# 15. Which teaching practices promote students' democracy learning? A systematic review

Pontus Wallin, Maria Olson and Mikael Persson

## INTRODUCTION

In this systematic review, we provide an overview of research regarding the question: Which teaching practices promote students' democracy learning? We utilized a rigorous approach to thoroughly survey the literature and report research findings. The studies chosen focused on teaching practices, with the explicit goal of enhancing students' democracy learning in school; that is, knowledge, skills, attitudes, or values related to democracy. This review encompasses both intervention studies, which investigate the hypothesized causal relationship between specific teaching methods and students' democracy learning, and correlational studies, which examine the connection between the classroom environment and students' democracy learning. The studies indicate that teaching methods involving a high degree of student participation, such as discussions, group work, role-playing, simulations, and student involvement in decision-making, effectively foster democracy learning. Furthermore, the studies suggest that an open and positive classroom environment, along with teacher engagement, leadership, and attitudes, are crucial factors in promoting students' democracy learning.

There are previous systematic reviews on related areas, but only a few focus on how teachers can design teaching to promote democracy learning. The review that most closely resembles this one is a recently published systematic review by Teegelbeckers et al. (2023). One of their most important conclusions is that teaching has differential effects on democratic competences. Considering these differential effects, the authors concluded that some practices have general positive effects. Among these are instruction with classroom discussion, small-group work, application assignments, civic projects, and practicing democratic decision-making in simulations or school decision-making programs. However, the focus of the review was on citizenship education more broadly, albeit with an ambition to narrow it down to citizenship education related to liberal democracy. The scope of the search was also limited to studies published between 2010 and 2020. Their review also included studies of higher education at universities and colleges. This review serves an important purpose to give a comprehensive overview of empirical research focusing on students' democracy learning in pre-college education. The text draws in part on a research review written in Swedish funded by Swedish Institute for Educational Research. Att lära demokrati – lärares arbetssätt i fokus. Systematisk forskningssammanställning 2022:03. Solna: Skolforskningsinstitutet. ISBN 978-91-985317-9-4."

## **METHODS**

In the search and selection of individual studies, we have focused on teachers' *teaching methods and practices*. The other central starting point has been to include studies that, in some way, measure or evaluate students' *democracy learning*. Therefore, we have only included empirical studies where students' democracy learning is evaluated either through comparisons over time or between students.

From a general perspective, democracy learning can occur in teaching contexts, such as in classrooms, but also at home or in different kinds of interactions with civil society and other contexts outside of school. In this review, we have chosen to exclude research targeting students' democracy learning outside of or beyond the teaching context. However, we have included studies where teachers give students the task of interacting with the home environment or surrounding society.

The selection criteria of studies for this review is as follows. The studies should:

- Use as their population students in preschool, elementary school, secondary school, or adult education at the primary or secondary level (not higher education, non-formal, or informal education).
- Cover teaching specifically and clearly aimed at promoting students' democracy learning.
- Study students' knowledge, skills, attitudes, or values related to democracy.
- Focus on teaching in the classroom or in connection with it.

We have further used the following methodological and technical criteria:

- Empirical research with variation in teaching in which students' learning progress is assessed through comparisons over time or between students.
- Peer-reviewed studies published in scientific journals or peer-reviewed monographs written in English.

For a study to be included in the review, all selection criteria, including the methodological and technical criteria, must be met. The information search was carried out in the following databases: Education Source – Education, ERIC – Education, APA PsycInfo – Psychology and Scopus – Interdisciplinary. The database searches were performed by first identifying relevant keywords in the three categories of (1) *teaching*, (2) *students* and *children*, and (3) *democracy*. The keywords in the three categories were gathered and formulated into search strings that were combined to find studies that included at least one keyword from all categories (see Appendix 15A). Most of the search process was performed in the fall of 2021 but was then monitored with additional searches up to and including May 2022. This means that later research relevant to the review has not been included in our review.

The literature searches generated 7,771 unique hits that were entered into Rayyan QCRI software for screening (Ouzzani et al., 2016). In the first part of the screening process, the review team reviewed all titles and abstracts of the studies identified in the literature search. The studies that did not match the established criteria were excluded.

In the second part of the screening process, 702 studies remained for blinded screening. This part of the screening process was carried out independently by the three authors of this

study through a blinded procedure. Studies that at least one person judged to sufficiently meet the criteria were passed on to the next step. At the end of this process 139 studies remained for further screening in full text.

In the third part of the screening process, the remaining studies were assessed for relevance and quality in full text. The full text reading was also carried out independently by the authors. During this step, the person who, after reading the full text, judged that a publication should be excluded was also required to indicate the reasons for this in accordance with the selection criteria

Literature that was excluded after the full text assessment was excluded for one or several of the following reasons: wrong participants, wrong intervention, wrong outcome variable, wrong context, wrong language, or wrong type of publication. Publications could also be excluded because they were not original research but rather re-analyses of identical material or background material such as research reviews, theoretical articles, or duplicates.

The disagreements that arose when the researchers had assessed the same study differently were resolved for each of the studies through a consensus process: the researcher who included a publication that the other researcher had excluded was allowed to assess the relevance again, this time with information about the exclusion reason that the other researcher had specified in the previous step. If necessary, a discussion was held to reach a common decision.

After the full text review, 54 studies remained, and after further discussions about remaining issues, 21 studies that met the criteria remained. Based on the results, a citation search was performed to find studies that had cited the remaining studies, as well as a chain search to find studies in the remaining studies' reference lists. Another purpose of these searches was to find studies published after the main search was performed. Both searches were performed in Scopus and Google Scholar in May 2022. Of the search results, eight studies were considered relevant and of good quality after following the screening process described above. Thus, a total of 29 studies were included in the review. After that, we carried out a systematic result extraction. Data and result extraction involves extracting relevant information from the studies included in the review. The aim was to describe the studies in terms of the research methods used, the results, and the conclusions. The work involved reviewing each study and noting the research question, research method, participants, teaching situation, materials, and tools used in teaching, as well as the researchers' interpretations and conclusions.

We included research on different aspects of students' democracy learning but were careful to ensure that the studies included clearly related to democracy, which means that related areas such as, for example, human rights, values education, or civic education in general have been excluded. In the studies included in this review, democracy and democracy learning are defined in different ways, depending on, for example, the descriptions of the democracy mandate in national curricula.

