# Lower-secondary Students' Civic Engagement at School: Results from ICCS 2016.

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## Abstract

Based on survey data from the latest implementation of the International Civic and Citizenship Education Study (ICCS 2016), this paper explores the extent of students' civic engagement at school, their beliefs about their own ability to engage and their perceptions of the value of student participation, as well as their willingness to engage in future civic activities at school. Where possible, it compares results with those from the previous ICCS survey in 2009, and it also analyses which factors related to home background, school context and students' beliefs about engagement explain variation in their willingness to participate at school in the future. The results show that substantial numbers of students across countries participate in civic activities at school and hold positive views regarding the value of engagement. While in particular students' sense of self-efficacy, experience with past or current participation at school, and valuing of student engagement were consistently positive predictors of students' willingness to become engaged at school in the future, there was no consistent association with civic knowledge.

## Background and research questions

Young people's daily experiences in school are potential influences on their perception of school as a democratic environment (Dürr, 2004). The establishment of relationships and behaviours based on openness and mutual respect, possibilities for active contribution to school decision-making processes, and participation in formal and informal governance processes have the potential of providing students with opportunities to practice a democratic lifestyle and to begin exercising appropriate autonomy (Reilly, Niens, & McLaughlin, 2005). Research evidence suggests that more democratic forms of school governance can contribute to higher levels of political engagement among students (see, for example, Mosher, Kenny, & Garrod, 1994; Pasek, Feldman, Romer, & Jamieson, 2008) and that participation in school-based political activities tends to have a positive influence on future civic engagement as adults (Keating & Janmaat, 2015; Schulz, Ainley, & Fraillon, 2013).

The first IEA Civic and Citizenship Education Study (ICCS 2009) asked students to report on their past and current participation in a wide range of civic-related activities at school (such as voting for school councils/parliaments, or becoming involved in student debates). The results from ICCS 2009 showed that majorities of students reported participation in many of these activities in school and revealed positive associations between participation and civic knowledge (Schulz, Ainley, Fraillon, Kerr, & Losito, 2010).

There is wide acceptance in the research literature that individuals' "judgments of their capabilities to organise and execute courses of action required to attain designated types of performances" are called self-efficacy and have a strong influence on the choices they make in regard to undertaking tasks, the effort they put into those tasks and the extent to which they persevere with them (Bandura, 1986, p. 391). Consequently, students' sense of citizenship self-efficacy is widely considered as an important part of personal engagement with political and social issues. The ICCS 2016 framework

defines students' sense of citizenship self-efficacy as their self-confidence in undertaking specific behaviours in the area of civic participation (Schulz, Ainley, Fraillon, Losito, & Agrusti, 2016).

Consideration of students' beliefs regarding the value of participating in civic-related activities at school is important because of its close association with the more general concept of political efficacy (Campbell, Gurin, & Miller, 1954). Although adolescents at lower-secondary level (the ICCS 2016 target age) are generally unable to vote or run for office in "adult politics," they experiment as students understand the collective process of trying to influence what happens in their schools (Bandura, 1997, p. 491). Results from the IEA CIVED study in 1999 (Torney-Purta, Lehmann, Oswald, & Schulz, 2001) and ICCS 2009 (Schulz et al., 2010) showed generally high level of support for the value of student participation but also that female students were valuing engagement at school more than males.

The *theory of planned behaviour* links attitudes to action through intentions (Ajzen, 2001; Ajzen, & Fishbein, 2000). It posits that attitudes influence actions through reasoned processes manifested as intentions. To measure students' intentions to engage in the future not only as adults but also in their immediate school context, ICCS 2016 developed a set of items measuring students' beliefs about their likelihood of undertaking future civic activities at school (such as voting in school elections or engaging in a public debate about school-related issues) if they had a chance to do so (Schulz, Ainley, Fraillon, Losito, Agrusti, & Friedman, 2017). The resulting scale is the focus variable of the analysis in this paper, with students' past or current participation, and their beliefs about their own capacity to engage (citizenship self-efficacy) and about the value of participating at school as additional variables of attention.

This paper uses data from the most recent cycle of ICCS, with data collected in 2015/2016, to explore the following research questions:

- 1. To which extent are students engaged in civic activities at their schools across participating countries in ICCS 2016 (in terms of active participation, valuing this type of participation, and expecting future engagement)? It is expected that there are differences in the likelihood of engagement depending on the type of activities as well as notable variation across education systems.
- 2. Which effects do prior engagement and perceptions of its value have on students' willingness to participate at school? It is expected that both prior experiences and positive attitudes are key predictors of students' expectations to participate in the school context.
- 3. Which are the associations between factors related to the learning context (such as acquired civic knowledge, civic learning opportunities or opportunities for engagement) and students' willingness to participate at school? It is expected that in particular opportunities to learn and engage are related to students' expectations to participate at school.

## Data and methods

## Data

In 2016, ICCS gathered data from more than 94,000 Grade 8 students in 3800 schools in 24 countries. These student data were augmented by data from more than 37,000 teachers in those schools, however, the analyses in this paper will focus on the student-level outcomes. With regard to interpretations, our analyses focus on the 21 countries in ICCS 2016 that satisfied the participation requirements established by the IEA to reduce the risk of non-participation bias. Eighteen of these 21 countries had participated in ICCS in both 2016 and 2009 and these provide the bases for commenting

on changes over time with regard to students' participation at school, their sense of citizenship selfefficacy and valuing of student participation at school. ICCS employed two-stage cluster sampling procedures within countries. During the first stage, schools were sampled from a sampling frame with a probability proportional to their size. During the second stage, intact classrooms at the target grade were randomly sampled within schools and all students were surveyed (see further details in Schulz, Carstens, Losito, & Fraillon, 2018).

