

4-2012

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## Recommended Citation

Schulz, Wolfram and Fraillon, Julian, "Students' participation in and valuing of civic engagement at school" (2012).

<http://research.acer.edu.au/civics/14>

## **Students' participation in and valuing of civic engagement at school**

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Paper prepared for the Annual Meetings of the American Educational Research Association in Vancouver, 13-17 April 2012.

## Introduction

The IEA International Civic and Citizenship Education Study studied the ways in which young people in lower secondary schools are prepared to undertake their roles as citizens in a wide range of countries including Europe, Latin America, and the Asian-Pacific region. ICCS was the third IEA study designed to measure contexts and outcomes of civic and citizenship education and was linked to the 1999 IEA Civic Education Study (CIVED) (Amadeo, Torney-Purta, Lehmann, Husfeldt & Nikolova, 2002; Schulz & Sibberns, 2004; Torney-Purta, Lehmann, Oswald & Schulz, 2001). A central aspect of the study was the assessment of student knowledge about a wide range of civic-related issues (Schulz, Ainley, Fraillon, Kerr & Losito, 2010).

ICCS gathered data from more than 140,000 Grade 8 (or equivalent) students in more than 5,300 schools from 38 countries. These student data were augmented by data from more than 62,000 teachers in those schools and by contextual data collected from school principals and the study's national research centres (Schulz et. al., 2010b).

This paper uses data from ICCS 2009 to describe the level of reported student participation at school across participating countries as well as their perceptions of how valuable it is to become active at school. The paper also analyses which student and school level factors are associated with student participation at school and the extent to which they value these activities. In addition, using a path modelling approach, the paper reviews how indicators related to student participation at school are related to other outcomes like civic knowledge, citizenship self-efficacy and expected civic participation in the future.

## Theoretical Framework

Active engagement by citizens is often seen as a pillar of democratic regimes whose functioning relies to a great extent on contributions from their citizens to the democratic process. Verba, Scholzman & Brady (1995, p. 38) define *political participation* as "activity that has the intent or effect of influencing government action – either directly by affecting the making of implementation of public policy or indirectly by influencing the selection of people those policies". Putnam (1995) defines *civic engagement* more broadly as "people's connections with the life of their communities, not merely politics" (p. 665). Whereas definitions of citizen engagement differ, most researchers emphasize the importance of formal education as a strong predictor of adult engagement (see Nie, Junn, & Stehlik-Barry, 1996).

Given the increased importance of protest behaviour as a form of participation in Western democracies during the seventies and eighties (Barnes et al., 1979), scholars have more explicitly distinguished "conventional" (voting, running for office) from "unconventional (social movement)" activities (grass-root campaigns, protest activities) (Kaase, 1990). Ekman and Amnå (2009) distinguish civic participation (latent political participation) from manifest political participation as well as individual forms from collective forms of engagement. In this typology, civic participation consists of involvement (e.g., interest and attentiveness) and civic engagement (defined here as either individual or collective activities outside the political sphere). Political participation can involve formal political participation (e.g., voting or party membership) or activism (legal or illegal protest).

The ICCS assessment framework (Schulz, Fraillon, Ainley, Losito & Kerr, 2008) emphasizes both *behavioural intentions* (i.e. students' expectations of future action) as well as *behaviours* (i.e. current or past civic participation) which are seen as important aspects of students' civic engagement. Given the limitations 14-year-old students face with regard to active participation, behavioural intentions for what they expect to do in the future has emerged as being of particular importance for this age group.

Numerous studies on social capital and citizen participation in society have used membership or involvement in larger organisations or community groups as indicators of civic engagement (see for example, Van Deth, Maraffi, Newton & Whiteley, 1999; Putnam, 2000). Becoming involved in these activities can be seen as an indicator of, and also as a resource for, future engagement. A "social network" is viewed, along with trust and social norms, by Putnam (1993) as one of three components of social capital.

Opportunities for active participation in the wider community are limited for the age group studied in ICCS but some studies (for example, Verba, Schlozman & Brady, 1995) have emphasized the links between adolescent participation and later involvement as adult citizens. Data from the IEA CIVED study in 1999 have shown that participation in political youth organisations had positive association with feelings of political efficacy among lower and upper secondary students (Schulz, 2005).

Given the existing limitations young people face with regard to their participation in civic life (for example through voting or becoming candidates in elections), scholars have emphasized the importance of students' experience at school to determine the extent to which they have power to influence how schools are run (Bandura, 1997). There is evidence that more democratic forms of school governance have the potential of contributing to higher levels of political efficacy (see for example Mosher, Kenny & Garrod, 1994; Pasek, Feldman, Romer & Jamieson, 2008).

There is also evidence that students' involvement civic-related activities at school tend are associated with higher levels of civic knowledgeable. In their analyses of the NAEP assessments in the United States Niemi and Junn (1998) found that participation in role-playing elections or mock trials had a positive effect on civic knowledge. Reported student participation in a school council or student parliament was also a positive predictor of civic knowledge and engagement in the CIVED and ICCS 2009 (Torney-Purta et al., 2001; Amadeo et al., 2003; Schulz et al, 2010; ACARA, 2011).

Both CIVED and ICCS 2009 included items designed to assess students' confidence in the value school participation. Results from both studies showed that female students expressed more confidence in the value of school participation than males (Torney-Purta et al., 2001; Schulz et al., 2010). The 2010 national assessment of civics and citizenship in Australia assessed grade 6 and grade 10 students' valuing of civic action (both at school and in general) and confirmed more positive appreciations of civic action among female students (ACARA, 2011). The results also showed that there was no change in the levels of valuing civic action between the two year levels.

Research on active citizenship has often tended to focus on participation in politics. Political participation can be defined as any "activity that has the intent or effect of influencing government action – either directly by affecting the making of implementation of public policy or indirectly by influencing the selection of people

those policies" (Verba, Schlozman, & Brady, 1995, p. 38). Citizen activities like voting, volunteering for campaign work, becoming members of political parties or other politically active organisations, running for office or protest activities are all different forms of political participation. Among these, voting is clearly the least intensive and demanding of these activities.

Verba, Schlozman and Brady (1995) identify the following three factors as predictors of political participation: (i) resources enabling individuals to participate (time, knowledge), (ii) psychological engagement (interest, efficacy) and (iii) "recruitment networks" which help to bring individuals into politics (like social movements, church groups or parties). With regard to the first factor, ICCS 2009 data include measures of students' civic knowledge and with regard to the second, most importantly students' citizenship self-efficacy as well as the value they assign to student participation at school as the most relevant form of engagement at this age. Active participation at school as well as engagement in the community are both related to the third factor by providing recruitment network that may motivate further student engagement.

This paper will focus on the link between variables related to student participation (reported engagement as well as valuing student participation), related intermediate variables of importance (civic knowledge and citizenship self-efficacy) and student expectations to participate in the future. The conceptual model for explaining variation students' motivation for future electoral or active political participation assumes that these are influenced by student home and school context variables including current or past participation as well as three important mediating variables.

- *Civic knowledge* is viewed as an important factor which reflects how much students know about civic issues and constitutes a resource enabling them to engage.
- *Citizenship self-efficacy* reflects the confidence students express in their own abilities to participate in civic life.
- *Valuing student participation at school* is the extent to which students think that civic engagement is important with regard to their current context at school.

For the purpose of studying the relationship with expectations of future civic engagement, we will limit the analyses to two important variables: expected electoral participation and expected active political participation. These variables are perceived as being influenced by the three intermediate variables civic knowledge, citizenship self-efficacy and valuing student participation as well as directly by some of the context variables.

In particular, the paper will attempt to answer the following research questions:

- What is extent of student participation at school and how much do student value this form of engagement?
- Which contextual variables are associated with student participation and their appreciation of its value?
- Which are the relationships between student engagement at school, context variables, civic knowledge, students' citizenship self-efficacy and expected forms of future engagement as adult citizens?

Whereas the first two research questions will be addressed by presenting descriptive results from ICCS 2009, the third research question will be approached by presenting a more complex model including relationship between contextual variables, intermediate variables and expected future engagement.

## Data and Methods

The paper includes results from analyses of the international survey data from ICCS 2009, which was carried out in 38 participating countries between October 2008 and May 2009. In each country approximately 150 schools were sampled depending on characteristics of the education system using PPS (probability proportional to size as measured by the number of students enrolled) sampling procedures. Typically, one intact class was randomly selected within each sampled school. Student samples per country ranged from 3000 to 5000 students in the target grade. The target grade corresponded to the eighth year of schooling provided that the minimum age of students was 13.5 years, in which case the ninth grade was selected.

The participation rates required for each country were 85 percent of the selected schools as well as 85 percent of the selected students within the participating schools or a weighted overall participation rate of 75 percent<sup>1</sup>. These requirements are intended to minimise bias in the achieved samples that might arise from differential non-participation.

The following instruments were used in the ICCS data collection:

- The international student test with 80 items in seven different clusters administered in complete rotated design with seven randomly allocated booklets, each consisting of three 15-minute clusters.
- The international student questionnaire (40 minutes length) which was administered after the international test booklets.
- The international teacher questionnaire contained questions regarding school context, teaching and learning and took about 30 minutes to be completed.
- The international school questionnaire contained questions about school characteristics, school, and community context and took 20-30 minutes to be completed.

The analyses presented in this paper are based on data from the student test and questionnaire from 36 countries that met sample participation requirements.

The first part of this paper describes the extent to which student reported experience with civic participation at school and valued student participation at school. Percentages reported in the paper are accompanied by standard errors<sup>2</sup> are flagged with regard to their differences from the international average<sup>3</sup> (both with regard to

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<sup>1</sup> Countries that met these response rates only after replacement schools were used were reported with annotations; Hong Kong SAR and the Netherlands, which did not meet the response rates even after replacement were reported separately in the ICCS 2009 reports and their data are not included in the analyses presented in this paper.

<sup>2</sup> Given the cluster sample design, these standard errors were estimated using the jackknife replication method

<sup>3</sup> The ICCS average was defined as the simple average statistics across countries that had met the sample participation requirements (36 for the student survey). National averages and percentages that

their statistical significance ( $p < 0.05$ ) and their relative difference). Likewise, correlations and regression coefficients are flagged for statistical significance.

To investigate the relationships between student context variables, civic engagement, civic knowledge, citizenship efficacy, valuing of school participation and expected participation, path models were estimated using the software package MPLUS 6.11 (Muthén & Muthén, 2011). In a first step, exploratory analyses were carried out using a pooled international sample consisting of 36 national sub-samples with 500 students per country (18,000 students). Once a final model had been defined, it was estimated for each national dataset separately.

The criterion variables for these analyses were *expected electoral participation* and *expected active political participation* (both IRT scales with international means of 50 and standard deviations of 10). Standard errors for path coefficients and correlations were estimated using the jackknife (JK2) replication method. Cases with missing values on any of the variables were excluded from the path analyses presented in this paper. On average across countries, about 11 percent of students were excluded due to missing values; in two countries (Dominican Republic and Paraguay) considerably higher percentages above 20 percent were found.

The path analyses were undertaken at the student level. Exploratory analyses confirmed that except for civic knowledge there were only small proportions of variance found between schools. Therefore and also in order to reduce model complexity it was decided to undertake single-level analyses instead of estimated multilevel models.