## **RESULTS**

Approximately half of the 29 studies are intervention studies that compare teaching methods in the classroom or evaluate students' knowledge, abilities, attitudes, and values before and after a certain type of instruction. The other half of the studies in the review use data from large-scale assessments or survey research. Many of these studies use the same or similar measurement instruments to evaluate specific aspects of students' learning, which makes it possible to compare and combine the results in the studies.

## **Teaching Methods**

The studies are evenly distributed between elementary and secondary schools. Since it is difficult to implement interventions in the teaching contexts of schools, researchers can instead take advantage of the fact that different types of changes have been made to teaching and compare students' knowledge before and after instruction.

# Discussions, Deliberation, and Group Work as Key in Teaching for Democracy Learning

Several of the studies included in the review explore different types of teaching characterized by discussions and group work. A common term sometimes used is *deliberation*, *deliberative teaching*, or *deliberative conversation*. Deliberation is often used for discussions in small groups. Hess and McAvoy's 2014 study, involving 1,001 students and 35 teachers from 21 high schools across three United States (U.S.) states, employed surveys, pre- and post-tests, interviews, and classroom observations to examine democracy learning. The study identified three teaching types: one with high student engagement in discussions, another with student-to-teacher communication, and a third with less discussion but high-quality lectures. The results show that the students who participated in teaching with clearer elements of discussions had developed democratic skills to a higher extent than the students who participated in more traditional teacher-centered teaching, where the teacher leads and controls the activities in the classroom, explains content knowledge, and establishes the planning for the lesson.

In a Swedish study, Andersson (2015) examines the effects of teaching that focuses on deliberation. Two hundred and thirty high school students who were studying social science, and six teachers, participated in the study. The students were randomly divided into intervention groups where the subject teaching had a focus on deliberation through clear elements of discussions, established criteria for the discussions and problem-solving, and control groups that had teacher-centered teaching. In the intervention groups, the students worked in small groups and were instructed to help each other formulate arguments, listen to each other without interrupting or offending the person talking, find common solutions, and be inspired by challenges. In the control groups, teacher-centered teaching was conducted by the teacher initiating questions to the class, the class responding to these questions, and the teacher giving feedback to the students. The students' democracy learning was evaluated using surveys before and after the teaching, which covered eight two-hour lessons. The results show that subject teaching focused on deliberation strengthened some students' trust in their own political efficacy and had a positive impact on their expected political participation in, for example, future political elections. Interestingly, only students in vocational preparatory programs benefited from deliberative teaching, not the students in the theoretical programs.

Another study investigating the effects of deliberation was conducted by Persson et al. (2020). The study involved 1,283 high school students in 59 classes in Sweden who studied social science. The students answered surveys before and after the intervention, which spanned over seven lessons of subject teaching. To evaluate the somewhat more long-term effects of the teaching, the students also answered a survey at the end of the academic year,

several months later. The surveys consisted of knowledge questions about politics, as well as questions related to political interest, democratic values, and willingness to discuss politics in their environment. About half of the students participated in deliberative teaching in social science, focusing on small-group discussions. The remaining students participated in teachercentered teaching, which took the form of the teacher initiating questions to the students in the class, who answered these questions and received teacher feedback. Neither immediately after the seven lessons nor at the end of the academic year were there any differences between the students in the intervention group and the control group that could not be explained by chance. The students in the intervention group had a slightly higher degree of political knowledge, but the effect was too small to draw any certain conclusions.

A challenge with studying students' democracy learning is that we can only come to know much later, when the students have finished school and have gained the right to vote, whether the teaching has affected the way they act as democratic citizens. Holbein et al. (2021) examine the effect of some teaching initiatives taken in the 1990s to promote students' democracy learning by following up on what had happened with the students' voter turnout several decades later. Around 700 students in the first grade of elementary school participated in the study, which was conducted in 27 classrooms at nine socioeconomically disadvantaged schools in the U.S. The students were randomly assigned to two intervention groups and a control group. In the first intervention group, the students participated in teaching that focused on stimulating cooperation between students around a game led by the teacher. For the second intervention group, the teachers made special efforts to improve cooperation with the parents. The control group had traditional teacher-centered teaching. Results show that students from both intervention groups had higher levels of voting later in life. This was particularly the case for the group of students who had a focus on stimulating the students' cooperation around a game. This group of students had a 10 percent higher likelihood of voting in the 2016 election than the control group students. The researchers concluded that it was mainly the likelihood to vote that was affected, not who or what they voted for.

There are relatively few studies that investigate students' democracy learning in school subjects apart from social science. One exception is Kang (2019), who examines students' democracy learning through working in small groups in science education in grade 6 at a primary school for high-performing students in South Korea. The study was designed as a quasi-experiment with 36 students in the intervention group and 30 students in the control group. In the intervention group, the students collaborated in small groups of two to four people through a collaborative function in a digital learning resource for programming. In the control group, the students worked as usual in the subjects of mathematics and science. To analyze differences between the groups, the students answered surveys with questions about attitudes towards democracy at the beginning and at the end of the term. The students' democratic learning progress was evaluated through different aspects of what the researcher calls democratic virtues, such as civic spirit, sense of responsibility, and law abidance. The results show that the students who had collaborated in small groups had a higher degree of civic spirit than the students in the control group at the end of the term. However, there was no difference in the degree of law abidance between the groups.

#### **Simulations and Decision-making Processes**

One way for students to experience and practice democracy in the classroom is through simulations. Some studies address the teacher's use of realistic situations through democratic games, role-playing, or voting to this end. This type of simulation requires a relatively high degree of student participation.

Finkel and Ernst (2005) investigated the effects of teaching in a societal context characterized by democratization. Their study evaluated a social science teaching initiative called Democracy for All in South Africa in the 1990s, after the transition from apartheid to democracy. Two hundred and sixty-one high school students who participated in the specially designed democracy and citizenship education, while 221 high school students who did not participate in the initiative were surveyed. The purpose of the survey was to estimate students' knowledge, attitudes, and skills in relation to democracy. The students were also asked questions about this teaching initiative, such as to what degree the teaching was characterized by an open classroom climate, and several control questions about, among other things, their home conditions. The study's most obvious results are that teaching with elements of democracy and citizenship education in social science had a noticeable impact on students' political knowledge, but to a lesser extent on their attitudes and values. The researchers could also see a connection between the students' appreciation of the quality of the teaching and a higher degree of knowledge of politics. There was also a connection between certain teaching methods in social science teaching, such as using role-play to stimulate active student participation and a higher degree of political knowledge.