### Measures

### Criterion variables

ICCS 2016 included a question gauging *students' willingness to participate at schools*. The question asked students to rate the likelihood ("very likely," "quite likely," "not very likely," or "not at all likely") of them personally participating in the following civic activities if they had the chance to do so: (a) vote in a school election for class or school parliament representatives (on average across participating countries 81% of students reported this is as very or quite likely); (b) join a group of students campaigning for an issue they agreed with (65%); (c) become a candidate for class or school parliament representative (48%); (d) take part in discussions in a student assembly (54%); and (e) participate in writing articles for a school newspaper or website (43%). The five items reflecting students' willingness to participate in school activities formed an IRT scale that, on average across the participating countries, had high reliability (Cronbach's alpha of 0.81), for which higher scores reflected higher levels of expected participation (see a more detailed description of scaling procedures for ICCS 2016 in Schulz et al., 2018).

To collect data on students' part and/or current engagement in civic activities at school, the ICCS 2016 student questionnaire included a set of (slightly modified) items from the previous ICCS cycle. These items asked students to state whether they had participated "within the last 12 months," "more than a year ago," or "never" in the following activities: (a) "Active participation in an organised debate" (ICCS 2016 average percentage of students reporting to have done this: 57%); (b) "Voting for <class representative> or <school parliament>" (77%); (c) "Taking part in decision-making about how the school is run" (41%); (d) "Taking part in discussions at a <student assembly>" (39%); (e) "Becoming a candidate for <class representative> or <school parliament>" (42%); and (f) "Participating in an activity to make the school more <environmentally friendly> (e.g. through water-saving or recycling)" (50%). These items were used to derive a scale reflecting students' *civic participation at school* with (marginally) satisfactory reliability across participation. As the question had been modified between ICCS 2009 and 2016, scales score were not equated with those from the previous cycle.

To assess students' *sense of citizenship self-efficacy*, both ICCS 2009 and 2016 requested students to rate their confidence ("very well", "fairly well", "not very well", or "not well at all") to undertake the following activities: (a) "Discuss a newspaper article about a conflict between countries" (ICCS 2016 average percentage of students expressing confidence to this fairly or very well: 65%), (b) "Argue your point of view about a controversial political or social issue" (68%), (c) "Stand as a candidate in a school election" (59%), (d) "Organise a group of students in order to achieve changes at school" (65%), (e) "Follow a television debate about a controversial issue" (59%), (f) "Write a letter or email to a newspaper giving your view on a current issue" (60%), and (g) "Speak in front of your class about a social or political issue" (60%). The items had similar levels of agreement, and we used them to derive an IRT scale reflecting students' *citizenship self-efficacy* with high average reliability (Cronbach's alpha

= 0.84) and was equated to the original scale derived in ICCS 2009. Higher scale scores indicate higher levels of confidence to undertake civic engagement.

To gauge students' valuing of student participation at school, ICCS 2009 and 2016 student questionnaire asked students to state their level of agreement ("strongly agree", "agree", "disagree", or "strongly disagree") with a set of five statements (items) on the value of participation at school: (a) "student participation in how schools are run can make schools better" (ICCS 2016 average percent of students agreeing with this item: 90%); (b) "lots of positive changes can happen in schools when students work together" (93%); (c) "organizing groups of students to express their opinions could help solve problems in schools" (87%); (d) "students can have more influence on what happens in schools if they act together rather than alone" (90%); and (e) "voting in student elections can make a difference to what happens at schools" (81%). These items formed a reliable scale reflecting students' *perceptions of the value of student participation at school* (average Cronbach's alpha= 0.79) which was equated with the one established in ICCS 2009 and where higher scale scores indicates more positive perceptions.

## Independent Variables

We used the following predictor variables for multiple regression analyses explaining variance in the four criterion variables:

- Student background
  - Students' gender (female = 1, male = 0); this variable was only used for analysis of endorsement of gender equality and equal rights for ethnic/racial groups.
  - Students' *interest in political and social issues* is included as dichotomous variables with a value of 0 indicating no or little interest, and a value of 1 that students were quite or very interested.
  - Socioeconomic background using a composite indictor from parental occupation, education and the number of books at home, where scale scores were nationally standardized to having averages of 0 and standard deviations of 1 in each country.
- Aspects of civic learning:
  - Student reports of *civic learning at school* were measured based on seven items that formed a scale with satisfactory reliability across countries ( $\alpha = 0.80$ ); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
  - Civic knowledge was measured based on a test of 87 items, which included 42 items from ICCS 2009. In the (preliminary) analyses underlying the results presented in this paper we used the first plausible value in a nationally standardised metric with national averages of 0 and national standard deviations of 1.
- School contexts civic learning:
  - Student reports of an open classroom climate for discussion of political and social issues and measured as a scale based on six items with sound reliability (Cronbach's α = 0.77); scale scores were nationally standardised with national averages of 0 and national standard deviations of 1.
  - Students' past or current participation at school (see description above)
- School contexts civic learning:
  - Students' *sense of citizenship self-efficacy* (see description above).
  - Students' valuing of student participation at school (s see description above).

