ICCS level	B		Key	3
Cycle	2016	GCED	N			
Content domain	3. Civic participation	Cognitive domain	1. Knowing			

Members of a youth club want to choose a leader. One member offers to be the leader, but the club members decide instead to vote to elect a leader.

Q What is the **best** reason for the club to elect the leader by a vote rather than choosing a person who offers to be the leader?

☐ Voting enables people to hold a second vote if they disagree with the outcome.

☐ Voting is the fastest way to decide who should be the leader.

☐ Voting enables every member of the club to participate in choosing the leader.

☐ Voting ensures that every member of the club will be happy with the choice of leader.

Example Item 8 (paired in a unit with Example Item 9)

Item ID	CI2ETM2	ICCS level	B	Key	1
Cycle	2009 & 2016	GCED	Y		
Content domain	2. Civic principles	Cognitive domain	2. Reasoning and applying		

Some businesses in <Exland> have begun to import fruit from another country at a very cheap price. Farmers in <Exland> are angry because they cannot afford to sell fruit at the same cheap price. Some people in <Exland> have decided to buy only fruit grown locally in <Exland>.

CI2ETM2

Q What is the best argument **against** protecting the <Exland> farmers' businesses?

☐ People have the right to choose who they buy their fruit from.

☐ The farmers will be able to find some other way to make money.

☐ People will always buy the best quality fruit so the price does not matter.

☐ The farmers should just sell their fruit for less even though they cannot afford to.

Example Item 9 (paired in a unit with Example Item 8)

Item ID	CI2ETO1	ICCS level	B	Max score	2
Cycle	2009 & 2016	GCED	Y		
Content domain	3. Civic participation	Cognitive domain	2. Reasoning and applying		

Q   How can choosing to buy only locally grown fruit help to protect the <Exland> farmers' businesses? Write **two different** ways.

1. _____
_____

2. _____
_____

Example Item 9: Scoring

Score 2: Refers to ways of helping from **two different categories** of the three categories listed below.

1. provides the farmers with money

2. keeps a position in the market for the farmers (relative to competitors)

3. sets an example for other people to follow OR can lead to exposure for the farmers and/or their cause

Code 1: Refers only to ways of helping from one of the three listed categories (including responses in which **different ways of helping from the same category** are provided).

Code 0: Irrelevant OR incoherent OR repeats the question.

Example Item 10

Item ID	CI2DLM1	ICCS level	A	Key	4
Cycle	2009 & 2016	GCED	N		
Content domain	2: Civic principles	Cognitive domain	2: Reasoning and applying		

> Individuals or groups sometimes give money to political parties as donations. Some countries have laws that require political parties to give the public access to information about donations to parties.

Q Why do countries have these laws?

☐ The laws encourage people to vote for the political parties that receive fewer donations.

☐ The laws help the public to decide which party is likely to win the next election.

☐ The laws encourage more people to join the wealthy political parties.

☐ The laws discourage political parties from favouring the people who make the donations.

Computer-enhanced cluster descriptions

Below are summary descriptions of the contents of the three ICILS 2022 computer-enhanced test clusters, including the nature of the dynamic task within each clust

Name	Cluster and dynamic task description
Sports club voting **(5 items of varying difficulty)**	A sports club has decided to have members vote on club decisions using an app. The questions in the cluster relate mainly to how different voting rules associated with configuring the app might affect the voting process and the legitimacy of the results of the voting process. In the dynamic task, students configure the app (using radio buttons) to establish three of the rules governing the conduct of the vote. Students then receive a dynamically generated report on the number of people who voted and 'feedback' from voters about their perceptions of the voting process. Students use this information to evaluate the voting rules.
Charity organization **(5 items of varying difficulty)**	Students are in the role of advisor to a charitable organization. Students evaluate and provide advice on how the organization can best allocate funds across three areas of its budget (marketing and fundraising; services; and administration), and on practices that will enable the charity to support its volunteers and clients. In the dynamic task, students can manipulate the allocation of the budget across these three areas. As students increase or decrease the proportion of the budget allocated to any given area, they can see the impact that the increase or decrease has on what can be completed. Students are required to recommend the 'best' balance of spending across the three areas.
School election **(5 items of varying difficulty)**	Students contribute to the development of rules governing the election of class representatives at their school. The campaign has three candidates each of whom demonstrates very different behavior in their attempt to win support. Throughout the cluster students reflect on the relationship between the rules and their likely impact on the conduct of the school election. In the dynamic task students select voting rules specifically to support the school election being free and fair. Students then evaluate how a rule not selected by them may advantage or disadvantage the candidates based on the candidates' expressed behaviors in the campaign.

ICCS
IEA

Assessment Framework