The researchers concluded that simulations of political processes both strengthen the students' knowledge of democracy and the abilities required for democratic participation as citizens. Group work and presentations in front of the class were also found to be beneficial for the students' learning in this regard. However, the researchers could not see any connection between the degree to which the teachers encouraged class discussions and how the students' democracy learning progressed. Their interpretation was that it is not only the teacher-led discussions but also the students' own initiatives and active participation that contribute to their democracy learning.

Another study that examines students' democracy learning through different types of teaching was carried out in a context of societal democratization (Slomczynski & Shabad, 1998). The aim was to evaluate an initiative of teaching social studies with elements of citizenship education in grades 8–9 in Poland in the 1990s, when the country was undergoing a democratization process. The subject teaching was designed with a particular focus on realistic situations related to democracy and market economy, where the teacher's role was to help the students solve problems in discussion-based teaching. The researchers conducted interviews with the teachers in the intervention groups to investigate how they had designed their teaching. The teachers described that they had given the students more opportunities to discuss in class and that they had let the students participate in so-called democratic games and market simulations. The teachers in the control group, however, had used a textbook more frequently and explained different aspects of democracy to the students. The subject content for the different groups was the same.

To evaluate whether the teaching had a positive impact on the students' democracy learning, a survey was conducted over a two-year period. The researchers also compared an intervention group of 208 students who had participated in the specially designed teaching and a

control group of 172 students who had participated in regular teacher-centered teaching in social studies. The students came from a total of 12 classes in grades 8-9 in schools that were similar in terms of size. To evaluate the students' learning, questions were asked about support for democratic principles such as the majority principle, protecting minorities, and resolving conflicts through compromise.

Both comparisons showed differences between the two groups of students. Students in the intervention group were more skeptical and had a more critical view of democracy than the students in the control group. However, the range was larger in the control group: these students displayed both strong resistance and strong support for democratic principles. The conclusion was that the specially designed teaching, where the students had to solve problems and discuss them with each other, made them less extreme in their positions.

Cohen et al. (2015) wanted to investigate whether students learn democracy by participating in decision-making processes regarding the school's finances. Two hundred and eighty-five students in a high school with a focus on natural sciences in the U.S. were invited to participate. Class time was set aside for the students to participate in decision-making processes, which included investments in various teaching resources. Some students designed proposals for projects that would go to a vote and were thus more involved than the other students. Two hundred and seventeen of the students responded to a survey where they were asked to assess their knowledge, abilities, attitudes, and behavior related to democracy before and after their participation in the decision-making process.

The survey responses show that the students mainly felt that they had gained better knowledge of how decisions are made in the school. It also became clear that they had changed their behavior in relation to decision-making processes, for example, by talking to other students and teachers about problems and providing suggestions for change. To a somewhat lesser extent, the students felt that they had changed their attitudes towards participation, such as their interest and engagement in issues related to the governance of the school.

In an intervention study by McDevitt and Kiousis (2006), the researchers were interested in examining the impact of teaching in an initiative called Kids Voting in connection to an election in the U.S. in 2002. To evaluate the effects of teaching from a democracy learning perspective, interviews were conducted with 491 students and one of their guardians (totaling 982 interviews) at 150 high schools. A year later, all participating students and guardians were invited to follow-up interviews, in which about 60 percent participated.

The researchers argue that several of the teaching elements included in Kids Voting can be incorporated into a form of deliberative democracy education through clear discussions about the election and debates in the classroom. To evaluate the impact of the teaching, the students were asked how aware they were of social issues in the media, their political knowledge, their understanding of political issues, and how willing they were to listen to others' arguments and test their own views.

The results show that teaching with elements of deliberation benefited students' knowledge, skills, and behavior compared to less deliberation in the teaching. A year later, students who had participated in deliberative teaching, on average, had a greater understanding of political issues. They also felt more able to participate in political discussions and were more willing to discuss politics with parents and friends.

In a study by Levy et al. (2019), the researchers investigated differences in students' democracy learning in three high schools in the U.S. that had designed their social science teaching in different ways. Eighty-seven students studied at a school where the researchers described the subject teaching as traditional, and 318 students studied at two schools where the teaching focused on simulations of various kinds. Students were given the opportunity to conduct research, discuss, debate, and vote on controversial social issues. The researchers followed the teaching during one term and collected material in the form of surveys with students, interviews with students and teachers, and observations in the classroom.

Student survey responses showed that students who participated in teaching focused on simulation were more likely to be interested in future political participation at the end of the term. They were also more interested in politics, had more confidence in their own political ability, and discussed politics more often outside the classroom. Students from resource-poor homes had an increased interest in politics as an effect of the teaching. Although there were differences between classes, students who participated in simulations were also more likely to question and reevaluate their views on political conditions. In addition, supplementary observations were carried out in the classroom to try to explain possible reasons why teaching aimed at students' democracy learning may have different outcomes. Among other things, students who participated in teaching focused on simulation for two to three weeks through parliamentary processes were able to discuss controversial issues. The classroom observations showed that students who participated in teaching that focused on simulation had good opportunities to test their own opinions and positions, while students who participated in traditional teacher-centered teaching were not given these opportunities to the same extent. Some teachers went as far as allowing students to sit together with other students with similar views. This seemed to result in some students starting to identify themselves as rival groups. The researchers concluded that teachers, by encouraging students with minority views and by toning down group formation, can contribute to all students having the opportunity to test their own positions and develop a deeper understanding of political issues.

## **Using News Media and Texts About Politics**

Some studies discuss the advantages of using various types of news media in teaching. For example, news media, such as local newspapers, can be used to stimulate discussions about politics and social issues, which have been found to be especially beneficial for democracy learning for resource-poor students (Chaffee et al., 1997). Therefore, according to the researchers, it may be valuable for teachers to encourage news consumption outside of school and to stimulate political discussions between students and, for example, parents at home (Gainous & Martens, 2012). Reading informative texts has been found to provide students with the factual knowledge necessary to participate in classroom discussions (Chambliss et al., 2015).