### Analyses

The paper includes comparisons of results for student participation at school, their sense of citizenship self-efficacy and their valuing of student participation at school for 2016 and 2009, and also shows a comparison of scale scores reflecting past or current and expected student participation at school. Furthermore, it contains an examination of the results of multivariate regression analyses to review factors associated with variation in students' expectation to participate at school. For all analyses significance tests were conducted for the calculation of population parameters (such as percentages, averages or regression coefficients) that were based on jack-knife repeated replication (JRR) to compute standard errors. For comparisons of scale scores between the two cycles in 2009 and 2016, an equating error term was added to the formula for the standard error of the difference between countries because the process of equating the tests across the cycles introduces additional error into the calculation of any test statistic.

Multiple regression analysis was used to investigate the associations between expected student participation at school and the range of predictor variables. Because we found relatively low proportions of between-school variation in the dependent variable, a single-level multiple regression approach was chosen when analysing the factors explaining variation. All estimates of the percentage of explained variance were obtained by multiplying R<sup>2</sup> by 100. The regression modelling was carried out in two steps, with first step focused on variables reflected student background, civic learning and school context variables, and the second models also including student beliefs regarding participation (sense of citizenship self-efficacy and valuing student participation at school).

## Results

Across the countries participating in ICCS 2016, 77 percent of students, on average, said that during or beyond the last 12 months, they had voted for a class or school parliament representative. Forty-one percent said they had taken part in decisions on how their school was being run, and 42 percent reported having been a candidate for class representative or member of a school parliament.

#### Table 1 Students' reported participation in civic activities at school 2016 and 2009

	Percentages of students who reported to have participated in the following activities:												
	Voting for <class representative=""> or <school parliament=""></school></class>				Taking pa ho	Taking part in decision-making about how the school is run				Becoming a candidate for <class representative&gt; or <school parliament=""></school></class 			
Country	2016		2009	Difference	2016		2009	Difference	2016		2009	Difference	
Belgium (Flemish)	64 (2.0)	▼	68 (2.0)	-4 (2.8)	37 (1.3)	$\bigtriangledown$	36 (1.3)	2 (1.8)	37 (1.3)	$\bigtriangledown$	34 (1.2)	3 (1.7)	
Bulgaria	56 (1.7)	▼	52 (1.9)	5 (2.5)	32 (1.2)	$\bigtriangledown$	31 (1.2)	1 (1.6)	37 (1.3)	$\bigtriangledown$	34 (1.1)	3 (1.6)	
Chile	91 (0.7)		89 (0.7)	2 (1.0)	49 (1.0)	$\bigtriangleup$	39 (1.1)	9 (1.5)	46 (0.9)	$\bigtriangleup$	47 (1.0)	-1 (1.3)	
Chinese Taipei	72 (0.8)	$\bigtriangledown$	67 (0.9)	5 (1.2)	43 (0.8)	$\bigtriangleup$	43 (0.7)	-1 (1.1)	34 (0.9)	$\bigtriangledown$	32 (0.9)	1 (1.2)	
Colombia	90 (0.8)		90 (0.5)	0 (0.9)	49 (1.0)	$\bigtriangleup$	57 (0.9)	-7 (1.4)	42 (1.1)		44 (0.8)	-2 (1.4)	
Croatia	91 (0.6)		-	-	20 (1.0)	▼	-	-	58 (1.1)	۸	-	-	
Denmark <sup>+</sup>	80 (1.1)	$\bigtriangleup$	73 (1.1)	6 (1.5)	47 (1.0)	$\bigtriangleup$	44 (1.0)	4 (1.4)	50 (1.0)	$\bigtriangleup$	49 (1.0)	1 (1.4)	
Dominican Republic	66 (1.0)	▼	61 (1.5)	5 (1.8)	60 (1.1)	▲	59 (1.1)	1 (1.5)	62 (1.1)	۸	58 (1.2)	4 (1.6)	
Estonia <sup>1</sup>	74 (1.7)		75 (1.8)	0 (2.5)	29 (1.0)	▼	24 (1.2)	5 (1.5)	30 (1.2)	▼	32 (1.5)	-2 (1.9)	
Finland	85 (1.1)	$\bigtriangleup$	83 (1.3)	2 (1.7)	27 (1.0)	▼	15 (0.7)	12 (1.3)	46 (1.5)	$\bigtriangleup$	35 (1.4)	11 (2.0)	
Italy	50 (2.5)	▼	49 (2.3)	2 (3.4)	36 (1.2)	$\bigtriangledown$	34 (1.5)	2 (1.9)	22 (1.6)	▼	21 (1.3)	0 (2.0)	
Latvia <sup>1</sup>	62 (2.0)	▼	67 (2.5)	-5 (3.1)	30 (1.3)	▼	31 (1.3)	-1 (1.9)	34 (1.3)	$\bigtriangledown$	39 (1.6)	-5 (2.1)	
Lithuania	89 (0.8)	▲	84 (0.9)	5 (1.2)	43 (1.5)		35 (1.1)	8 (1.8)	47 (1.3)	$\bigtriangleup$	30 (1.1)	17 (1.6)	
Malta	78 (0.7)	$\bigtriangleup$	62 (1.2)	16 (1.4)	42 (0.8)		29 (1.0)	13 (1.2)	48 (0.8)	$\bigtriangleup$	24 (0.9)	25 (1.3)	
Mexico	76 (1.0)		74 (0.9)	3 (1.4)	57 (0.8)	▲	54 (0.9)	3 (1.2)	42 (0.9)		36 (0.7)	6 (1.2)	
Netherlands <sup>+</sup>	51 (2.3)	▼	-	-	27 (1.0)	▼	-	-	21 (1.3)	▼	-	-	
Norway (9) <sup>1</sup>	93 (0.4)	۸	90 (0.8)	3 (0.9)	59 (0.9)		56 (1.1)	3 (1.4)	58 (0.8)	۸	59 (1.0)	-1 (1.3)	
Peru	84 (1.0)	$\bigtriangleup$	-	-	45 (1.0)	$\bigtriangleup$	-	-	45 (1.0)	$\bigtriangleup$	-	-	
Russian Federation	84 (1.4)	$\bigtriangleup$	76 (1.4)	7 (2.0)	33 (1.1)	$\bigtriangledown$	32 (1.2)	1 (1.6)	25 (1.0)	▼	28 (1.1)	-3 (1.5)	
Slovenia	84 (0.8)	$\bigtriangleup$	84 (0.8)	-1 (1.2)	24 (0.9)	▼	28 (1.2)	-4 (1.4)	59 (1.2)	۸	59 (1.1)	0 (1.7)	
Sweden <sup>1</sup>	89 (0.8)	<b></b>	85 (0.9)	4 (1.2)	64 (0.9)		54 (1.1)	11 (1.4)	47 (0.8)	$\triangle$	40 (1.0)	6 (1.3)	
ICCS 2016 average	77 (0.3)				41 (0.2)				42 (0.2)				
Common countries	77 (0.3)		74 (0.3)	3 (0.5)	42 (0.2)		39 (0.3)	3 (0.4)	42 (0.3)		39 (0.3)	3 (0.4)	
Countries not meeting sam	nple participa	tion r	equiremen	ts								l	
Hong Kong SAR	71 (1.2)		-	-	30 (1.1)		-	-	30 (1.0)		-	-	
Korea, Republic of <sup>2</sup>	88 (0.8)		-	-	53 (1.4)		-	-	47 (1.1)		-	-	
Benchmarking participant	not meeting	samp	le participa	tion requirem	ents								
North Rhine-Westphalia $^1$	82 (1.2)		-	-	50 (2.2)		-	-	60 (1.4)		-	-	