## Results

### ***Students' Civic participation at school***

The students participating in ICCS were asked to report whether they had done the following activities “within the last 12 months,” “more than a year ago,” or “never”:

- Voluntary participation in school-based music or drama activities outside of regular lessons;
- Active participation in a debate;
- Voting for class representative or school parliament;
- Taking part in decision-making about how the school is run;
- Taking part in discussions at a student assembly;
- Becoming a candidate for class representative or school parliament.

This set of activities were selected because of they relate to the development of students citizenship participatory skills.

The percentages of students who said that they had participated in each of these activities in the past (either in the last 12 months or before) are shown in Table 1.

*<Insert Table 1 here>*

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are significantly ( $p < 0.05$ ) above or below the ICCS average are flagged. A similar flag was used for national percentages that were more than ten percentage points above or below the ICCS average.

Across participating countries, 76 percent of ICCS students, on average, reported having voted in school elections and 61 percent reported voluntary participation in music or drama activities. Fewer than half students (typically around 40 percent), on average reported active involvement in the remaining four activities: being actively involved in debates, taking part in decision-making about how their school was run, taking part in school assembly discussions, or been candidates for class representative or the school parliament. Although these participation rates are consistently higher than those reported by students for out-of-school activities (Schulz et. al., 2010) given their explicit curricular relationships to participatory skills it is worth noting that fewer than half students have reported participating in four of the six activities within the past year.

On average, across countries, only seven percent of students reported not having been involved in any of these activities at school. The highest percentages in this category were found in the Republic of Korea and in Luxembourg. We note, however, that students were asked whether they had done these activities at this or any previous schools, and that they were also not asked to what extent these activities were available to them. As such, students' non-participation could also be due to lack of opportunities at their schools.

The six items were used to obtain an IRT scale reflecting student participation at school with an average reliability (Cronbach's alpha) of 0.66. The scale is described in detail in the ICCS 2009 Technical Report (Schulz & Friedman, 2011).

### ***Students' perception of the value of student engagement at school***

ICCS 2009 used the following five items to measure students' perceptions of the value of student participation at school. Students were asked to what degree they agreed with the following five statements.

- Lots of positive changes can happen in schools when students work together;
- Organizing groups of students to express their opinions could help solve problems in schools;
- Students can have more influence on what happens in schools if they act together rather than alone;
- Student participation in how schools are run can make schools better;
- All schools should have a school parliament.

Students were required to rate their agreement using the categories 'strongly disagree', 'disagree', 'agree' and 'strongly agree' for each statement. Table 2 shows the percentage of student agreement (agree and strongly agree combined) for all ICCS countries. From Table 2 it can be seen that the levels of agreement to the statements around the value of student participation at school were high across countries for all five items.

*<Insert Table 2 here>*

The percentages of agreement ranged from 86 percent (support for school parliaments at all schools) to 92 percent (agreement that positive changes are possible when students work together). Five of the six ICCS Latin American countries showed very



high levels of support for the value of student participation at school. Across Chile, Colombia, the Dominican Republic, Guatemala and Paraguay the percentage agreement was significantly higher than the ICCS average in 22 of 25 cases and not significantly different in the other three.

These five items were used to form a one-parameter (Rasch) IRT scale with an average reliability (Cronbach's alpha) of 0.72 across ICCS countries. A detailed description of these scale data can be found in the ICCS 2009 Technical Report (Schulz & Friedman, 2011) and its results are described in the international report (Schulz et al., 2010).

### ***Associations between selected contextual factors and indicators of school engagement***

The following contextual variables were viewed as important covariates for indicators of student engagement at school:

- *Students' sex* with female coded as 1 and male as 0;
- *Students' expected further education* (in approximate years according the expected ISCED level of qualification);
- *Students' socio-economic background* (a nationally standardized composite index based on highest parental occupation, highest parental education and the number of books at home);
- *Reported parental interest in political and social issues* (0 = both parents not interested or not very interested, 1 = at least one parent quite interested or very interested which reflects home context);
- *Frequency of discussing political and social issues with parents* (three-point scale, in which 0 = never or hardly ever, 1 = monthly, 2 = weekly or daily) also reflecting home context;
- *Perception of openness with respect to classroom discussions of political and social issues*, which is an IRT (item response theory) scale, which reflected the extent to which students consider they are free to express opinions in class and to discuss civic-related issues.<sup>4</sup>

Table 3 shows the correlations between scale scores of students' participation in civic-related activities at school and these six contextual variables. The correlations tend to be statistically significant but are generally not very high. Students' sex and socioeconomic status have the lowest correlations averaging 0.13 each and the frequency of discussing politics with parents and openness of classroom discussions showed the highest average correlations of 0.21 and 0.23 respectively. The correlations ranged typically 0.1 either side of the mean correlations with each contextual variable across countries and across countries the pattern of the relative

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<sup>4</sup> The scale was derived from student responses to six items (teachers encourage student to make up their own minds, teachers encourage students to express their opinions, students bring up current political events for discussion in class, students express opinions in class even when their opinions are different from most of the other students, teachers encourage students to discuss the issues with people having different opinions, teachers present several sides of the issues when explaining them in class) and had an average reliability (Cronbach's alpha) of 0.76 across countries (see further details in Schulz & Friedman, 2011).

magnitude of correlations between each contextual variable and student participation in civic-related activities at school was largely consistent.

*<Insert Table 3 here>*

Table 4 shows the correlations between the scale scores of students' perceptions of the value of participation at school with the six contextual variables. The correlations between the contextual variables and students' perceptions of the value of participation at school are very similar to those reported for participation in civic-related activities at school. The mean correlations across the six variables range from 0.09 for students' sex and socioeconomic status to 0.24 for perceived openness of classroom discussions.

*<Insert Table 4 here>*

### ***Modelling the relationships between school and future engagement***

To investigate the relationships between home and school context variables, civic-related student learning outcomes and expected participation as adults, we estimated a path model which assumes that knowledge, citizenship self-efficacy<sup>5</sup> and valuing student participation function as intermediate variables between home and school context and expected electoral or active political participation in the future.<sup>6</sup> Both reported participation at school and in the community<sup>7</sup> form part of the set of contextual antecedent variables in this model.

In the exploratory phase all possible paths were included and removed if the coefficients were of negligible size in the overall model as well as not statistically significant ( $p > 0.05$ ) in almost all national samples. The final model still includes a few path coefficients of a smaller size that were of significance in a larger sub-set of

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<sup>5</sup> The scale reflecting citizenship self-efficacy was based on a set of seven items measuring how well students thought they could do several tasks related to civic engagement (discuss a newspaper article about a conflict between countries, argue your point of view about a controversial political or social issue, stand as a candidate in a school election, organise a group of students in order to achieve changes at school, follow a television debate about a controversial issue, write a letter to a newspaper giving your view on a current issue, speak in front of your class about a social or political issue) and had an average reliability (Cronbach's alpha) of 0.82 across participating countries (see further details in Schulz & Friedman, 2011).

<sup>6</sup> The ICCS 2009 student questionnaire asked students to indicate whether they expected to participate as adults in a number of activities ranging from voting in local or national election to joining political parties or trade unions or standing as candidates in local elections. The response categories were "I will certainly do this", "I will probably do this", "I will probably not do this" and "I will certainly not do this". The scale reflecting expected electoral participation was based on three items (voting in local elections, voting in national elections, get information about candidates before voting in an election) and has an average reliability of 0.82 across participating countries. The scale reflecting expected active political participation was based on four items (help a candidate or party during an election campaign, join a political party, join a trade union, stand as a candidate in a local election) and has an average reliability of 0.81. Both scales are described in further detail in Schulz & Friedman (2011).

<sup>7</sup> In ICCS 2009, civic participation in the community was measured by asking students to rate whether they had participated "within the last twelve months", "more than a year ago" or "never" in a number of organisations or activities (political youth organisations, environmental organisations, human rights organisations, voluntary groups in the community, charitable organisations, cultural organisations based on ethnicity, groups campaigning for an issue). The resulting scale had an average reliability (Cronbach's alpha) of 0.74 across participating countries and is described in more detail in the ICCS 2009 Technical Report (Schulz & Friedman, 2011).

countries. The model also includes estimates of the (partial) correlations between the three intermediate variables and the two indicators of expected participation as adults.

Once the final model had been defined, the analyses were carried out for the 36 national samples using jackknife replication (JK2) to estimate the sampling variance associated with the coefficients.

*<Insert Figure 1 here>*

Figure 1 illustrates the path model and the average coefficients across national samples are given for each path or correlation. Coefficients which had on average significant t-values ( $p < 0.05$ ) across countries are written in bold. Given the complexity of the model Table 5 summarizes the average path coefficients and correlations in tabular form. The corresponding country level results are shown in the Appendix Tables 7, 8, 9 and 10.

*<Insert Table 5 here>*

Female sex of students had a weak positive effect on civic knowledge and weak negative effect on expected active political participation. Socio-economic background of students had a relatively strong positive effect on civic knowledge but it did not affect any of the other dependent variables and therefore the corresponding paths were not included in the model.

Parental interest did not have a consistent positive effect on civic knowledge across countries but weak and on average significant positive effects on citizenship self-efficacy and valuing student participation at school (0.05 and 0.08 respectively). Having parents interested in political and social issues had direct positive and on average significant effects on expected electoral participation (0.14) and expected active political participation (0.09).

Coming from a home where parents talk with their children about political and social issues was The frequency of discussing civic issues with parents had modest positive effects on civic knowledge (0.08) and citizenship self-efficacy (0.12) but the relationship was rather weak (albeit on average significant) for valuing student participation (0.04).

Expected further education reflects students' intended engagement with education and is an important potential predictor of civic knowledge, parental expectations, and individual aspirations. It has a relatively strong effect on civic knowledge (0.23) and somewhat lower but consistently statistically significant effects on citizenship self-efficacy (0.12) and valuing student participation at school (0.07).

Perceptions of openness in classroom discussion is based students' reports about the frequency with which they observed certain events during discussions of political and social issues in class, and it reflects the extent to which students consider they are free to express opinions in class and to discuss civic-related issues. It showed consistent positive effects on civic knowledge (0.13), citizenship self-efficacy (0.10) and valuing of student participation (0.18).

Reported student participation in civic activities at school had positive effects on civic knowledge (0.11), citizenship self-efficacy (0.20) and valuing school participation (0.15). Reported student participation in the community, however, had a negative effect on civic knowledge in this model (-0.15) and a weak positive effect on

citizenship self-efficacy (0.08). The effects on valuing student participation at school were on average non-significant and inconsistent across participating countries (see Table 9). Having experience with participation in the community was positively and on average significantly associated with expected active political participation in the future (0.08).

Civic knowledge had a relatively strong positive effect on expected electoral participation (0.24) but was negatively associated with the expectations of engaging actively in politics as an adult (-0.13). Students' confidence in their ability to engage was consistently a positive predictor for both expected electoral (0.25) and active political participation (0.35).

The model included the correlations between intermediate variables and the two indicators of expected participation after controlling for other factors included in the model. Civic knowledge was not correlated with citizenship self-efficacy but had a positive association with valuing student participation (0.14). Self-efficacy and valuing student participation were positively correlated at 0.18. The correlation between expected electoral and active political participation was 0.34.