In a study by Chaffee, Morduchowicz, and Galperin (1997), the researchers were interested in investigating the impact of using local newspapers in teaching in Argentina. It is important to note that Argentina, at the time of the study's implementation, was a relatively young democracy, and the educational initiative using local newspapers in teaching was part of the country's initiative for democratization. Three thousand three hundred and eighty-seven students in grades 5–7 and 130 teachers participated in the study, which was conducted during the 1995 election year. Approximately half of the teachers had participated in training on teaching methods focused on discussing local news with students. To investigate the impact on students' democracy learning, students who had participated in teaching with and without discussions of local news were asked to answer knowledge questions about politics in a survey. Students in the intervention groups who had participated in social science teaching with the

use of local newspapers exhibited both more developed political knowledge, a stronger will to participate in politics, and more support for democratic principles. It was concluded that resource-poor students in the intervention groups were particularly helped by this design of teaching.

Chambliss, Torney-Purta, and Richardson (2015) studied working with different texts for learning democracy. The participants in the study were 168 15-year-old students from two schools in the U.S. Approximately half of the students studied at a school on the West Coast, and half at a school on the East Coast. The researchers were interested in investigating how the design of the texts affected the students' learning. The texts that the students were to read were about the differences between direct and representative democracy but differed in that they focused on informing, arguing, or explaining these different forms of democracy. The three different types of texts were randomly distributed among the students, who also had to answer survey questions before, during, and after reading the texts. The students worked relatively briefly with the texts, equivalent to about one lesson.

Despite the study being limited in scope, it showed that different texts serve different functions in lower secondary democracy education. The choice of text did not play a role in the students' reading comprehension or engagement. However, it was found that students who had read more informative texts were more inclined to vote and discuss with adults. The researchers conjectured that by using informative texts, students gained more factual knowledge to use in discussions about democracy. The researchers' more general conclusion is that it is beneficial for students to work with texts of different types, as they serve different functions in the students' learning of complex areas such as democracy.

Nelsen (2021) examined whether critical pedagogy affects students' political participation. The study involved 678 students studying social science in 24 classes in high school in the U.S. An important aspect of critical pedagogy is to highlight the perspectives of minorities. For that reason, students from diverse backgrounds were carefully selected for participation. To evaluate the students' democracy learning, they were asked to complete surveys before and after a single lesson. Students in the intervention group worked with texts about American history that focused on marginalized groups, systemic injustices, and grassroots political activism, while students in the control group worked with texts on the same content, these were texts that the researcher deemed to be lacking a critical perspective. A comparison of the students' survey responses before and after the lesson showed that students from minority backgrounds in the intervention group had strengthened their willingness to participate politically.

# Activities Outside the Classroom as a Potential for Democracy Learning

There are also a set of studies focusing on how cooperation with the surrounding society, in different ways, can promote students' democracy learning. A concrete expression of this, when it comes to experiencing democracy, comes to the fore in Reimers et al.'s (2014) study, where students, in project form, work with local challenges. They get the opportunity to experience principles, attitudes, and values related to democracy, such as the importance of equality in relation to political power. A total of 80 teachers and 2,608 8th-grade students at 39 schools participated in the study. Participants were randomly divided into three intervention groups and one control group. In the first group, teachers were given support in designing lesson plans. In the second group, teachers were asked to design instruction focused on active student participation, where students would choose a challenge in the surrounding local

community and work on a project-based approach to find solutions. The third group combined teacher support with lesson plans and instruction focused on active student participation. To evaluate the students' learning, they were asked to respond to a survey at the beginning and the end of the school year. The results show that students in all the intervention groups had benefited from the specially designed instruction one year later. The students from the intervention groups had become more convinced of the importance of equality as a democratic value compared to the average in the control group. They also had slightly greater trust in their own knowledge and abilities in relation to democracy, and willingness to actively participate in democratic processes at school. However, the knowledge questions in the survey showed that only the students from the groups that had instruction with a focus on active student participation had improved their knowledge on average.

In two sub-studies, Feddes et al. (2019) studied students' democracy learning in connection with an interactive exhibition on democracy. The exhibition was called *Fortress of Democracy* and aimed to increase youth engagement in democracy in the Netherlands. A total of 453 students aged 12–20 participated in two experiments, where half of the students answered a survey before the exhibition and the other half after. The two sub-studies were conducted in a similar way, with the difference that about half of the students in the second sub-study had a non-Western ethnic minority background.

The survey results show that students who had visited the exhibition were more knowledgeable about democracy than students who answered the survey before the visit. Among students of non-Western ethnic minority backgrounds, those who had visited the exhibition showed slightly stronger support for democracy as a form of government. Students with more knowledge about democracy also gave less support for ideologically motivated violence and had more trust in the political system. It was concluded that the exhibition had benefited students' democracy learning and that similar exhibitions should be organized in other contexts to strengthen students' democratic knowledge and values.

## **Teaching Environment**

The studies involving the teaching environment are evenly divided between primary and secondary schools. It is important to note that the focus is still on teachers' teaching practices, but these practices are chosen to affect the teaching and learning environment. The studies reviewed in this section are not experimental ones but simply rely on the analysis of cross-sectional or longitudinal data.

#### An Open Classroom Climate

A number of studies in the review point to the potentially positive impact of an open class-room climate. In the ICCS study, the classroom climate is even directly evaluated by students' ratings of how common it is for the following to happen in the classroom:

- 1. Students can openly express their opinions.
- 2. Students are encouraged to develop their own opinions.
- 3. The teachers respect students' opinions.
- 4. Students can express their opinions even if most of the class have a different opinion.

- The teachers encourage students to discuss political or societal issues on which people have different opinions.
- The teachers bring up multiple opinions and perspectives when a topic is discussed dur-6 ing the lesson.
- 7. Students bring up many current political issues that are discussed during the lesson.

Campbell (2008) analyzed the results from the U.S. for the 2,811 14-year-old students from 124 schools who participated in CIVED 1999. The aim was to investigate what in the teaching situation could affect students' democracy learning, with a particular focus on students' knowledge of democracy. The analysis shows a positive correlation between an open classroom climate and students' knowledge of democracy. By being exposed to political conflicts in the classroom, along with the free exchange of ideas, students' understanding of political conflicts in society also increases. By controlling for students' socio-economic background, the correlation between an open classroom climate and knowledge of democracy is also stronger for resource-poor students. The researcher's interpretation is therefore that teaching characterized by an open classroom climate can function as a compensatory activity for resource-poor students.