National ICCS 2016 results are:

more than 10 percentage points above average  $~\blacktriangle$ 

significantly above average  $\ \bigtriangleup$ 

significantly below average  $\ \, \nabla$ 

more than 10 percentage points below average 🔻

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

 $^{*}$  Statistically significant changes (p < 0.05) between 2009 and 2016 are displayed in bold.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup>National Defined Population covers 90% to 95% of National Target Population

<sup>2</sup> Country surveyed target grade in the first half of the school year.

- No comparable data available.

Over the seven years between ICCS 2009 and 2016, eight countries saw significant increases in the percentages of students who said they had voted for a class or school parliament representative. There were nine countries (in which significantly higher percentages of students said they had participated in decisions about the running of their school, and two countries where this proportion was significantly lower. Six countries witnessed significant increases across time in the percentage of students who reported standing as a candidate for class representative or member of a school parliament while two countries experienced a decline. On average across the common countries that participated in both ICCS cycles, the proportion of students reporting participation for all of the three activities increased (significantly) by three percentage points.

## Table 2National average scale scores for students' past or current and their willingness to<br/>participate at school

Country	Average scores in	Average scores in 35 40 45 50 55 60 65 2016 35 40 45 50 55 60 65	Correlation between					
Belgium (Flemish)	<u>2010</u> 47 (0,4) ⊽		0.29					
Bulgaria	49 (0.3) V		0.47					
Chilo	49 (0.3) ↓		0.47					
Chinese Tainei	32 (0.3) <sup>⊥</sup>		0.39					
Colombia	49 (0.2) ↓		0.24					
Croatia	55 (0.2) △		0.40					
Crodud Denmarkt	51 (0.2) <sup>∞</sup>		0.30					
Deminisan Banublia (r)	50 (0.2)		0.24					
Dominican Republic (r)	55 (0.3) ▲		0.49					
Estonia	47 (0.3) ⊽		0.39					
Finiand	48 (0.2) ∨		0.25					
latuia <sup>1</sup>	47 (0.4) ⊽ 48 (0.3) ⊽		0.30					
Latvia	-10 (0.3) ↓		0.32					
Malta	$51(0.3) \simeq$		0.44					
Mexico	50 (0.2) 52 (0.2)		0.40					
Netherlandst	42 (0.4) ▼		0.45					
Norway (9) <sup>1</sup>	54 (0.2) ▲		0.28					
Peru	53 (0.2) △	<b>□ □</b> 55 (0,1) ▲ <b>□</b>	0.43					
Russian Federation	51 (0.3) △		0.45					
Slovenia	50 (0.2) ∇	49 (0.2) ▽	0.33					
Sweden <sup>1</sup>	53 (0.2) △	47 (0.2) ▼ □	0.30					
Average ICCS 2016	50 (0.1)	50 (0.0)	0.35					
Countries not meeting sample	e participation r	quirements						
Hong Kong SAR	47 (0.3)		0.34					
Korea, Republic of <sup>2</sup>	53 (0.4)		0.29					
Benchmarking participant no	t meeting sampl	e participation requirements						
North Rhine-Westphalia <sup>1</sup>	49 (0.3)	47 (0.4)	0.30					
National results for ICCS 2016 are: Average score for expected legal activities +/- Confidence interval								
more than 3 score points above ICCS 2016 average 🔺 🔲 Average score for expected illegal activities +/- Confidence interval								
significantly above IC	significantly above ICCS 2016 average 🛆							
significantly below ICCS 2016 average $\bigtriangledown$								
more than 3 score points below IC	CS 2016 average ▼	No participation						
Participation								
() Standard errors appear in parentheses.								