*<Insert Table 6 here>*

Table 6 describes the model fit and the explained variance for each of the dependent variables for each national sample and on average across countries. The model fit was satisfactory across countries with an average RMSEA of 0.04 and an average RMR of 0.02. On average, the model explained 28 percent of the variance in civic knowledge (ranging from 20% to 36%), 17 percent for citizenship self-efficacy (ranging from 6% to 28%), 10 percent for valuing student participation at school (ranging from 4% to 17%), 24 percent for expected electoral participation (ranging from 14% to 36%) and 19 percent for expected active political participation (ranging from 8% to 27%). It should be noted that the percentages of explained variance varied quite considerable across participating countries.

## **Conclusion and discussion**

The results presented in this paper show that lower secondary students in the 36 ICCS 2009 countries reported relatively high levels of participation in different civic activities at school. On average, only seven percent reported not to have done any of the listed activities in the past. However, it should be taken into account that more recent participation was not quite as frequent.

Students across participating countries also tended to agree with positive statements about the value of student participation at school. Overwhelmingly, students supported the notion that students can influence what happens at school and that student representation is important.

Both reported student participation and perceptions of its value were weakly to moderately related to individual, home and school-related contextual variables. Students talking at home more frequently with their parents about civic issues and those who reported openness in classroom discussions were also more likely to report engagement at school. In particular openness in classroom discussions was positively associated with perceptions of the value of student participation.

The results for the path model show the central importance of civic knowledge and citizenship self-efficacy when explaining future engagement of students. Whereas both variables have positive effects on expected electoral expectations, more knowledgeable students are less likely to expect to become actively involved in conventional political activities. The model also shows support for a conceptual model of civic and citizenship education that supports the development of civic knowledge and student citizenship self-efficacy as separate “outcomes” each of which is positively influenced by the provision of an open classroom climate (as perceived by students) and the opportunity for students to participate in civic-related activities at school. Another counterintuitive finding is that whilst reported student participation has a positive effect on civic knowledge, reported participation in the community is associated with lower levels of civic knowledge.

The model also shows that student participation at school is associated with higher levels of civic knowledge, citizenship self-efficacy and valuing student engagement. Valuing student participation has a positive effect on expectations to engage in elections but is not associated with expectations to become actively involved in conventional political activities. Whereas students who have become engaged at school and value their participation are more knowledgeable and are also more likely to become engaged in elections, indices related to school participation do not lead to expectations of become more actively engaged in conventional political participation.

The effects of civic and citizenship education on active citizenship can only be truly assessed through longitudinal studies that follow individuals from school through to adult life. Therefore we recommend caution when interpreting the results from the path analyses. Given the cross-sectional nature of the ICCS 2009 survey, assumptions about causal relationships were made with for the sake of statistical modelling but readers should be aware that some of the associations modelled as uni-directional paths could also be interpreted as reciprocal. For example, reported participation at school may to a certain extent be current activities that are due to student beliefs about the value of doing so.

It is also important to keep in mind that ICCS students were asked about their expectations about intended behaviour in future adult life like elections at a relatively early stage of adolescence which may change prior to reaching adulthood. However, it can also reasonably be argued that data from cross-sectional surveys such as those from ICCS may be used to model influences on students' intentions to participate. The theory of planned behaviour (Ajzen, 2001), and a body of empirical research derived from that theory, supports the proposition that intentions act as powerful mediating influences on actions, and that attitudes, experiences and backgrounds operate on actions through their influences on intentions.

Some of the findings will require further investigations, in particular the counterintuitive negative relationships between community participation and civic knowledge and the negative effect of cognitive measures on expectations of active political participation. Furthermore, we did not include expected non-conventional participation like protest activities or informal participation in the model which constitutes a more attractive form of engagement and for which different outcomes may be obtained (see for example Ainley & Schulz, 2011).

## References

- ACARA (2011). *National Assessment Program Civics and Citizenship Year 6 and Year 10 Report 2010*. Sydney: Australian Curriculum and Assessment Reporting Authority.
- Ainley, J. & Schulz, W. (2011). *Expected participation in protest activities among lower secondary students in 38 countries*. Paper presented at the Annual Meetings of the American Educational Research Association (AERA) in New Orleans, 8-12 April.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27-58.
- 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*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Barnes, S. H. & Kaase, M. (1979). *Political action: Mass participation in five Western democracies*. Beverly Hills: Sage Publications.
- Ekman, J. & Amnå, E. (2009). *Political Participation and Civic Engagement: Towards A New Typology*. Youth & Society (YeS) Working Paper 2009:2. Örebro: Örebro University.
- Kaase, M. (1990) Mass participation. In M. K. Jennings, J. W. van Deth et al. (Eds.), *Continuities in political action* (pp.23–67) Berlin, New York: Walter de Gruyter.
- Mosher, R., Kenny, R.A. & Garrod, A. (1994). *Preparing for Citizenship. Teaching Youth Live Democratically*. Westport/London: Praeger.
- Muthén, L. K. & Muthén, B. O. (2006) *Mplus. Statistical Analysis With Latent Variables. User's Guide*. Los Angeles, CA: Muthén & Muthén.
- Nie, N. H., Junn, J. & Stehlik-Barry, K. (1996). *Education and democratic citizenship in America*. Chicago: University of Chicago Press.
- Niemi, R. and Junn, J. (1998) *Civic education: What makes students learn?* New Haven: Yale University Press.

- 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)*, 236-37.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.
- Putnam, R. D. (1993). *Making democracy work*. Princeton, NJ: Princeton University Press.
- Reilly, J., Niens, U. and McLaughlin, R. (2005). Education for a Bill of Rights in Northern Ireland. In A. Osler (Ed.) *Teachers, Human Rights and Diversity: educating citizens in multicultural societies*. Stoke-on-Trent: Trentham, pp.53-72.
- Schulz, W. & Friedman, T. (2011). Scaling procedures for ICCS questionnaire items. In W. Schulz, J. Ainley, & J. Fraillon (Eds.). *ICCS 2009 Technical Report* (pp. 157-257). Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
- Schulz, W. & Sibberns, H. (2004) (Eds.). *IEA Civic Education Study Technical Report*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).
- Schulz, W. (2005). *Political efficacy and expected participation among lower and upper secondary students: A comparative analysis with data from the IEA civic education study*. Paper presented at the ECPR general conference in Budapest, Hungary, 8–10 September.
- Schulz, W., Ainley, J., & Fraillon, J. (2011) (Eds.). *ICCS 2009 Technical Report*. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
- 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 38 countries*. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
- 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: International Association for the Evaluation of Educational Achievement (IEA).
- Schulz, W., Fraillon, J., Ainley, J., Losito, B., & Kerr, D. (2008). *International civic and citizenship education study: Assessment framework*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement (IEA).

- Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. Amsterdam: International Association for the Evaluation of Educational Achievement (IEA).
- Van Deth, J. W., Maraffi, M., Newton, K. & Whiteley, P. F. (1999) *Social capital and European democracy*. London, New York: Routledge.
- Verba, S., Schlozman, K. L. and Brady, H. E. (1995) *Voice and equality: Civic voluntarism in American politics*. Cambridge: Harvard University Press.



**Table 1 Percentage of students' reported participation in different civic activities at school**

Country	Voluntary participation in school-based music or drama activities outside of regular lessons		Active participation in a debate	Voting for class representative or school parliament	Taking part in decision-making about how the school is run	Taking part in discussions at a student assembly	Becoming a candidate for class representative or school parliament		No participation in any of these activities					
Austria	52 (1.4)	▽	25 (1.1)	▼	81 (0.9)	△	30 (1.2)	▼	38 (1.1)	▽	57 (1.1)	▲	8 (0.7)	
Belgium (Flemish) †	47 (1.8)	▼	31 (1.2)	▼	68 (2.0)	▽	36 (1.3)	▽	24 (0.9)	▼	34 (1.2)	▽	16 (1.2)	△
Bulgaria	66 (1.2)	△	52 (1.4)	△	52 (1.9)	▼	31 (1.2)	▽	40 (1.2)	▽	34 (1.1)	▽	12 (0.9)	△
Chile	70 (1.0)	△	49 (1.7)	△	89 (0.7)	▲	39 (1.1)		35 (1.0)	▽	47 (1.0)	△	3 (0.3)	▽
Chinese Taipei	56 (0.8)	▽	17 (0.8)	▼	67 (0.9)	▽	43 (0.7)		84 (0.7)	▲	32 (0.9)	▽	7 (0.4)	
Colombia	71 (0.9)	▲	49 (1.3)	△	90 (0.5)	▲	57 (0.9)	▲	41 (0.9)	▽	44 (0.8)	△	3 (0.3)	▽
Cyprus	69 (0.9)	△	55 (0.9)	▲	71 (0.8)	▽	35 (1.2)	▽	39 (0.9)	▽	67 (1.0)	▲	9 (0.5)	△
Czech Republic †	52 (1.2)	▽	54 (1.0)	△	74 (1.9)		21 (0.9)	▼	29 (0.9)	▼	31 (1.0)	▼	9 (0.8)	△
Denmark †	43 (1.4)	▼	57 (1.2)	▲	73 (1.1)	▽	44 (1.0)	△	20 (0.8)	▼	49 (1.0)	△	9 (0.6)	△
Dominican Republic	62 (1.3)		66 (1.5)	▲	61 (1.5)	▼	59 (1.1)	▲	49 (1.2)	△	58 (1.2)	▲	6 (0.4)	▽
England ‡	62 (1.3)		48 (1.5)	△	79 (1.2)	△	55 (1.5)	▲	37 (1.4)	▽	40 (1.2)		8 (0.6)	
Estonia	73 (1.2)	▲	36 (1.2)	▽	75 (1.8)		24 (1.2)	▼	25 (1.3)	▼	32 (1.5)	▼	7 (0.6)	
Finland	61 (1.2)		59 (1.2)	▲	83 (1.3)	△	15 (0.7)	▼	23 (1.0)	▼	35 (1.4)	▽	6 (0.6)	▽
Greece	61 (1.4)		40 (1.1)	▽	85 (1.0)	△	57 (1.1)	▲	74 (1.4)	▲	68 (1.5)	▲	4 (0.4)	▽
Guatemala <sup>1</sup>	76 (1.0)	▲	56 (2.0)	▲	94 (0.8)	▲	63 (1.0)	▲	51 (1.2)	△	56 (1.2)	▲	1 (0.2)	▽
Indonesia	55 (1.4)	▽	41 (1.2)	▽	72 (1.4)	▽	57 (1.3)	▲	85 (1.0)	▲	26 (1.0)	▼	3 (0.4)	▽
Ireland	58 (1.2)	▽	66 (1.3)	▲	76 (2.2)		38 (1.3)		28 (1.1)	▼	25 (0.9)	▼	6 (0.7)	
Italy	67 (1.1)	△	50 (1.3)	△	49 (2.3)	▼	34 (1.5)	▽	24 (1.5)	▼	21 (1.3)	▼	8 (0.6)	
Korea, Republic of <sup>1</sup>	23 (0.7)	▼	33 (0.9)	▼	76 (0.7)		33 (0.9)	▽	26 (0.6)	▼	33 (0.7)	▽	18 (0.6)	▲
Latvia	77 (1.2)	▲	55 (1.6)	▲	67 (2.5)	▽	31 (1.3)	▽	31 (1.5)	▼	39 (1.6)		6 (0.6)	
Liechtenstein	48 (2.9)	▼	54 (2.6)	△	74 (2.5)		27 (2.6)	▼	42 (2.5)		49 (2.5)	△	8 (1.4)	
Lithuania	63 (1.1)	△	23 (0.9)	▼	84 (0.9)	△	35 (1.1)	▽	38 (1.2)	▼	30 (1.1)	▼	6 (0.5)	▽
Luxembourg	46 (0.7)	▼	19 (0.6)	▼	63 (0.8)	▼	25 (0.6)	▼	31 (0.7)	▼	36 (0.8)	▽	17 (0.8)	▲
Malta	70 (1.3)	△	30 (1.1)	▼	62 (1.2)	▼	29 (1.0)	▼	*		24 (0.9)	▼	12 (0.9)	△
Mexico	59 (0.8)		48 (1.1)	△	74 (0.9)	▽	54 (0.9)	▲	41 (1.0)	▽	36 (0.7)	▽	8 (0.4)	
New Zealand †	64 (1.2)	△	42 (1.4)		75 (1.4)		48 (1.3)	△	43 (1.1)		38 (1.1)	▽	10 (0.7)	△
Norway †	61 (1.3)		62 (1.3)	▲	90 (0.8)	▲	58 (1.6)	▲	52 (1.3)	△	62 (1.0)	▲	4 (0.4)	▽
Paraguay <sup>1</sup>	73 (0.9)	▲	39 (1.3)	▽	87 (1.0)	▲	56 (1.2)	▲	54 (1.4)	▲	58 (1.3)	▲	3 (0.5)	▽
Poland	60 (1.3)		32 (1.2)	▼	95 (0.5)	▲	57 (1.1)	▲	67 (1.1)	▲	59 (0.9)	▲	2 (0.3)	▽
Russian Federation	67 (1.0)	△	34 (1.2)	▼	76 (1.4)		32 (1.2)	▽	45 (1.1)		28 (1.1)	▼	8 (0.6)	
Slovak Republic <sup>2</sup>	60 (1.2)		49 (1.5)	△	73 (2.3)		28 (1.2)	▼	81 (1.0)	▲	43 (1.5)		5 (0.6)	▽
Slovenia	65 (1.3)	△	41 (1.2)	▽	84 (0.8)	△	28 (1.2)	▼	35 (1.4)	▽	59 (1.1)	▲	6 (0.5)	▽
Spain	65 (1.0)	△	50 (1.5)	△	87 (1.0)	▲	48 (1.2)	△	38 (1.3)	▽	55 (1.2)	▲	4 (0.4)	▽
Sweden	59 (1.4)		42 (1.6)		85 (0.9)	△	54 (1.1)	▲	53 (1.1)	△	40 (1.0)		6 (0.5)	▽
Switzerland †	56 (1.3)	▽	56 (1.5)	▲	60 (2.0)	▼	28 (1.3)	▼	40 (1.4)	▽	34 (1.4)	▽	9 (0.8)	△
Thailand †	64 (1.1)	△	36 (1.3)	▽	79 (0.9)	△	46 (1.1)	△	52 (1.1)	△	36 (1.0)	▽	6 (0.5)	▽
<b>ICCS average</b>	<b>61 (0.2)</b>		<b>44 (0.2)</b>		<b>76 (0.2)</b>		<b>40 (0.2)</b>		<b>43 (0.2)</b>		<b>42 (0.2)</b>		<b>7 (0.1)</b>	