Quintelier and Hooghe (2013) take a comprehensive approach by analyzing data from almost all participating countries in the international knowledge assessment ICCS 2009, which largely used the same design, with knowledge tests and survey questions, as CIVED 1999. In total, it concerns survey responses and knowledge tests from 109,784 14-year-old students in 35 countries. The material also includes survey responses from the students' teachers and school principals. The purpose of the study was to investigate whether there is a correlation between an open classroom climate and students' attitudes towards future political participation. The results show that there is a clear correlation between students' perception of an open classroom climate and their self-assessed tendency towards future political participation.

In a study by Lin (2014), data from ICCS 2009 is also used to investigate whether the relationship between an open classroom climate and students' democracy learning looks different for different student groups in terms of socio-economic background, as measured, among other things, by access to books at home. All 134,000 high school students from 38 countries who participated in the study were included in the analysis, which shows, in line with previous studies on ICCS 2009 data, that there is a clear correlation between an open classroom climate and students' knowledge of democracy. In the study, it is also clear that the correlation applies to all student groups studied. The researchers conclude that it is likely that subject teaching aimed at creating an open classroom climate has the potential to promote democracy learning for students from different backgrounds and home conditions.

Persson followed students over time to investigate how their knowledge development might correlate with teaching practices (2015). The study included around 500 social science students at three high schools in Sweden. The students were asked to complete surveys at the beginning and end of their first year of high school, where they answered questions about the subject teaching as well as knowledge questions taken from CIVED on topics such as democratic principles. The results show that there is a correspondence between an open classroom climate and students' democracy learning in the form of their acquisition of political knowledge of, among other things, the principles of democracy.

In a study by Perliger and colleagues (2006), a survey was conducted which included 718 students who attended five high schools in Israel. Three hundred and eighty-nine students

studied social studies with elements of civic education, while 329 students did not participate in such teaching. The purpose of the study was to investigate whether subject teaching is important for students' political knowledge, and whether the classroom climate is important for students' attitudes towards democracy. Questions were posed to the students on, for example, whether it is unnecessary for citizens to participate in decisions that should instead be made by a knowledgeable and reliable elite (which according to the researchers, speaks of undemocratic attitudes). The results show that the high school students who participated in the social studies teaching with elements of civic education had increased their knowledge of politics more than students who had not participated in such teaching. However, no significant differences were observed between the two student groups in terms of how much they had developed democratic attitudes. Nonetheless, a correlation between high school students' perception of classroom climate and their democratic attitudes was noted.

Several of the studies included in the review investigate differences in how much teachers involve students in their teaching. Many studies stress the importance of incorporating students' own experiences, knowledge, interests, and initiatives into teaching practices.

Gainous and Martens (2013) examined the correlation between teachers' teaching practices and students' democracy learning, focusing on four learning aspects: political knowledge, trust in their own ability to participate in politics, trust in the political system to respond to citizens' voices and demands, and intentions to vote in formal political elections at various levels. The correlation between students' democracy learning and their home environments was also studied. Data from CIVED 1999 was analyzed, but only data from students in the U.S. was used.

The analyses were based on knowledge tests for 2,615 14-year-old students at 124 high schools, together with survey responses from their teachers and principals. In conjunction with the knowledge test, a student survey was also conducted, in which they were asked questions about the teacher's teaching practices. The results show that there is a positive correlation between teachers' promotion of an open classroom climate and various aspects of students' democracy learning. However, the study also shows a clear correlation between students' home environments and their democratic aptitude. For example, high school students from resource-poor homes show lower political knowledge when the teaching is characterized by a variety of methods, such as using video materials, role-playing, writing letters, and school visits from people from the surrounding society. But there is also a positive correlation between a diversity of teaching methods and students' trust in their own ability and higher trust in the political system. Therefore, the researchers discuss whether there may be correlations between different teaching designs, such as planning, implementation, and follow-up, and students' democracy learning. Since so much of students' democracy learning appears to be correlated with their home environments, the researchers reiterate the potential importance of stimulating better conditions for learning at home by, for example, improving parent engagement.

In a follow-up study, Martens and Gainous (2013) deepen the analysis of the same data in order to more precisely explore the relationship between teachers' practices and high school students' democracy learning. Through an analysis of the students' survey responses, four important factors emerge that co-vary with the students' democracy learning. The first factor is traditional instruction, which means that the teacher uses a teaching practice that includes exercises with elements of memorizing facts, individual work with various types of materials, assignments, and discussions of current events related to politics and society. The second

factor is an open classroom climate, meaning that students are encouraged to freely form an opinion about various societal and political conditions and express their views in relation to these conditions. The third factor is called active learning, which in their study means that the instruction includes elements of role-playing, students writing letters to decision-makers, and that representatives who offer different perspectives on democracy are invited to class. The fourth factor is the teaching practice of using video material.

The researchers note that an open classroom climate has the clearest positive association with all aspects of learning democracy. However, for the other teaching factors, such as teaching as a mainly one-way communication act where students are hardly or not at all actively engaged, active learning, and use of video material, the impact is different. For example, there is a positive connection between active participation in their learning process and students' trust in their own ability to participate in politics. Nonetheless, there is a negative connection between the students' active learning and political knowledge. Using videos as a studentactive method in high school teaching, on the other hand, shows a positive connection with students' political knowledge but no association with other aspects of democratic capacity. While traditional instruction is shown to have a positive association with students' intentions to vote and their trust in the political system.

The study's conclusion is that teachers, through their choices of teaching practices, have an impact on which aspects of democracy students are given the opportunity to learn. Taken together, the study determines that an open classroom climate has a greater chance of strengthening various aspects of democratic capacity. An analysis of combinations of factors suggests that it is particularly beneficial to combine an open classroom climate with traditional teaching in, particularly, older school years.

Hooghe and Dassonneville (2011) conducted a study with high school students in Belgium. A total of 2,988 students participated in two survey studies with a two-year interval. The analyses show that group work in school contributes to the development of political knowledge two years later. However, it was clear that the students who initially had the highest levels of knowledge were the ones who were most affected. More traditional teaching of politics, however, did not have this effect: the researchers measured factual knowledge of Belgian and European politics.

In a follow-up study, Dassonneville and colleagues (2012) partly used the same data, although the analytical task was somewhat different from the former study. This time, 4,235 students participated in two survey studies with a two-year interval. In this study, the researchers examined the relationship between different teaching methods and students' democracy learning through traditional classroom teaching of politics and democracy, an open classroom climate, and methods based on active learning and the students' political attitudes and behaviors. The teaching was mainly aimed at encouraging students to act as active citizens within and outside the school context. The researchers looked more closely at four strategies: participating in group work, visiting a local political assembly, being a member of the school student council, and participating in teaching that takes place in collaboration with the surrounding society.