#### Past or current civic participation at school

#### Expected civic participation at school

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup> National Defined Population covers 90% to 95% of National Target Population

<sup>2</sup> Country surveyed target grade in the first half of the school year.

An "(r)" indicates that data are available for at least 70% but less than 85% of students.

Table 2 shows the scale scores reflecting students' past or current and their expected civic participation at school in comparison. Relatively high national averages scores for both scales were recorded in Colombia, the Dominican Republic, Mexico and Peru, while relatively low averages on both scales were found in Belgium (Flemish), Finland, and the Netherlands. While generally there was a correspondence in country-level scale scores (with a correlation of 0.71 at the level of countries) there were also deviations from this pattern: Swedish students had relatively high averages scores for past or current participation but below-average scores for expected participation at school, while in Denmark they had score for part or current school participation similar to the ICCS 2016 average, and relatively low scores for expected participation. The correlation between scale scores within countries

was (r=) 0.35 on average, ranging from 0.24 to 0.47. These findings suggest a moderate association between past or current participation and expected engagement at school.

## Table 3National average scale scores for students' citizenship self-efficacy and perceptions of<br/>the value of student participation at school

	Sense of citizenship self-efficacy					Perception of the value of participation at school										
Country	Average scores in 2016	Changes since 2009	35 40 45	50 55 60 6	65	Average scores in 2016	Changes since 2009	35	4	0 4	5 50	55	60	6	Cor be 5 s	relation etween scales
Belgium (Flemish)	50 (0.2) 🗸	<b>2.7</b> (0.4)		0		49 (0.2) 🗸	-0.3 (0.4)					Т				0.27
Bulgaria	52 (0.3) 🛆	1.6 (0.5)				51 (0.2)	<b>2.3</b> (0.4)				P	Т				0.30
Chile	52 (0.2)	0.1 (0.4)		0		55 (0.2)	-1.4 (0.4)					•				0.27
Chinese Taipei	52 (0.2)	<b>3.6</b> (0.4)		0		53 (0.2) 🛆	<b>2.7</b> (0.4)									0.27
Colombia	53 (0.2) <sup>△</sup>	0.5 (0.4)		0		54 (0.2) 🛆	-0.1 (0.4)									0.29
Croatia	54 (0.2) 🛆	-		0		53 (0.2) 🛆	-					•				0.29
Denmark <sup>+</sup>	51 (0.2) 🗸	<b>1.1</b> (0.4)		0		49 (0.2) 🗸	-0.7 (0.4)									0.23
Dominican Republic (r)	60 (0.2) 🔺	3.6 (0.5)				56 (0.2) 🔺	<b>1.7</b> (0.4)						1			0.29
Estonia <sup>1</sup>	49 (0.2) 🗸	<b>1.0</b> (0.4)		0		51 (0.3)	<b>1.1</b> (0.5)					J T				0.30
Finland	48 (0.2) 🔻	<b>1.8</b> (0.4)				50 (0.2) 🗸	0.4 (0.4)				¢	Т				0.26
Italy	52 (0.2)	0.6 (0.4)		0		51 (0.2)	<b>2.1</b> (0.3)				0					0.31
Latvia <sup>1</sup>	48 (0.2) 🔻	-1.2 (0.4)				49 (0.2) 🗸	0.7 (0.4)					Т				0.29
Lithuania	51 (0.2) 🗸	<b>0.8</b> (0.4)		0		49 (0.2) 🗸	<b>0.8</b> (0.4)									0.28
Malta	50 (0.2) 🗸	3.9 (0.4)		p		51 (0.2)	-0.2 (0.4)				0					0.30
Mexico	54 (0.2) <sup>△</sup>	<b>1.5</b> (0.4)		0		53 (0.2) 🛆	<b>2.1</b> (0.4)					0				0.24
Netherlands <sup>+</sup>	48 (0.2) 🔻	-		0		48 (0.2) 🔻	-					Т				0.25
Norway (9) <sup>1</sup>	51 (0.2) 🗸	1.2 (0.5)		P		51 (0.2) 🗸	-0.4 (0.4)				U	Т				0.27
Peru	55 (0.2) 🔺	-		ļ (		53 (0.2) 🛆	-									0.32
Russian Federation	50 (0.2) 🗸	0.6 (0.4)		0		50 (0.2) 🗸	-0.5 (0.4)					Т				0.28
Slovenia	50 (0.2) 🗸	0.2 (0.4)		0		50 (0.2) 🗸	0.4 (0.4)				P	Т				0.26
Sweden <sup>1</sup>	52 (0.2)	2.6 (0.5)				49 (0.4) 🛛	0.2 (0.5)									0.28
Average ICCS 2016	51 (0.0)	<b>1.5</b> (0.1)				51 (0.1)	<b>0.6</b> (0.1)									0.28
Countries not meeting sample pa	articipation requ	irements						_								
Hong Kong SAR	50 (0.2)	-		p		48 (0.3)	-	_								0.23
Korea, Republic of <sup>2</sup>	59 (0.3)	-				51 (0.3)	-				<u> </u>					0.42
Benchmarking participant not m	eeting sample p	articipation	requirements	_	- I		1	-	_							
North Rhine-Westphalia <sup>1</sup>	49 (0.3)	-		9		49 (0.4)	-									0.28
National results for I	CCS 2016 are:			Average score fo	orexp	ected legal activitie	es +/- Confiden	ce int	terva	ıl						
more than 3 score points above ICCS 2016 average 🔺																
significantly above ICCS 2016 average 🛆 On average across items, students with a score in On average across items, students with a score in																
significantly below ICI	CS 2016 average ⊽		the range with this c probablity to indica	olour nave more than 50% te:				th	ne rang robab	e with th lity to ind	is colour h licate:	ave mor	e than 50	1%		
more than 3 score points below IC	more than 3 score points below ICCS 2016 average V Not or not very well Disagreement															
Very or quite well Agreement																
() Standard errors appear in parentheses. Statistically significant changes (p < 0.05) between 2009 and 2016 are displayed in bold.																