**National percentage**

- more than 10 percentage points above ICCS average ▲
- significantly above ICCS average △
- significantly below ICCS average ▽
- more than 10 percentage points below ICCS average ▼

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

**Table 2 Percentage of students' agreement with statements valuing student participation at school**

Country	Student participation in how schools are run can make schools better	Lots of positive changes can happen in schools when students work together	Organising groups of students to express their opinions could help solve problems in schools	All schools should have a <school parliament>	Students can have more influence on what happens in schools if they act together rather than alone
Austria	71 (1.0) ▼	89 (0.7) ▽	80 (0.8) ▽	56 (1.1) ▼	83 (0.8) ▽
Belgium (Flemish) †	85 (0.8) ▽	96 (0.5) △	88 (0.7) △	90 (0.8) △	92 (0.6) △
Bulgaria	79 (0.9) ▽	87 (0.9) ▽	84 (0.9) ▽	78 (1.1) ▽	87 (0.8) ▽
Chile	95 (0.3) △	97 (0.3) △	92 (0.5) △	97 (0.3) ▲	94 (0.5) △
Chinese Taipei	94 (0.4) △	94 (0.4) △	91 (0.5) △	83 (0.7) ▽	87 (0.5) ▽
Colombia	96 (0.2) △	94 (0.4) △	92 (0.4) △	94 (0.4) △	91 (0.4) △
Cyprus	88 (0.7)	86 (0.7) ▽	85 (0.8) ▽	88 (0.8) △	84 (0.7) ▽
Czech Republic †	80 (0.8) ▽	92 (0.4)	88 (0.5)	71 (1.6) ▼	87 (0.7) ▽
Denmark †	84 (0.6) ▽	97 (0.3) △	87 (0.6)	95 (0.5) △	93 (0.4) △
Dominican Republic	94 (0.4) △	92 (0.5)	88 (0.7)	92 (0.9) △	87 (0.6) ▽
England ‡	85 (0.8)	91 (0.6)	85 (0.8) ▽	86 (1.0)	90 (0.7)
Estonia	87 (1.0)	95 (0.6) △	88 (0.8)	88 (1.0)	92 (0.6) △
Finland	92 (0.6) △	94 (0.5) △	86 (0.7)	88 (0.7) △	95 (0.5) △
Greece	92 (0.6) △	91 (0.7)	85 (0.8)	91 (0.7) △	88 (0.7)
Guatemala <sup>1</sup>	98 (0.3) ▲	96 (0.4) △	94 (0.5) △	96 (0.3) △	88 (0.7)
Indonesia	98 (0.3) ▲	95 (0.4) △	94 (0.5) △	96 (0.4) △	78 (1.0) ▼
Ireland	90 (0.7) △	94 (0.5) △	88 (0.6)	91 (0.7) △	92 (0.6) △
Italy	90 (0.6) △	95 (0.4) △	88 (0.7)	74 (0.8) ▼	88 (0.5)
Korea, Republic of <sup>1</sup>	82 (0.7) ▽	86 (0.6) ▽	78 (0.8) ▽	61 (0.9) ▼	88 (0.6)
Latvia	87 (0.8)	91 (0.7)	81 (1.0) ▽	85 (0.9)	89 (0.7)
Liechtenstein	73 (2.6) ▼	89 (1.6)	83 (1.9) ▽	82 (2.1)	90 (1.8)
Lithuania	68 (1.1) ▼	80 (1.0) ▼	89 (0.5) △	92 (0.6) △	93 (0.7) △
Luxembourg	74 (0.7) ▼	90 (0.5) ▽	84 (0.8) ▽	74 (0.8) ▼	87 (0.6) ▽
Malta	90 (0.9) △	93 (0.6)	89 (0.8) △	86 (0.8)	88 (1.0)
Mexico	92 (0.4) △	89 (0.5) ▽	87 (0.5)	90 (0.6) △	85 (0.6) ▽
New Zealand †	87 (0.8)	93 (0.6)	86 (1.0)	86 (0.9)	92 (0.6) △
Norway †	86 (0.8)	95 (0.5) △	91 (0.6) △	97 (0.4) ▲	92 (0.5) △
Paraguay <sup>1</sup>	94 (0.5) △	96 (0.4) △	90 (0.7) △	94 (0.5) △	91 (0.7) △
Poland	88 (0.8)	93 (0.6) △	88 (0.7)	95 (0.5) △	93 (0.6) △
Russian Federation	91 (0.5) △	92 (0.5)	83 (0.7) ▽	89 (0.8) △	89 (0.6)
Slovak Republic <sup>2</sup>	79 (1.1) ▽	94 (0.6) △	85 (0.8) ▽	75 (1.7) ▼	89 (0.7)
Slovenia	84 (0.8) ▽	92 (0.6)	86 (0.9)	85 (0.9)	87 (0.8) ▽
Spain	88 (0.7)	89 (0.7) ▽	87 (0.6)	93 (0.6) △	88 (0.8)
Sweden	87 (0.8)	90 (0.6) ▽	81 (0.9) ▽	92 (0.6) △	87 (0.7) ▽
Switzerland †	74 (1.4) ▼	89 (0.7) ▽	80 (1.0) ▽	74 (1.5) ▼	86 (0.7) ▽
Thailand †	96 (0.3) △	94 (0.5) △	93 (0.4) △	95 (0.5) △	94 (0.4) △
<b>ICCS average</b>	<b>87 (0.1)</b>	<b>92 (0.1)</b>	<b>87 (0.1)</b>	<b>86 (0.2)</b>	<b>89 (0.1)</b>

**National percentage**

more than 10 percentage points above ICCS average ▲

significantly above ICCS average △

significantly below ICCS average ▽

more than 10 percentage points below ICCS average ▼

() Standard errors appear in parentheses. Because results are rounded to the nearest whole number, some totals may appear inconsistent.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