The researchers found a positive correlation between students participating in group work or traditional teaching and the students' political interest or political self-confidence. They also found a positive correlation between an open classroom climate, participation in decision-making, and the students' political confidence. Additionally, a positive correlation was observed between group work and political participation.

Kahne and Sporte (2008) examined the relationship between the design of teaching and the degree to which students develop civic engagement, such as democratic participation. The study included 4,057 students at 52 high schools in Chicago who answered surveys in rounds with up to two-year intervals. The surveys included questions about the design of teaching and the students' attitudes and interests in civic engagement. The results show that the teaching practices that particularly correlated with students' self-assessed future civic engagement were the opportunity to discuss social issues and interact with the surrounding society. The latter was measured by students' assessment of the extent to which they had the opportunity to meet people who were working to make society better, or the degree to which they learned about ways to make society better.

In a later study of partly the same material, Kahne and colleagues (2013) examined a combination of discussions in teaching, allowing students to interact with the surrounding society. The researchers supplemented the earlier study with a survey of 1,203 students who were in their first year of high school in California. The students answered a survey with questions about the design of teaching and attitudes towards political participation. Five hundred and two students also answered a follow-up survey a year later. The researchers used the fact that students had reported various degrees of opportunities to discuss within the context of teaching to calculate the correlation with the students' interest in civic engagement. Based on the results, the researchers concluded that students develop different types of civic engagement and interest in participation depending on how the teaching is designed.

Coopmans et al. (2020) studied the relationship between teaching practices and students' democracy learning in 78 schools in the Netherlands. They surveyed 5,172 high school students, as well as their teachers and school leaders, on the design of their teaching practices. The students, teachers, and school leaders were asked to rate how often students were allowed to choose the topics discussed in class, the extent to which students participated in role-playing, and how often students interacted with the surrounding society. This interaction with the community could occur through projects where students conducted interviews outside of school. The students were also asked if they felt if the classroom atmosphere was open, and if teachers supported the students by showing interest in the topics the students were interested in. To evaluate the students' democracy learning, they were given a knowledge test on democratic principles. The results mainly showed a correlation between allowing students to choose the topics discussed in class and an open classroom atmosphere in general and democracy learning, both in terms of knowledge, abilities, and attitudes.

# **Teacher Engagement and Leadership**

A number of studies discuss the significance of teacher engagement for students' democracy learning. Students' experience of the quality of teaching can be strengthened by teachers being engaged and showing an interest in students' opinions and viewpoints, which in turn is important for students' engagement and political knowledge as well as their democratic values. It is important to note that engagement and leadership can be subject to teachers' inherent qualities such as personality or personal interest.

Isaac and colleagues (2014) conducted an analysis of the results in ICCS 2009, focusing on the home conditions of around 100,000 students in 31 countries. Like other studies based on ICCS data, it mainly involves students aged 14. The researchers made a distinction between students' knowledge and their attitudes in relation to democracy and citizenship.

The analysis shows that there are relatively small differences between schools in terms of attitudes. However, the differences that do exist are correlated with individual factors, such as the student's home conditions, and not with factors at the school level, such as school size or teacher density. The interpretation of these results is that school only has a small impact on students' democratic attitudes, and that it is what happens outside of school and teaching that really affects students' attitudes towards democracy. However, there is a stronger correlation between the type of school that students attend and their knowledge and abilities in relation to democracy. An open classroom climate is the aspect of teaching that has the clearest positive correlation with students' democratic knowledge and abilities. Inclusive and mutually respectful relationships between teachers and students are also important for students' democratic knowledge and attitudes towards future democratic participation.

Ekman and Zetterberg (2011) also analyzed data from the international knowledge assessment ICCS 2009. In their study, they focus particularly on the Swedish data. They also collected supplementary information about the students, such as the students' estimate of the number of books in the home, to investigate the significance of socio-economic status. A total of 3,464 students aged 14 from 169 high school classes in approximately the same number of schools in Sweden participated. The students took a survey and a knowledge test that evaluated their democratic competence in the form of political knowledge as well as attitudes and behavior. This study shows that high school students who come from socio-economically advantaged homes or are surrounded by classmates from socio-economically advantaged homes tend to have higher democratic competence than those who come from less socio-economically advantaged homes, or have classmates from such homes. The conclusion is that it, therefore, seems to be more important who goes to class than what happens in the classroom when it comes to promoting students' democracy learning.

Abendschön (2017) studied primary school students in Germany developing knowledge and attitudes during their first year of school. Five hundred and eight students participated in a knowledge test that compared their answers at the beginning of 1st grade and their answers one year later. The test included questions designed to measure knowledge of political power, such as who has the most power in Germany, or what a politician does. The students were also asked more abstract questions about what democracy is. In addition, 24 primary school teachers from 15 of the schools participated in a supplementary survey to investigate how they described the design and implementation of their teaching. The teachers were asked questions such as what teaching goal and what aspects of the learning environment were most important. The results show that the students, on average, had developed their democratic knowledge one year later, but there were differences between students and classes mainly in terms of abstract knowledge, such as what democracy is. The researcher concluded that there is a positive correlation between primary school students who develop abstract knowledge and teachers who reported that they involved students more in decision-making and emphasized social aspects of learning. A positive correlation was also found between students' political knowledge and teachers who reported that they taught in a more student-centered way. However, the researcher observed a negative correlation between student-centered teaching and students' abstract knowledge of democracy. The researcher concluded that it may be counterproductive to use a variety of teaching methods for students at a younger age when the aim is to promote students' democracy learning.

## CONCLUSIONS

Several conclusions can be drawn from this review. For high school students, there are indications that it may be beneficial for teachers to combine teaching practices and include tasks and approaches that allow students to engage in discussions characterized by openness. However, for students in lower grades, there are signs that in certain contexts, it may not be effective for teachers to use many different teaching methods and discussions to promote students' democracy learning. The overall results of the review support the idea that teaching that involves students is beneficial for promoting their democracy learning, in terms of knowledge, skills, attitudes, and values. Teaching democracy learning is also about developing values and attitudes, which to some extent requires that the student is at the center of his or her own learning process.