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup>National Defined Population covers 90% to 95% of National Target Population

 $^{\rm 2}$  Country surveyed target grade in the first half of the school year.

An "(r)" indicates that data are available for at least 70% but less than 85% of students.

- No comparable data available.

When comparing scale scores reflecting students' sense of citizenship self-efficacy and their valuing of student participation at school, again there is a correspondence between higher and lower national averages across both scales. Students in Chinese Taipei, Colombia, Dominican Republic<sup>1</sup>, Mexico and Peru had relatively high scores for both scales, while students in the Netherlands had relatively low scores for both measured constructs. When comparing results from 2016 with those from the previous cycle, there were significant increases in citizenship self-efficacy in more than half of the countries with available data, while only in one country there was a significant decrease. For students' valuing

<sup>&</sup>lt;sup>1</sup> It should be noted that the percentage of missing data in the Dominican Republic was very high and that results from this country should be interpreted with caution.

of student participation at school, seven countries recorded significant increases and one country a decrease. The correlation between both scales was 0.28 on average, ranging from 0.24 to 0.32, which suggests moderate association between the two constructs.

## Factors associated with students' expectations of participation at school

Multiple regression was used to investigate the net influence of predictor variables representing student background, civic learning, school contexts and student beliefs regarding engagement. Each regression analysis was conducted separately for each country to enable a comparative review. Furthermore, two models were estimated, one, Model 2, with and another one, Model 1, without the student beliefs regarding their self-efficacy and the value of engagement at school.

Table 4 shows the unstandardised regression coefficients as estimated in both models for student background and civic learning variables. The results show that female gender had positive net effects in all but five countries. On average, for both models the difference between gender groups was associated with over one scale score point (equivalent to a tenth of standard deviation, which was set to 10 across all participating countries). Socio-economic background did not have any consistent association with expected participation at school, while students' interested had relatively strong and significant positive net effects for Model 1 in all countries (on average with an increase of 2.3 score points per national standard deviation). However, after including students' beliefs about their own ability to engage and the value of student participation, only about little more than half of the countries there were significant coefficients for Model 2 (on average, with an increase of less than one score point per standard deviation).

Students' report on learning about civic issues at school had significant positive net effects in all countries for Model 1 (on average 1.2 score points), but weaker and often insignificant ones for Model 2 (on average less than one score point). Civic knowledge tended to have weak negative associations with expected school engagement for both analysis models.

## Table 4Regression coefficients for effects of students' background and civic learning variables<br/>on students' willingness to participate at school