**Table 3** Correlations between the student participation at school index and selected context variables

Country	Students' sex (female)	Expected years of further education	Socio-economic background	Highest parental interest	Frequency of talking with parents about civic issues	Perceived openness in classroom discussions
Austria	<b>0.05</b>	<b>0.10</b>	<b>0.14</b>	<b>0.17</b>	<b>0.23</b>	<b>0.19</b>
Belgium (Flemish) †	<b>0.12</b>	<b>0.15</b>	<b>0.16</b>	<b>0.16</b>	<b>0.21</b>	<b>0.18</b>
Bulgaria	<b>0.13</b>	<b>0.15</b>	<b>0.12</b>	<b>0.16</b>	<b>0.18</b>	<b>0.25</b>
Chile	<b>0.13</b>	<b>0.12</b>	<b>0.10</b>	<b>0.15</b>	<b>0.20</b>	<b>0.25</b>
Chinese Taipei	<b>0.15</b>	<b>0.22</b>	<b>0.16</b>	<b>0.12</b>	<b>0.21</b>	<b>0.26</b>
Colombia	<b>0.07</b>	<b>0.04</b>	<b>0.10</b>	<b>0.18</b>	<b>0.25</b>	<b>0.29</b>
Cyprus	<b>0.15</b>	<b>0.26</b>	<b>0.21</b>	<b>0.15</b>	<b>0.22</b>	<b>0.20</b>
Czech Republic †	<b>0.18</b>	<b>0.25</b>	<b>0.17</b>	<b>0.17</b>	<b>0.19</b>	<b>0.27</b>
Denmark †	<b>0.07</b>	<b>0.17</b>	<b>0.17</b>	<b>0.13</b>	<b>0.28</b>	<b>0.25</b>
Dominican Republic	<b>0.03</b>	<b>0.04</b>	<b>0.06</b>	<b>0.11</b>	<b>0.14</b>	<b>0.13</b>
England ‡	<b>0.13</b>	<b>0.20</b>	<b>0.27</b>	<b>0.22</b>	<b>0.28</b>	<b>0.25</b>
Estonia	<b>0.23</b>	<b>0.19</b>	<b>0.07</b>	<b>0.10</b>	<b>0.19</b>	<b>0.22</b>
Finland	<b>0.13</b>	<b>0.18</b>	<b>0.18</b>	<b>0.14</b>	<b>0.23</b>	<b>0.22</b>
Greece	<b>0.07</b>	<b>0.21</b>	<b>0.12</b>	<b>0.15</b>	<b>0.18</b>	<b>0.21</b>
Guatemala <sup>1</sup>	<b>0.06</b>	<b>0.05</b>	0.01	<b>0.11</b>	<b>0.15</b>	<b>0.21</b>
Indonesia	0.03	<b>0.12</b>	<b>0.17</b>	<b>0.11</b>	<b>0.18</b>	<b>0.20</b>
Ireland	<b>0.21</b>	<b>0.17</b>	<b>0.17</b>	<b>0.15</b>	<b>0.23</b>	<b>0.27</b>
Italy	<b>0.06</b>	<b>0.14</b>	<b>0.10</b>	<b>0.07</b>	<b>0.19</b>	<b>0.16</b>
Korea, Republic of <sup>1</sup>	<b>0.09</b>	<b>0.20</b>	<b>0.22</b>	<b>0.15</b>	<b>0.27</b>	<b>0.23</b>
Latvia	<b>0.25</b>	<b>0.15</b>	<b>0.10</b>	<b>0.16</b>	<b>0.19</b>	<b>0.31</b>
Liechtenstein	<b>0.13</b>	<b>0.23</b>	0.11	0.04	<b>0.21</b>	<b>0.20</b>
Lithuania	<b>0.27</b>	<b>0.25</b>	<b>0.08</b>	<b>0.14</b>	<b>0.21</b>	<b>0.29</b>
Luxembourg	<b>0.06</b>	<b>0.11</b>	<b>0.07</b>	<b>0.10</b>	<b>0.16</b>	<b>0.19</b>
Malta	0.04	<b>0.13</b>	<b>0.17</b>	<b>0.14</b>	<b>0.15</b>	<b>0.21</b>
Mexico	<b>0.10</b>	<b>0.05</b>	-0.01	<b>0.13</b>	<b>0.21</b>	<b>0.23</b>
New Zealand †	<b>0.17</b>	<b>0.24</b>	<b>0.25</b>	<b>0.16</b>	<b>0.25</b>	<b>0.25</b>
Norway †	<b>0.11</b>	<b>0.23</b>	<b>0.21</b>	<b>0.13</b>	<b>0.25</b>	<b>0.24</b>
Paraguay <sup>1</sup>	<b>0.07</b>	<b>0.08</b>	<b>0.10</b>	<b>0.12</b>	<b>0.21</b>	<b>0.22</b>
Poland	<b>0.23</b>	<b>0.27</b>	<b>0.16</b>	<b>0.14</b>	<b>0.23</b>	<b>0.24</b>
Russian Federation	<b>0.24</b>	<b>0.16</b>	<b>0.06</b>	<b>0.18</b>	<b>0.23</b>	<b>0.39</b>
Slovak Republic <sup>2</sup>	<b>0.20</b>	<b>0.18</b>	<b>0.10</b>	<b>0.14</b>	<b>0.17</b>	<b>0.23</b>
Slovenia	<b>0.16</b>	<b>0.24</b>	<b>0.16</b>	<b>0.14</b>	<b>0.22</b>	<b>0.17</b>
Spain	<b>0.10</b>	<b>0.16</b>	<b>0.12</b>	<b>0.14</b>	<b>0.21</b>	<b>0.26</b>
Sweden	<b>0.10</b>	<b>0.19</b>	<b>0.22</b>	<b>0.17</b>	<b>0.26</b>	<b>0.26</b>
Switzerland †	<b>0.12</b>	<b>0.10</b>	<b>0.09</b>	<b>0.10</b>	<b>0.16</b>	<b>0.15</b>
Thailand †	<b>0.09</b>	0.03	0.02	<b>0.11</b>	<b>0.16</b>	<b>0.18</b>
<b>ICCS average</b>	<b>0.13</b>	<b>0.16</b>	<b>0.13</b>	<b>0.14</b>	<b>0.21</b>	<b>0.23</b>

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

**Table 4** Correlations between student index of valuing school participation and selected context variables

Country	Students' sex (female)	Expected years of further education	Socio-economic background	Highest parental interest	Frequency of talking with parents about civic issues	Perceived openness in classroom discussions
Austria	<b>0.08</b>	<b>0.13</b>	<b>0.11</b>	<b>0.11</b>	<b>0.18</b>	<b>0.22</b>
Belgium (Flemish) †	0.01	<b>0.08</b>	<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.14</b>
Bulgaria	<b>0.11</b>	<b>0.15</b>	<b>0.17</b>	<b>0.10</b>	<b>0.08</b>	<b>0.22</b>
Chile	<b>0.12</b>	<b>0.14</b>	<b>0.10</b>	<b>0.12</b>	<b>0.13</b>	<b>0.32</b>
Chinese Taipei	0.01	<b>0.15</b>	<b>0.13</b>	<b>0.09</b>	<b>0.12</b>	<b>0.21</b>
Colombia	0.02	0.02	0.03	<b>0.10</b>	<b>0.11</b>	<b>0.23</b>
Cyprus	<b>0.21</b>	<b>0.23</b>	<b>0.11</b>	<b>0.10</b>	<b>0.11</b>	<b>0.25</b>
Czech Republic †	<b>0.08</b>	<b>0.14</b>	<b>0.11</b>	<b>0.13</b>	<b>0.15</b>	<b>0.22</b>
Denmark †	0.02	<b>0.08</b>	<b>0.09</b>	<b>0.09</b>	<b>0.12</b>	<b>0.20</b>
Dominican Republic	<b>0.04</b>	<b>0.07</b>	0.01	0.01	-0.03	<b>0.15</b>
England ‡	<b>0.07</b>	<b>0.13</b>	<b>0.12</b>	<b>0.17</b>	<b>0.19</b>	<b>0.32</b>
Estonia	<b>0.20</b>	<b>0.19</b>	<b>0.13</b>	<b>0.12</b>	<b>0.11</b>	<b>0.22</b>
Finland	<b>0.14</b>	<b>0.11</b>	<b>0.08</b>	<b>0.10</b>	<b>0.12</b>	<b>0.19</b>
Greece	<b>0.13</b>	<b>0.19</b>	<b>0.10</b>	<b>0.10</b>	<b>0.12</b>	<b>0.26</b>
Guatemala <sup>1</sup>	<b>0.04</b>	<b>0.05</b>	<b>0.09</b>	<b>0.06</b>	0.04	<b>0.26</b>
Indonesia	<b>0.06</b>	<b>0.12</b>	<b>0.07</b>	<b>0.09</b>	<b>0.10</b>	<b>0.24</b>
Ireland	<b>0.15</b>	<b>0.19</b>	<b>0.15</b>	<b>0.12</b>	<b>0.17</b>	<b>0.29</b>
Italy	<b>0.07</b>	<b>0.18</b>	<b>0.11</b>	<b>0.05</b>	<b>0.16</b>	<b>0.23</b>
Korea, Republic of	<b>0.08</b>	<b>0.14</b>	<b>0.10</b>	<b>0.09</b>	<b>0.18</b>	<b>0.19</b>
Latvia	<b>0.18</b>	<b>0.06</b>	<b>0.05</b>	<b>0.07</b>	<b>0.14</b>	<b>0.30</b>
Liechtenstein	0.06	<b>0.11</b>	<b>0.11</b>	0.02	0.03	<b>0.15</b>
Lithuania	<b>0.14</b>	<b>0.19</b>	<b>0.15</b>	<b>0.07</b>	<b>0.12</b>	<b>0.16</b>
Luxembourg	<b>0.09</b>	<b>0.10</b>	0.03	<b>0.12</b>	<b>0.12</b>	<b>0.20</b>
Malta	<b>0.11</b>	<b>0.20</b>	0.05	<b>0.14</b>	<b>0.12</b>	<b>0.20</b>
Mexico	<b>0.09</b>	<b>0.13</b>	<b>0.08</b>	<b>0.09</b>	<b>0.09</b>	<b>0.27</b>
New Zealand †	<b>0.13</b>	<b>0.19</b>	<b>0.11</b>	<b>0.14</b>	<b>0.16</b>	<b>0.33</b>
Norway †	<b>0.04</b>	<b>0.15</b>	<b>0.11</b>	<b>0.11</b>	<b>0.13</b>	<b>0.27</b>
Paraguay <sup>1</sup>	<b>0.07</b>	<b>0.13</b>	<b>0.09</b>	0.04	<b>0.11</b>	<b>0.24</b>
Poland	<b>0.16</b>	<b>0.21</b>	<b>0.09</b>	<b>0.12</b>	<b>0.15</b>	<b>0.26</b>
Russian Federation	<b>0.12</b>	<b>0.08</b>	0.03	<b>0.15</b>	<b>0.17</b>	<b>0.31</b>
Slovak Republic <sup>2</sup>	<b>0.07</b>	<b>0.15</b>	<b>0.09</b>	<b>0.13</b>	<b>0.15</b>	<b>0.28</b>
Slovenia	<b>0.12</b>	<b>0.14</b>	<b>0.08</b>	<b>0.14</b>	<b>0.16</b>	<b>0.26</b>
Spain	<b>0.10</b>	<b>0.15</b>	<b>0.11</b>	<b>0.10</b>	<b>0.17</b>	<b>0.24</b>
Sweden	<b>0.10</b>	<b>0.17</b>	<b>0.16</b>	<b>0.15</b>	<b>0.20</b>	<b>0.29</b>
Switzerland †	<b>0.06</b>	<b>0.09</b>	0.05	<b>0.08</b>	<b>0.14</b>	<b>0.10</b>
Thailand †	<b>0.09</b>	<b>0.15</b>	0.02	<b>0.09</b>	<b>0.12</b>	<b>0.29</b>
<b>ICCS average</b>	<b>0.09</b>	<b>0.13</b>	<b>0.09</b>	<b>0.10</b>	<b>0.13</b>	<b>0.24</b>

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

Figure 1 Path model for civic knowledge, citizenship self-efficacy, valuing of school participation and expected participation