A striking result from several of the studies is the important role that deliberative and participatory approaches can have in reducing inequalities in democratic dispositions between students. There is also evidence indicating that this might be a causal effect since several of the studies are experimental studies with an intervention and a control group. More work with this specific focus is, however, needed to explore such effects.

Overall, the studies in this review show that there are different aspects of democracy learning that can be promoted through different teaching practices. An open classroom climate also appears to be an important component for strengthening the ability to participate as a member of society in a "democratic" way. For example, teaching with elements of discussion can stimulate students' ability to listen to others' arguments and test their own opinions in discussions with others. Furthermore, inclusive and mutually respectful relationships between teachers and students appear to have a positive correlation with students' abilities in relation to democracy. There are indications that it may be important for teachers to encourage students to listen attentively instead of politely listening to promote their democracy learning. By encouraging students with minority opinions and toning down group formations, teachers can contribute to giving all students the opportunity to test their own positions. Participating in decision-making processes at school can give students the opportunity to practice democratic processes, which increases their ability to listen to arguments and collaborate. However, it appears that students' influence over teaching design, schedule, and materials can have a negative correlation with students' democracy learning in terms of knowledge. Starting with texts in newspapers, students can become stimulated to discuss societal issues, which can also level out differences between students who have and do not have access to newspapers at home. Students benefit from working with different texts that fulfill different functions, such as informative texts that help them with factual knowledge they can use to shape arguments in discussions. Taking responsibility for cooperation and conversation tone in small groups can strengthen students' ability to engage in democratic processes, such as listening to and respecting the opinions of others. Overall, it is important to consider the context of teaching, the students, and the goals of democracy learning when choosing teaching methods.

For democracy to function as a way of structuring society, individuals must be willing to participate in it, for example, through voting. Studies suggest that teaching has a forceful potential to affect students' attitudes towards participation and, for example, political behavior later in life. A positive classroom climate and inclusive, mutually respectful relationships between teachers and students are associated with higher perceived future participation among students. However, it seems that such a classroom climate affects students' attitudes

to a lesser degree than their knowledge. Collaborative exercises, such as group work, can also explain higher voting participation later in life.

For high school students, a correlation can be traced between an open classroom climate and democratic values. But the picture is not clear, and researchers studying specific discussion situations in the classroom show that discussions under certain circumstances can have a negative impact on students' political tolerance. There are signs that school teaching under certain circumstances can lead some students to develop support for democracy while others lose faith in democracy. By involving students in simulations where they can discuss social issues, the chances of developing a more nuanced picture of the possibilities and challenges of democracy among all students are increased.

The research field would benefit from a more systematic way of studying the outcomes of various teaching methods and interventions in subject teaching in different school years, particularly in lower school years where research is particularly meagre. We hope that this systematic review can inspire researchers to develop such a systematic research agenda that, in turn, could provide a more comprehensive picture of what the most productive ways of teaching to promote democracy are and can be.

### REFERENCES

- Abendschön, S. (2017). Children's political learning in primary school Evidence from Germany. Education 45(4), 450-461.
- Andersson, K. (2015). Deliberative teaching: Effects on students' democratic virtues. Scandinavian Journal of Educational Research, 59(5), 604–622.
- Campbell, D. E. (2008). Voice in the classroom: How an open classroom climate fosters political engagement among adolescents. Political Behavior, 30(4), 437–454.
- Chaffee, S., Morduchowicz, R., & Galperin, H. (1997). Education for democracy in Argentina: Effects of a newspaper-in-school program. International Journal of Public Opinion Research, 9(4), 313-335.
- Chambliss, M. J., Torney-Purta, J., & Richardson, W. K. (2015). The effects of reading well-written passages on students' civic understanding and engagement. Citizenship Teaching and Learning, 11(1), 49–67.
- Cohen, M., Schugurensky, D., & Wiek, A. (2015). Citizenship education through participatory budgeting: The case of bioscience high school in Phoenix, Arizona. Curriculum and Teaching, 30(2), 5–26.
- Coopmans, M., ten Dam, G., Dijkstra, A. B., & Van der Veen, I. (2020). Towards a comprehensive school effectiveness model of citizenship education: An empirical analysis of secondary schools in The Netherlands. Social Sciences, 9(9), 157–166.
- Dassonneville, R., Quintelier, E., Hooghe, M., & Claes, E. (2012). The relation between civic education and political attitudes and behavior: A two-year panel study among Belgian late adolescents. Applied Developmental Science, 16(3), 140-150.
- 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.
- Feddes, A. R., Huijzer, A., van Ooijen, I., & Doosje, B. (2019). Fortress of democracy: Engaging youngsters in democracy results in more support for the political system. Peace and Conflict: Journal of Peace Psychology, 25(2), 158-164.
- Finkel, S. E., & Ernst, H. R. (2005). Civic education in post-apartheid South Africa: Alternative paths to the development of political knowledge and democratic values. *Political Psychology*, 26(3), 333–364.
- Gainous, J., & Martens, A. M. (2012). The effectiveness of civic education: Are "good" teachers actually good for "all" students? American Politics Research, 40(2), 232–266.
- Hess, D. E., & McAvoy, P. (2014). The political classroom: Evidence and ethics in democratic education. NY: Routledge.