			Student ba	Civic learning						
	Students' gender (female)		Home socioeconomic background		Students' interest in political and social issues		Student rep learning	orts on civic at school	Civic knowledge	
Country	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Belgium (Flemish)	<b>0.8</b> (0.4)	<b>1.1</b> (0.4)	0.3 (0.2)	0.1 (0.2)	3.4 (0.5)	<b>1.4</b> (0.4)	<b>0.5</b> (0.2)	0.2 (0.2)	- <b>0.8</b> (0.2)	-0.4 (0.2)
Bulgaria	1.8 (0.4)	<b>1.2</b> (0.4)	-0.3 (0.3)	- <b>0.6</b> (0.2)	<b>2.2</b> (0.4)	<b>0.7</b> (0.3)	<b>1.0</b> (0.3)	0.0 (0.3)	0.0 (0.3)	-0.3 (0.3)
Chile	1.0 (0.3)	<b>1.1</b> (0.3)	0.3 (0.2)	0.1 (0.2)	2.9 (0.4)	0.7 (0.4)	<b>1.4</b> (0.2)	0.3 (0.2)	- <b>0.7</b> (0.2)	- <b>0.4</b> (0.2)
Chinese Taipei	<b>0.5</b> (0.2)	<b>0.6</b> (0.2)	<b>0.4</b> (0.1)	<b>0.3</b> (0.1)	<b>1.7</b> (0.3)	<b>0.6</b> (0.2)	1.0 (0.2)	<b>0.4</b> (0.2)	-0.2 (0.2)	<b>0.4</b> (0.2)
Colombia	0.3 (0.3)	0.5 (0.3)	-0.2 (0.2)	-0.2 (0.1)	<b>3.1</b> (0.3)	<b>1.4</b> (0.3)	1.8 (0.2)	<b>0.5</b> (0.2)	-1.3 (0.2)	- <b>0.6</b> (0.2)
Croatia	1.2 (0.3)	<b>0.7</b> (0.3)	0.0 (0.2)	-0.2 (0.2)	2.6 (0.4)	<b>0.9</b> (0.3)	<b>1.4</b> (0.2)	<b>0.7</b> (0.2)	0.2 (0.2)	0.0 (0.2)
Denmark†	<b>0.9</b> (0.3)	<b>0.9</b> (0.2)	0.0 (0.1)	- <b>0.2</b> (0.1)	<b>2.5</b> (0.2)	<b>0.8</b> (0.2)	<b>0.5</b> (0.2)	0.2 (0.1)	- <b>0.7</b> (0.1)	- <b>0.8</b> (0.1)
Dominican Republic (s)	0.3 (0.4)	0.4 (0.3)	-0.2 (0.2)	-0.1 (0.2)	1.2 (0.4)	0.5 (0.4)	1.6 (0.2)	<b>0.6</b> (0.2)	- <b>0.5</b> (0.2)	-0.3 (0.2)
Estonia <sup>1</sup>	1.9 (0.3)	<b>1.5</b> (0.3)	-0.2 (0.2)	- <b>0.3</b> (0.2)	2.0 (0.3)	0.4 (0.3)	<b>1.1</b> (0.2)	<b>0.5</b> (0.2)	0.3 (0.2)	- <b>0.4</b> (0.2)
Finland	1.9 (0.3)	<b>1.8</b> (0.3)	0.2 (0.1)	0.0 (0.1)	<b>2.3</b> (0.3)	0.2 (0.3)	<b>0.3</b> (0.2)	0.0 (0.2)	-0.2 (0.2)	- <b>0.7</b> (0.2)
Italy	2.2 (0.3)	<b>1.7</b> (0.3)	<b>0.6</b> (0.1)	0.2 (0.1)	1.9 (0.4)	0.3 (0.3)	<b>1.4</b> (0.2)	<b>0.5</b> (0.2)	<b>0.4</b> (0.2)	0.1 (0.2)
Latvia <sup>1</sup>	<b>2.2</b> (0.3)	<b>1.8</b> (0.3)	0.1 (0.2)	-0.1 (0.2)	<b>1.5</b> (0.4)	0.2 (0.4)	<b>1.1</b> (0.2)	0.3 (0.2)	-0.4 (0.2)	- <b>0.4</b> (0.2)
Lithuania	2.5 (0.3)	<b>1.9</b> (0.3)	0.1 (0.2)	-0.2 (0.2)	2.0 (0.3)	<b>0.7</b> (0.3)	1.3 (0.2)	<b>0.5</b> (0.2)	-0.3 (0.2)	- <b>0.4</b> (0.2)
Malta	-0.4 (0.4)	-0.5 (0.3)	0.1 (0.2)	-0.1 (0.2)	2.3 (0.3)	0.3 (0.3)	1.3 (0.2)	0.2 (0.2)	-0.2 (0.2)	-0.4 (0.2)
Mexico	0.1 (0.2)	0.1 (0.2)	0.0 (0.2)	-0.2 (0.1)	<b>2.4</b> (0.4)	<b>0.9</b> (0.3)	<b>1.6</b> (0.2)	<b>0.6</b> (0.2)	- <b>0.7</b> (0.1)	-0.2 (0.1)
Netherlands <sup>+</sup>	1.3 (0.5)	<b>1.4</b> (0.5)	<b>0.9</b> (0.2)	<b>0.5</b> (0.2)	<b>2.4</b> (0.6)	0.8 (0.6)	<b>0.8</b> (0.3)	0.1 (0.3)	- <b>0.6</b> (0.3)	-0.1 (0.2)
Norway (9) <sup>1</sup>	1.7 (0.3)	<b>1.4</b> (0.2)	0.1 (0.1)	-0.2 (0.1)	<b>3.2</b> (0.3)	1.3 (0.3)	<b>0.9</b> (0.1)	0.2 (0.1)	- <b>0.7</b> (0.2)	- <b>0.7</b> (0.1)
Peru	0.0 (0.3)	0.3 (0.2)	0.0 (0.1)	-0.1 (0.1)	1.8 (0.3)	<b>0.7</b> (0.2)	<b>1.6</b> (0.2)	<b>0.7</b> (0.2)	- <b>0.4</b> (0.2)	- <b>0.4</b> (0.2)
Russian Federation	<b>2.6</b> (0.4)	<b>2.5</b> (0.3)	0.0 (0.2)	-0.2 (0.2)	<b>1.7</b> (0.4)	0.2 (0.3)	<b>1.6</b> (0.3)	0.3 (0.2)	-1.0 (0.2)	- <b>0.4</b> (0.2)
Slovenia	1.2 (0.4)	<b>1.1</b> (0.3)	0.3 (0.2)	0.0 (0.2)	2.5 (0.5)	<b>1.0</b> (0.4)	1.0 (0.2)	<b>0.4</b> (0.2)	0.2 (0.2)	0.1 (0.2)
Sweden <sup>1</sup>	<b>1.2</b> (0.3)	<b>1.0</b> (0.3)	-0.3 (0.2)	- <b>0.5</b> (0.2)	<b>3.1</b> (0.3)	<b>1.0</b> (0.3)	<b>0.9</b> (0.2)	<b>0.4</b> (0.2)	-0.3 (0.2)	- <b>0.6</b> (0.2)
ICCS 2016 average	<b>1.2</b> (0.1)	<b>1.1</b> (0.1)	<b>0.1</b> (0.0)	- <b>0.1</b> (0.0)	<b>2.3</b> (0.1)	<b>0.7</b> (0.1)	<b>1.2</b> (0.0)	<b>0.4</b> (0.0)	- <b>0.4</b> (0.0)	- <b>0.3</b> (0.0)
Countries not meeting	samnle nart	icination re	quirements							