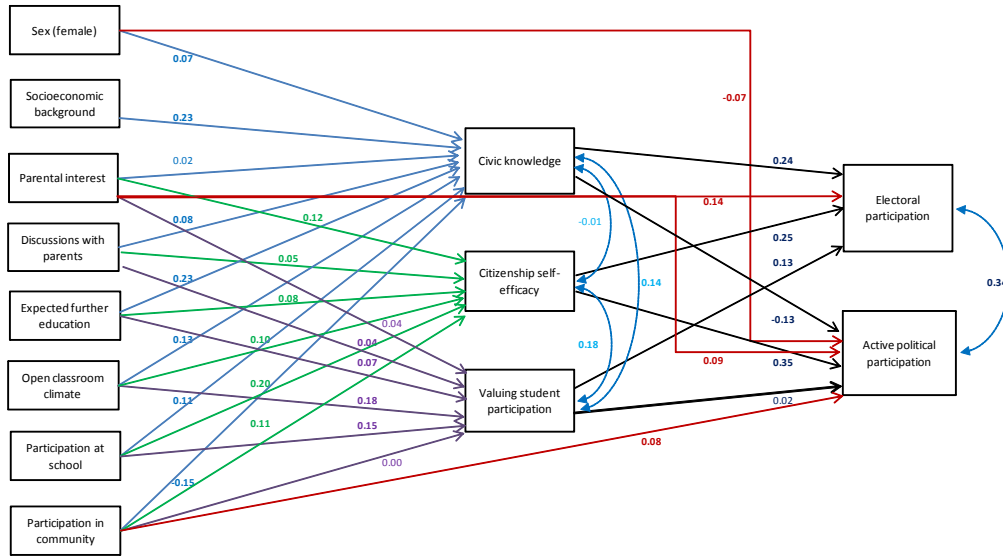


Table 5: Summary table of average model coefficients

Predictor variables	Standardised path coefficients				
	Civic knowledge	Citizenship efficacy	Valuing school participation	Expected electoral participation	Expected active participation
Students' sex (female)	<b>0.07</b>				<b>-0.07</b>
Expected years of further education	<b>0.23</b>	<b>0.05</b>	<b>0.07</b>		
Socio-economic background	<b>0.23</b>				
Highest parental interest	<b>0.02</b>	<b>0.08</b>	0.04	<b>0.14</b>	<b>0.09</b>
Frequency of talking with parents about civic issues	<b>0.08</b>	<b>0.12</b>	<b>0.04</b>		
Perceived openness in classroom discussions	<b>0.13</b>	<b>0.10</b>	<b>0.18</b>		
Participation at school	<b>0.11</b>	<b>0.20</b>	<b>0.15</b>		
Participation in community	<b>-0.15</b>	<b>0.11</b>	0.00		<b>0.08</b>
Civic knowledge				<b>0.24</b>	<b>-0.13</b>
Citizenship efficacy				<b>0.25</b>	<b>0.35</b>
Valuing student participation				<b>0.13</b>	0.02
<b>Correlations between criterion variables</b>					
Citizenship efficacy	-0.01				
Valuing student participation	<b>0.14</b>	<b>0.18</b>			
Expected active political participation				<b>0.34</b>	

Coefficients that were on average significant across countries (p>0.05) in **bold**.

**Table 6 Model fit indices and explained variance of dependent variables**

Country	Model fit		% explained variance				
	RMSEA	RMR	Civic knowledge	Citizenship efficacy	Valuing school participation	Expected electoral participation	Expected active participation
Austria	0.05	0.02	23	21	10	30	20
Belgium (Flemish) †	0.05	0.02	20	14	6	23	16
Bulgaria	0.04	0.02	36	16	11	19	19
Chile	0.04	0.02	30	17	14	15	20
Chinese Taipei	0.04	0.02	33	8	8	26	18
Colombia	0.03	0.02	24	13	7	21	26
Cyprus	0.05	0.02	30	18	16	25	21
Czech Republic †	0.04	0.02	29	18	12	32	16
Denmark †	0.06	0.03	30	28	8	32	16
Dominican Republic	0.03	0.02	21	6	4	20	26
England ‡	0.06	0.02	34	26	17	36	21
Estonia	0.05	0.02	29	17	11	22	13
Finland	0.05	0.02	21	24	9	29	20
Greece	0.05	0.02	30	17	11	18	13
Guatemala <sup>1</sup>	0.05	0.02	26	15	8	15	21
Indonesia	0.04	0.02	21	6	8	14	16
Ireland	0.04	0.02	29	23	13	28	21
Italy	0.03	0.02	30	22	9	24	20
Korea, Republic of <sup>1</sup>	0.05	0.03	25	10	9	26	8
Latvia	0.04	0.02	21	17	14	19	16
Liechtenstein	0.00	0.02	24	13	7	22	18
Lithuania	0.05	0.02	31	14	9	28	19
Luxembourg	0.04	0.02	30	15	7	18	17
Malta	0.05	0.02	30	21	10	27	27
Mexico	0.04	0.02	21	8	9	21	22
New Zealand †	0.05	0.02	30	26	16	33	22
Norway †	0.05	0.03	32	19	10	31	15
Paraguay <sup>1</sup>	0.04	0.02	31	12	7	19	18
Poland	0.04	0.02	35	21	13	25	18
Russian Federation	0.04	0.02	26	15	15	18	24
Slovak Republic <sup>2</sup>	0.04	0.02	30	15	13	28	21
Slovenia	0.03	0.02	31	19	13	24	16
Spain	0.03	0.02	29	16	10	21	18
Sweden	0.04	0.02	29	25	16	30	17
Switzerland †	0.06	0.03	22	19	6	23	14
Thailand †	0.06	0.03	31	6	11	20	17
<b>ICCS average</b>	<b>0.04</b>	<b>0.02</b>	<b>28</b>	<b>17</b>	<b>10</b>	<b>24</b>	<b>19</b>

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

# Appendix

**Table 7 Country-level path coefficients for civic knowledge**

Country	Standardised path coefficients							
	Gender (female)	Socio-economic background	Parental interest	Discussions with parents	Expected years of further education	Openness in classroom discussions	Participation at school	Participation in the community
Austria	<b>0.05</b>	<b>0.24</b>	<b>0.08</b>	<b>0.12</b>	<b>0.22</b>	<b>0.10</b>	0.03	<b>-0.10</b>
Belgium (Flemish) †	0.01	<b>0.28</b>	0.01	<b>0.11</b>	<b>0.17</b>	0.04	<b>0.13</b>	<b>-0.05</b>
Bulgaria	<b>0.08</b>	<b>0.31</b>	0.02	0.04	<b>0.20</b>	<b>0.23</b>	<b>0.13</b>	<b>-0.20</b>
Chile	0.03	<b>0.31</b>	0.00	<b>0.11</b>	<b>0.18</b>	<b>0.16</b>	<b>0.14</b>	<b>-0.19</b>
Chinese Taipei	<b>0.06</b>	<b>0.22</b>	0.01	<b>0.08</b>	<b>0.34</b>	<b>0.07</b>	<b>0.14</b>	<b>-0.13</b>
Colombia	0.02	<b>0.19</b>	0.03	0.02	<b>0.11</b>	<b>0.22</b>	<b>0.23</b>	<b>-0.29</b>
Cyprus	<b>0.09</b>	<b>0.17</b>	<b>0.05</b>	<b>0.06</b>	<b>0.22</b>	<b>0.15</b>	<b>0.26</b>	<b>-0.16</b>
Czech Republic †	<b>0.04</b>	<b>0.18</b>	<b>0.06</b>	<b>0.07</b>	<b>0.30</b>	<b>0.08</b>	<b>0.18</b>	<b>-0.14</b>
Denmark †	0.03	<b>0.25</b>	<b>0.03</b>	<b>0.18</b>	<b>0.20</b>	<b>0.10</b>	<b>0.13</b>	<b>-0.08</b>
Dominican Republic	<b>0.17</b>	<b>0.11</b>	<b>0.05</b>	0.01	<b>0.14</b>	<b>0.25</b>	<b>0.10</b>	<b>-0.22</b>
England ‡	<b>0.06</b>	<b>0.31</b>	0.01	<b>0.10</b>	<b>0.16</b>	<b>0.21</b>	<b>0.19</b>	<b>-0.17</b>
Estonia	<b>0.08</b>	<b>0.20</b>	0.03	<b>0.12</b>	<b>0.31</b>	<b>0.05</b>	<b>0.09</b>	<b>-0.17</b>
Finland	<b>0.14</b>	<b>0.21</b>	-0.02	<b>0.16</b>	<b>0.19</b>	<b>0.05</b>	<b>0.09</b>	<b>-0.09</b>
Greece	<b>0.09</b>	<b>0.18</b>	<b>0.09</b>	0.00	<b>0.24</b>	<b>0.21</b>	<b>0.13</b>	<b>-0.17</b>
Guatemala <sup>1</sup>	0.00	<b>0.30</b>	<b>0.06</b>	-0.02	<b>0.09</b>	<b>0.20</b>	<b>0.06</b>	<b>-0.30</b>
Indonesia	<b>0.04</b>	<b>0.14</b>	0.02	<b>0.06</b>	<b>0.17</b>	<b>0.19</b>	<b>0.11</b>	<b>-0.24</b>
Ireland	0.03	<b>0.27</b>	0.02	<b>0.12</b>	<b>0.25</b>	<b>0.16</b>	0.02	<b>-0.12</b>
Italy	<b>0.06</b>	<b>0.24</b>	-0.01	<b>0.10</b>	<b>0.30</b>	<b>0.15</b>	0.03	<b>-0.13</b>
Korea, Republic of <sup>1</sup>	<b>0.09</b>	<b>0.19</b>	-0.01	<b>0.13</b>	<b>0.27</b>	-0.02	<b>0.18</b>	<b>-0.11</b>
Latvia	<b>0.10</b>	<b>0.20</b>	-0.04	<b>0.12</b>	<b>0.21</b>	<b>0.12</b>	<b>0.12</b>	<b>-0.16</b>
Liechtenstein	0.09	<b>0.36</b>	0.05	0.07	<b>0.19</b>	0.00	-0.01	-0.06
Lithuania	0.02	<b>0.34</b>	0.02	<b>0.08</b>	<b>0.27</b>	<b>0.09</b>	<b>0.03</b>	<b>-0.04</b>
Luxembourg	<b>0.10</b>	<b>0.19</b>	-0.01	<b>0.05</b>	<b>0.38</b>	0.02	<b>0.09</b>	<b>-0.11</b>
Malta	<b>0.14</b>	<b>0.22</b>	0.05	<b>0.08</b>	<b>0.31</b>	<b>0.11</b>	<b>0.12</b>	<b>-0.15</b>
Mexico	<b>0.10</b>	<b>0.22</b>	-0.02	<b>0.05</b>	<b>0.22</b>	<b>0.13</b>	<b>0.09</b>	<b>-0.21</b>
New Zealand †	<b>0.06</b>	<b>0.23</b>	<b>0.03</b>	0.03	<b>0.24</b>	<b>0.17</b>	<b>0.17</b>	<b>-0.18</b>
Norway †	<b>0.08</b>	<b>0.27</b>	0.03	<b>0.06</b>	<b>0.22</b>	<b>0.14</b>	<b>0.18</b>	<b>-0.14</b>
Paraguay <sup>1</sup>	<b>0.12</b>	<b>0.28</b>	0.03	<b>0.08</b>	<b>0.22</b>	<b>0.13</b>	<b>0.15</b>	<b>-0.20</b>
Poland	<b>0.10</b>	<b>0.23</b>	<b>-0.03</b>	<b>0.10</b>	<b>0.29</b>	<b>0.09</b>	<b>0.22</b>	<b>-0.19</b>
Russian Federation	0.01	<b>0.21</b>	0.02	<b>0.07</b>	<b>0.24</b>	<b>0.24</b>	<b>0.05</b>	<b>-0.14</b>
Slovak Republic <sup>2</sup>	0.02	<b>0.17</b>	<b>0.05</b>	<b>0.07</b>	<b>0.40</b>	<b>0.10</b>	0.01	-0.04
Slovenia	<b>0.10</b>	<b>0.15</b>	<b>0.05</b>	<b>0.12</b>	<b>0.28</b>	<b>0.13</b>	<b>0.18</b>	<b>-0.18</b>
Spain	<b>0.06</b>	<b>0.23</b>	0.03	<b>0.13</b>	<b>0.29</b>	<b>0.08</b>	<b>0.11</b>	<b>-0.14</b>
Sweden	<b>0.05</b>	<b>0.30</b>	-0.03	<b>0.10</b>	<b>0.16</b>	<b>0.14</b>	<b>0.17</b>	<b>-0.11</b>
Switzerland †	0.02	<b>0.31</b>	0.07	<b>0.08</b>	<b>0.18</b>	<b>0.09</b>	0.04	-0.01
Thailand †	<b>0.16</b>	<b>0.18</b>	<b>-0.02</b>	<b>0.03</b>	<b>0.25</b>	<b>0.25</b>	0.02	<b>-0.17</b>
<b>ICCS average</b>	<b>0.07</b>	<b>0.23</b>	0.02	<b>0.08</b>	<b>0.23</b>	<b>0.13</b>	<b>0.11</b>	<b>-0.15</b>