- Holbein, J. B., Bradshaw, C. P., Munis, B. K., Rabinowitz, J., & Ialongo, N. S. (2021). Promoting voter turnout: An unanticipated impact of early-childhood preventive interventions, *Prevention Science*, 23, 192-203.
- Hooghe, M., & Dassonneville, R. (2011). The effects of civic education on political knowledge. A two year panel survey among Belgian adolescents. Educational Assessment, Evaluation and Accountability, 23(4), 321–339.
- Isac, M. M., Maslowski, R., Creemers, B., & van der Werf, G. (2014). The contribution of schooling to secondary-school students' citizenship outcomes across countries. School Effectiveness & School Improvement, 25(1), 29-63.
- Kahne, J., Crow, D., & Lee, N. J. (2013). Different pedagogy, different politics: High school learning opportunities and youth political engagement. Political Psychology, 34(3), 419–441.
- Kahne, J., & Sporte, S. (2008). Developing citizens: The impact of civic learning opportunities on students' commitment to civic participation. American Educational Research Journal, 45(3), 738-766.
- Kang, O. H. (2019). Analysis of the sociality and democratic-citizenship changes from the application of the scratch remix function in cooperative learning. Journal of Information Processing Systems, *15*(2), 320–330.
- Levy, B., Babb-Guerra, A., Batt, L. M., & Owczarek, W. (2019). Can education reduce political polarization? Fostering open-minded political engagement during the legislative semester. Teachers College Record, 121(5), 1-40.
- 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), 17–30.
- Martens, A. M., & Gainous, J. (2013). Civic education and democratic capacity: How do teachers teach and what works? Social Science Quarterly, 94(4), 956-976.
- McDevitt, M., & Kiousis, S. (2006). Deliberative learning: An evaluative approach to interactive civic education. Communication Education, 55(3), 247–264.
- Nelsen, M. D. (2021). Cultivating youth engagement: Race and the behavioral effects of critical pedagogy. Political Behavior, 43(2), 751-784.
- Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—A web and mobile app for systematic reviews. Systematic Reviews, 5(1), 1–10.
- 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),
- Persson, M. (2015). Classroom climate and political learning: Findings from a Swedish panel study and comparative data. *Political Psychology*, 36(5), 587–601.
- Persson, M., Andersson, K., Zetterberg, P., Ekman, J., Lundin, S., Zetterberg, P., Persson, M., Andersson, K., & Lundin, S. (2020). Does deliberative education increase civic competence? Results from a field experiment. Journal of Experimental Political Science, 7(3), 199–208.
- Quintelier, E., & Hooghe, M. (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.
- Reimers, F. M., Ortega, M. E., Cardenas, M., Estrada, A., & Garza, E. (2014). Empowering teaching for participatory citizenship: Evaluating the impact of alternative civic education pedagogies on civic attitudes, knowledge and skills of eight-grade students in Mexico. Journal of Social Science Education, 13(4), 41-55.
- Slomczynski, K. M., & Shabad, G. (1998). Can support for democracy and the market be learned in school? A natural experiment in post-Communist Poland. *Political Psychology*, 19(4), 749–779.
- Teegelbeckers, J. Y., Nieuwelink, H., & Oostdam, R. J. (2023). School-based teaching for democracy: A systematic review of teaching methods in quantitative intervention studies. Educational Research Review, 39, 100511.

via Mikael Persson

## **APPENDIX 15A**

Table 15A 1a Search syntax used on several repositories: search syntax Education Source

-	Keywords	Number of studies
1	Category A: TeachingTI (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*) OR AB (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*) OR SU (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*)	1,506,745
2	Category B: Students and childrenTI (student* OR pupil* OR child*) OR AB (student* OR pupil* OR child*) OR SU (student* OR pupil* OR child*)	1,722,915
3	Category C: DemocracyTI democra* OR AB democra* OR SU democra*	75,858
4	Combination1 AND 2 AND 3	6,931
5	Combination4 NOT SU ("higher education" OR universit* OR tertiary OR "post secondary" OR postsecondary OR college*)	5,844
6	Combination 5 AND Limiters: Scholarly (Peer Reviewed) JournalsNarrow by Language: - SwedishNarrow by Language: - English	3,781

Notes: EBSCOhost, search modes Boolean/Phrase, 2021-10-04 AB = Abstract KW = Keywords SU = Subject TI = Title \* = Truncation.

Source: Education Source.

Table 15A.1b Search syntax used on several repositories: search syntax ERIC

-	Keywords	Number of
		studies
1	Category A: TeachingTI (classroom OR teach* OR instruction* OR didactic* OR	1,056,706
	pedagog* OR learn*) OR AB (classroom OR teach* OR instruction* OR didactic* OR	
	pedagog* OR learn*) OR SU (classroom OR teach* OR instruction* OR didactic* OR	
	pedagog* OR learn*)	
2	Category B: Students and childrenTI (student* OR pupil* OR child*) OR AB (student*	1,090,231
	OR pupil* OR child*) OR SU (student* OR pupil* OR child*)	
3	Category C: DemocracyTI democra* OR AB democra* OR SU democra*	20,171
4	Combination1 AND 2 AND 3	7,887
6	Limiters: Peer Reviewed; Education Level: Adult Basic Education, Adult Education,	2,306
	Early Childhood Education, Elementary Education, Elementary Secondary Education,	
	Grade 1, Grade 2, Grade 3, Grade 4, Grade 5, Grade 6, Grade 7, Grade 8, Grade 9,	
	Grade 10, Grade 11, Grade 12, High School Equivalency Programs, High Schools,	
	Intermediate Grades, Junior High Schools, Kindergarten, Middle Schools, Preschool	
	Education, Primary Education, Secondary Education Narrow by Language: - English	

Notes: EBSCOhost, search modes Boolean/Phrase, 2021-10-04 AB = Abstract SU = Subject TI = Title \* = Truncation.

Source: ERIC.

Table 15A.1c Search syntax used on several repositories: search syntax PsycINFO

-	Keywords	Number of studies
1	Category A: TeachingTI (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*) OR AB (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*) OR SU (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*)	882,698
2	Category B: Students and childrenTI (student* OR pupil* OR child*) OR AB (student* OR pupil* OR child*) OR SU (student* OR pupil* OR child*)	1,400,618
3	Category C: DemocracyTI democra* OR AB democra* OR SU democra*	20,847
4	Combination 1 AND 2 AND 3	2,271
5	Combination4 NOT SU ("higher education" OR universit* OR tertiary OR "post secondary" OR postsecondary OR college*)	2,015
6	Limiters: Academic JournalsNarrow by Language: - SwedishNarrow by Language: - English	1,048

*Notes:* EBSCOhost, Search modes Boolean/Phrase, 2021-10-04 AB = Abstract SU = Subject TI = Title \* = Truncation.

Source: PsycINFO.

Table 15A.1d Search syntax used on several repositories: search syntax Scopus

-	Keywords	Number of studies
1	Category A: TeachingTITLE-ABS-KEY (classroom OR teach* OR instruction* OR didactic* OR pedagog* OR learn*)	3,079,785
2	Category B: Students and childrenTITLE-ABS-KEY (student* OR pupil* OR child*)	4,694,610
3	Category C: DemocracyTITLE-ABS-KEY (democra*)	205,186
4	CombinationCategory A AND Category B AND Category C AND NOT (KEY ({higher education} OR universit* OR tertiary OR {post-secondary} OR postsecondary OR college*))	5,390
5	Limiters: Document Type Article Language: English, Swedish, Norwegian	3,263

*Notes*: 2021-10-04 TITLE-ABS-KEY = Article title, Abstract, Keywords \* = Truncation.

Source: Scopus.