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

**Table 8** Country-level path coefficients for citizenship self-efficacy

Country	Standardised path coefficients					
	Expected years of education	Parental interest	Discussions with parents	Openness in classroom discussions	Participation at school	Participation in the community
Austria	<b>0.09</b>	<b>0.11</b>	<b>0.15</b>	<b>0.10</b>	<b>0.24</b>	<b>0.10</b>
Belgium (Flemish) †	0.04	<b>0.09</b>	<b>0.13</b>	<b>0.12</b>	<b>0.18</b>	<b>0.10</b>
Bulgaria	0.01	<b>0.10</b>	<b>0.08</b>	<b>0.08</b>	<b>0.19</b>	<b>0.18</b>
Chile	<b>0.05</b>	<b>0.07</b>	<b>0.11</b>	<b>0.15</b>	<b>0.18</b>	<b>0.14</b>
Chinese Taipei	-0.02	<b>0.07</b>	<b>0.11</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>
Colombia	0.02	<b>0.08</b>	<b>0.09</b>	<b>0.06</b>	<b>0.15</b>	<b>0.17</b>
Cyprus	0.01	<b>0.10</b>	<b>0.07</b>	<b>0.10</b>	<b>0.26</b>	<b>0.12</b>
Czech Republic †	0.03	<b>0.07</b>	<b>0.16</b>	<b>0.11</b>	<b>0.22</b>	<b>0.11</b>
Denmark †	<b>0.12</b>	<b>0.09</b>	<b>0.19</b>	<b>0.11</b>	<b>0.30</b>	<b>0.04</b>
Dominican Republic	0.00	<b>0.05</b>	0.03	<b>0.04</b>	<b>0.13</b>	<b>0.11</b>
England ‡	<b>0.08</b>	<b>0.09</b>	<b>0.13</b>	<b>0.13</b>	<b>0.29</b>	<b>0.10</b>
Estonia	<b>0.10</b>	<b>0.09</b>	<b>0.11</b>	<b>0.10</b>	<b>0.23</b>	<b>0.10</b>
Finland	<b>0.11</b>	<b>0.09</b>	<b>0.18</b>	<b>0.10</b>	<b>0.30</b>	<b>0.05</b>
Greece	<b>0.11</b>	<b>0.05</b>	<b>0.14</b>	<b>0.14</b>	<b>0.21</b>	<b>0.09</b>
Guatemala <sup>1</sup>	0.03	<b>0.08</b>	<b>0.11</b>	<b>0.06</b>	<b>0.20</b>	<b>0.17</b>
Indonesia	<b>-0.08</b>	0.02	0.02	<b>0.03</b>	<b>0.07</b>	<b>0.19</b>
Ireland	<b>0.08</b>	<b>0.10</b>	<b>0.20</b>	<b>0.12</b>	<b>0.22</b>	<b>0.08</b>
Italy	<b>0.16</b>	<b>0.06</b>	<b>0.17</b>	<b>0.15</b>	<b>0.19</b>	<b>0.10</b>
Korea, Republic of <sup>1</sup>	<b>0.13</b>	<b>0.03</b>	<b>0.11</b>	<b>0.13</b>	<b>0.13</b>	-0.02
Latvia	<b>0.06</b>	<b>0.07</b>	<b>0.13</b>	<b>0.07</b>	<b>0.23</b>	<b>0.12</b>
Liechtenstein	<b>0.14</b>	0.06	0.05	0.12	0.13	0.11
Lithuania	0.02	<b>0.07</b>	<b>0.14</b>	<b>0.13</b>	<b>0.18</b>	<b>0.10</b>
Luxembourg	<b>0.05</b>	0.03	<b>0.11</b>	<b>0.11</b>	<b>0.18</b>	<b>0.14</b>
Malta	0.03	<b>0.12</b>	<b>0.16</b>	<b>0.08</b>	<b>0.26</b>	<b>0.12</b>
Mexico	-0.01	<b>0.10</b>	<b>0.06</b>	<b>0.09</b>	<b>0.11</b>	<b>0.12</b>
New Zealand †	<b>0.09</b>	<b>0.08</b>	<b>0.15</b>	<b>0.12</b>	<b>0.28</b>	<b>0.11</b>
Norway †	<b>0.07</b>	<b>0.07</b>	<b>0.20</b>	<b>0.08</b>	<b>0.23</b>	<b>0.05</b>
Paraguay <sup>1</sup>	-0.04	<b>0.10</b>	<b>0.13</b>	<b>0.11</b>	<b>0.15</b>	<b>0.10</b>
Poland	<b>0.07</b>	<b>0.08</b>	<b>0.16</b>	<b>0.10</b>	<b>0.23</b>	<b>0.13</b>
Russian Federation	0.02	<b>0.08</b>	<b>0.11</b>	<b>0.08</b>	<b>0.18</b>	<b>0.14</b>
Slovak Republic <sup>2</sup>	0.00	<b>0.08</b>	<b>0.11</b>	<b>0.10</b>	<b>0.22</b>	<b>0.11</b>
Slovenia	<b>0.04</b>	<b>0.09</b>	<b>0.15</b>	<b>0.12</b>	<b>0.25</b>	<b>0.10</b>
Spain	<b>0.07</b>	<b>0.09</b>	<b>0.12</b>	<b>0.10</b>	<b>0.19</b>	<b>0.12</b>
Sweden	<b>0.08</b>	<b>0.09</b>	<b>0.15</b>	<b>0.14</b>	<b>0.29</b>	<b>0.06</b>
Switzerland †	<b>0.07</b>	<b>0.08</b>	<b>0.14</b>	<b>0.12</b>	<b>0.25</b>	<b>0.12</b>
Thailand †	<b>-0.10</b>	<b>0.05</b>	<b>0.05</b>	<b>0.09</b>	<b>0.07</b>	<b>0.12</b>
<b>ICCS average</b>	<b>0.05</b>	<b>0.08</b>	<b>0.12</b>	<b>0.10</b>	<b>0.20</b>	<b>0.11</b>

\* Data not available.

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.



**Table 9 Country-level path coefficients for valuing of student participation**

Country	Standardised path coefficients					
	Expected years of education	Parental interest	Discussions with parents	Openness in classroom discussions	Participation at school	Participation in the community
Austria	<b>0.09</b>	0.03	<b>0.10</b>	<b>0.18</b>	<b>0.10</b>	0.04
Belgium (Flemish) †	<b>0.04</b>	0.03	<b>0.05</b>	<b>0.08</b>	<b>0.17</b>	0.01
Bulgaria	<b>0.08</b>	0.03	0.00	<b>0.14</b>	<b>0.24</b>	0.01
Chile	<b>0.08</b>	<b>0.05</b>	<b>0.03</b>	<b>0.27</b>	<b>0.15</b>	-0.01
Chinese Taipei	<b>0.09</b>	<b>0.04</b>	<b>0.04</b>	<b>0.15</b>	<b>0.12</b>	<b>0.03</b>
Colombia	0.00	<b>0.04</b>	<b>0.04</b>	<b>0.17</b>	<b>0.07</b>	<b>0.06</b>
Cyprus	<b>0.15</b>	<b>0.05</b>	0.01	<b>0.17</b>	<b>0.24</b>	-0.03
Czech Republic †	<b>0.05</b>	<b>0.05</b>	<b>0.07</b>	<b>0.14</b>	<b>0.21</b>	0.01
Denmark †	0.01	<b>0.04</b>	0.01	<b>0.15</b>	<b>0.17</b>	<b>0.04</b>
Dominican Republic	<b>0.05</b>	-0.03	-0.04	<b>0.16</b>	<b>0.10</b>	<b>-0.07</b>
England ‡	0.04	0.04	<b>0.07</b>	<b>0.24</b>	<b>0.19</b>	<b>0.06</b>
Estonia	<b>0.11</b>	<b>0.07</b>	0.02	<b>0.16</b>	<b>0.18</b>	-0.02
Finland	<b>0.05</b>	0.04	0.03	<b>0.15</b>	<b>0.17</b>	<b>0.04</b>
Greece	<b>0.10</b>	0.03	<b>0.06</b>	<b>0.20</b>	<b>0.13</b>	<b>-0.10</b>
Guatemala <sup>1</sup>	0.02	0.03	0.01	<b>0.23</b>	<b>0.14</b>	<b>-0.11</b>
Indonesia	<b>0.08</b>	<b>0.05</b>	<b>0.03</b>	<b>0.20</b>	<b>0.08</b>	<b>-0.05</b>
Ireland	<b>0.10</b>	<b>0.04</b>	<b>0.06</b>	<b>0.20</b>	<b>0.16</b>	0.03
Italy	<b>0.12</b>	-0.02	<b>0.08</b>	<b>0.18</b>	<b>0.11</b>	0.02
Korea, Republic of <sup>1</sup>	<b>0.08</b>	0.02	<b>0.10</b>	<b>0.13</b>	<b>0.14</b>	0.00
Latvia	0.00	-0.01	<b>0.06</b>	<b>0.23</b>	<b>0.22</b>	-0.01
Liechtenstein	0.07	0.01	-0.01	<b>0.14</b>	<b>0.20</b>	-0.07
Lithuania	<b>0.06</b>	<b>0.06</b>	0.02	<b>0.16</b>	<b>0.15</b>	<b>0.05</b>
Luxembourg	<b>0.12</b>	0.01	<b>0.04</b>	<b>0.07</b>	<b>0.14</b>	0.04
Malta	<b>0.15</b>	<b>0.08</b>	<b>0.06</b>	<b>0.13</b>	<b>0.14</b>	-0.01
Mexico	<b>0.09</b>	<b>0.05</b>	0.01	<b>0.22</b>	<b>0.12</b>	-0.03
New Zealand †	<b>0.08</b>	<b>0.05</b>	0.04	<b>0.26</b>	<b>0.14</b>	<b>0.05</b>
Norway †	<b>0.06</b>	0.04	0.02	<b>0.21</b>	<b>0.16</b>	-0.04
Paraguay <sup>1</sup>	<b>0.07</b>	0.00	<b>0.07</b>	<b>0.19</b>	<b>0.09</b>	-0.04
Poland	<b>0.12</b>	0.03	<b>0.05</b>	<b>0.18</b>	<b>0.16</b>	<b>0.05</b>
Russian Federation	0.01	<b>0.07</b>	<b>0.05</b>	<b>0.20</b>	<b>0.20</b>	0.03
Slovak Republic <sup>2</sup>	<b>0.07</b>	<b>0.05</b>	<b>0.06</b>	<b>0.21</b>	<b>0.14</b>	<b>0.06</b>
Slovenia	<b>0.05</b>	<b>0.08</b>	<b>0.07</b>	<b>0.21</b>	<b>0.18</b>	0.00
Spain	<b>0.09</b>	0.02	<b>0.10</b>	<b>0.17</b>	<b>0.13</b>	-0.03
Sweden	<b>0.07</b>	<b>0.06</b>	<b>0.09</b>	<b>0.22</b>	<b>0.17</b>	0.03
Switzerland †	<b>0.06</b>	<b>0.04</b>	<b>0.08</b>	0.06	<b>0.14</b>	<b>0.05</b>
Thailand †	<b>0.09</b>	0.04	0.02	<b>0.25</b>	<b>0.09</b>	0.03
<b>ICCS average</b>	<b>0.07</b>	0.04	<b>0.04</b>	<b>0.18</b>	<b>0.15</b>	0.00

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

Table 10 Country-level path coefficients for expected electoral and active political participation

Country	Standardised path coefficients									
	Expected electoral participation				Expected active political participation					
	Parental interest	Civic knowledge	Citizenship self-efficacy	Valuing student participation	Gender (female)	Parental interest	Participation in the community	Civic knowledge	Citizenship self-efficacy	Valuing student participation
Austria	0.16	0.28	0.32	0.09	-0.12	0.07	0.09	-0.17	0.36	0.02
Belgium (Flemish) †	0.16	0.23	0.29	0.10	-0.06	0.10	0.05	-0.10	0.35	0.01
Bulgaria	0.18	0.17	0.25	0.10	-0.03	0.10	0.05	-0.29	0.28	0.06
Chile	0.12	0.09	0.27	0.10	-0.07	0.10	0.06	-0.18	0.37	0.01
Chinese Taipei	0.11	0.33	0.28	0.15	-0.12	0.08	0.07	-0.08	0.35	0.04
Colombia	0.09	0.21	0.27	0.18	-0.03	0.05	0.12	-0.22	0.36	0.09
Cyprus	0.14	0.21	0.31	0.09	-0.13	0.11	0.10	-0.14	0.37	0.02
Czech Republic †	0.22	0.33	0.21	0.11	-0.02	0.13	0.12	-0.06	0.32	0.02
Denmark †	0.16	0.25	0.30	0.13	-0.03	0.11	0.02	0.03	0.34	0.01
Dominican Republic	0.09	0.06	0.35	0.16	-0.07	0.07	0.12	-0.19	0.37	0.10
England ‡	0.21	0.28	0.27	0.14	-0.01	0.12	0.05	-0.10	0.41	0.01
Estonia	0.15	0.22	0.27	0.09	-0.10	0.06	0.09	-0.09	0.32	-0.03
Finland	0.24	0.21	0.27	0.14	-0.05	0.10	0.05	-0.03	0.42	-0.03
Greece	0.12	0.22	0.21	0.11	-0.07	0.07	0.09	-0.17	0.28	0.01
Guatemala <sup>1</sup>	0.08	0.21	0.26	0.11	-0.05	0.06	0.14	-0.20	0.30	0.03
Indonesia	0.05	0.24	0.16	0.20	-0.06	0.03	0.09	-0.08	0.33	0.03
Ireland	0.15	0.27	0.26	0.13	-0.07	0.12	0.07	-0.08	0.39	0.02
Italy	0.16	0.30	0.19	0.10	-0.14	0.11	0.06	-0.08	0.39	0.02
Korea, Republic of	0.10	0.25	0.25	0.14	-0.07	0.07	0.08	-0.20	0.21	0.04
Latvia	0.10	0.20	0.23	0.17	-0.09	0.04	0.08	-0.18	0.33	0.03
Liechtenstein	0.22	0.24	0.28	0.05	-0.14	0.22	0.05	-0.07	0.32	-0.04
Lithuania	0.20	0.29	0.27	0.09	-0.03	0.13	0.07	-0.13	0.37	0.02
Luxembourg	0.15	0.22	0.22	0.11	-0.11	0.06	0.08	-0.23	0.30	0.03
Malta	0.15	0.19	0.31	0.14	-0.12	0.13	0.04	-0.10	0.45	0.02
Mexico	0.11	0.24	0.25	0.18	-0.07	0.06	0.08	-0.18	0.35	0.07
New Zealand †	0.13	0.27	0.32	0.16	-0.01	0.10	0.10	-0.16	0.40	0.01
Norway †	0.19	0.34	0.22	0.09	-0.04	0.13	0.09	-0.07	0.33	0.00
Paraguay <sup>1</sup>	0.12	0.25	0.22	0.12	-0.06	0.12	0.07	-0.13	0.34	0.03
Poland	0.13	0.22	0.30	0.14	-0.14	0.08	0.09	-0.14	0.37	-0.02
Russian Federation	0.10	0.17	0.23	0.18	-0.09	0.10	0.08	-0.14	0.40	0.06
Slovak Republic <sup>2</sup>	0.17	0.27	0.27	0.14	-0.09	0.07	0.08	-0.16	0.39	0.02
Slovenia	0.16	0.24	0.22	0.13	-0.13	0.11	0.04	-0.13	0.33	0.01
Spain	0.15	0.20	0.25	0.12	-0.02	0.13	0.06	-0.18	0.35	0.00
Sweden	0.16	0.25	0.28	0.12	-0.04	0.10	0.09	-0.05	0.35	0.02
Switzerland †	0.19	0.28	0.17	0.13	-0.09	0.17	0.07	-0.03	0.27	0.05
Thailand †	0.05	0.37	0.09	0.17	-0.09	0.02	0.10	-0.17	0.28	0.05
<b>ICCS average</b>	<b>0.14</b>	<b>0.24</b>	<b>0.25</b>	<b>0.13</b>	<b>-0.07</b>	<b>0.09</b>	<b>0.08</b>	<b>-0.13</b>	<b>0.35</b>	<b>0.02</b>

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.

**Table 11**                      **Correlations between dependent variables**

Country	Correlations between dependent variables			
	Civic knowledge <i>with</i> citizenship self- efficacy	Civic knowledge <i>with</i> Valuing student participation	Citizenship self- efficacy <i>with</i> Valuing student participation	Electoral participation <i>with</i> Active political participation
Austria	0.01	<b>0.12</b>	<b>0.24</b>	<b>0.27</b>
Belgium (Flemish) †	-0.04	<b>0.14</b>	<b>0.10</b>	<b>0.29</b>
Bulgaria	-0.01	<b>0.18</b>	<b>0.19</b>	<b>0.43</b>
Chile	<b>-0.07</b>	<b>0.14</b>	<b>0.19</b>	<b>0.45</b>
Chinese Taipei	<b>-0.17</b>	<b>0.15</b>	<b>0.16</b>	<b>0.28</b>
Colombia	<b>-0.12</b>	<b>0.07</b>	<b>0.21</b>	<b>0.31</b>
Cyprus	<b>0.06</b>	<b>0.22</b>	<b>0.16</b>	<b>0.47</b>
Czech Republic †	-0.03	<b>0.14</b>	<b>0.18</b>	<b>0.46</b>
Denmark †	<b>0.16</b>	<b>0.08</b>	<b>0.14</b>	<b>0.34</b>
Dominican Republic	<b>-0.05</b>	<b>0.16</b>	<b>0.26</b>	<b>0.44</b>
England ‡	<b>0.06</b>	<b>0.13</b>	<b>0.21</b>	<b>0.39</b>
Estonia	0.05	<b>0.20</b>	<b>0.19</b>	<b>0.31</b>
Finland	<b>0.11</b>	<b>0.19</b>	<b>0.13</b>	<b>0.27</b>
Greece	0.02	<b>0.23</b>	<b>0.12</b>	<b>0.27</b>
Guatemala <sup>1</sup>	<b>-0.15</b>	<b>0.12</b>	<b>0.21</b>	<b>0.26</b>
Indonesia	<b>-0.26</b>	<b>0.14</b>	<b>0.09</b>	<b>0.30</b>
Ireland	<b>0.06</b>	<b>0.17</b>	<b>0.15</b>	<b>0.37</b>
Italy	<b>0.10</b>	<b>0.15</b>	<b>0.24</b>	<b>0.23</b>
Korea, Republic of <sup>1</sup>	<b>0.25</b>	<b>0.18</b>	<b>0.37</b>	<b>0.29</b>
Latvia	0.02	<b>0.12</b>	<b>0.17</b>	<b>0.27</b>
Liechtenstein	<b>-0.18</b>	0.07	0.12	<b>0.34</b>
Lithuania	-0.04	<b>0.10</b>	<b>0.18</b>	<b>0.44</b>
Luxembourg	-0.03	<b>0.19</b>	<b>0.19</b>	<b>0.24</b>
Malta	0.02	<b>0.27</b>	<b>0.13</b>	<b>0.37</b>
Mexico	<b>-0.13</b>	<b>0.16</b>	<b>0.21</b>	<b>0.34</b>
New Zealand †	0.01	<b>0.07</b>	<b>0.19</b>	<b>0.30</b>
Norway †	0.01	<b>0.11</b>	<b>0.16</b>	<b>0.35</b>
Paraguay <sup>1</sup>	-0.01	<b>0.15</b>	<b>0.17</b>	<b>0.40</b>
Poland	0.01	<b>0.14</b>	<b>0.16</b>	<b>0.35</b>
Russian Federation	-0.02	0.02	<b>0.19</b>	<b>0.33</b>
Slovak Republic <sup>2</sup>	-0.03	<b>0.11</b>	<b>0.22</b>	<b>0.36</b>
Slovenia	0.03	<b>0.19</b>	<b>0.21</b>	<b>0.32</b>
Spain	0.00	<b>0.13</b>	<b>0.24</b>	<b>0.36</b>
Sweden	<b>0.11</b>	<b>0.19</b>	<b>0.20</b>	<b>0.35</b>
Switzerland †	0.03	<b>0.15</b>	<b>0.14</b>	<b>0.41</b>
Thailand †	<b>-0.23</b>	<b>0.10</b>	<b>0.22</b>	<b>0.30</b>
<b>ICCS average</b>	-0.01	<b>0.14</b>	<b>0.18</b>	<b>0.34</b>

Significant coefficients ( $p > 0.05$ ) in **bold**.

† Met guidelines for sampling participation rates only after replacement schools were included.

‡ Nearly satisfied guidelines for sample participation only after replacement schools were included.

<sup>1</sup> Country surveyed the same cohort of students but at the beginning of the next school year.

<sup>2</sup> National Desired Population does not cover all of International Desired Population.