countries not meeting sample participation requirements										
Hong Kong SAR (	0.0 (0.4)	-0.1 (0.3)	0.4 (0.2)	0.4 (0.2)	<b>2.4</b> (0.4)	<b>1.3</b> (0.4)	<b>0.7</b> (0.3)	-0.3 (0.2)	0.2 (0.2)	<b>0.5</b> (0.2)
Korea, Republic of <sup>2</sup> -0	0.2 (0.4)	0.2 (0.4)	<b>0.4</b> (0.2)	0.4 (0.2)	<b>1.9</b> (0.4)	<b>1.6</b> (0.4)	<b>0.8</b> (0.3)	0.2 (0.2)	-0.2 (0.2)	- <b>0.5</b> (0.2)

\* Statistically significant (p<0.05) coefficients in **bold** .

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup>National Defined Population covers 90% to 95% of National Target Population

 $^{\rm 2}$  Country surveyed target grade in the first half of the school year.

An "(s)" indicates that data are available for less than 70% of students

When reviewing context factors (Table 5), perceptions of an open classroom climate for discussion of political and social issues had significant positive net effects in 15 out of 21 countries in Model 1 (0.6 score points on average), while in Model 2 these effects were no longer significant in most countries (0.1 score points on average). Students past or current civic participation at school had, as expected, significant positive net effects in all countries for both models, however, the effects were somewhat stronger in Model 1 (3.1 score points on average) than in Model 2 (2.2 score points) after controlling for student beliefs regarding their self-efficacy and the value of school engagement.

Students' sense of citizenship self-efficacy had consistently strong and positive net effects on expected participation at school, the difference of one national standard deviation was associated with almost four score points (more than a third of an international standard deviation in the dependent variable). Students' endorsement of the value of their participation at school also had consistently positive net effects on expected participation: the difference of one national standard deviation was associated with an increase of 1.3 score points (more than a tenth of an international standard deviation).

#### Table 5 Regression coefficients for effects of school context variables, citizenship self-efficacy and valuing of student participation at school on students' willingness to participate at school

ī

		School	context			1
	Students' perc classroom discu	eptions of open climate for ssions	Student's part or current civic participation at school		Student's sense of citizenship self-efficacy	Students' endorsement of the value of participation at school
Country	Model 1	Model 2	Model 1	Model 2	Model 2	Model 2
Belgium (Flemish)	<b>1.0</b> (0.3)	0.2 (0.2)	<b>3.3</b> (0.2)	<b>2.4</b> (0.2)	<b>3.8</b> (0.2)	<b>1.0</b> (0.2)
Bulgaria	<b>1.3</b> (0.2)	<b>1.0</b> (0.2)	<b>3.4</b> (0.3)	<b>2.3</b> (0.3)	<b>3.9</b> (0.3)	<b>1.5</b> (0.2)
Chile	<b>0.9</b> (0.2)	0.2 (0.2)	<b>3.3</b> (0.2)	<b>2.4</b> (0.2)	<b>4.9</b> (0.2)	<b>1.5</b> (0.2)
Chinese Taipei	<b>1.1</b> (0.2)	<b>0.6</b> (0.1)	<b>2.3</b> (0.1)	<b>1.8</b> (0.1)	<b>2.6</b> (0.2)	<b>1.2</b> (0.1)
Colombia	0.4 (0.2)	-0.2 (0.2)	<b>2.4</b> (0.2)	<b>1.5</b> (0.2)	<b>4.2</b> (0.2)	<b>1.4</b> (0.1)
Croatia	0.3 (0.2)	-0.1 (0.2)	<b>2.7</b> (0.2)	<b>2.0</b> (0.2)	<b>3.6</b> (0.2)	<b>1.2</b> (0.2)
Denmark <sup>†</sup>	<b>0.5</b> (0.1)	0.0 (0.1)	<b>3.6</b> (0.1)	<b>2.7</b> (0.2)	<b>3.0</b> (0.2)	<b>0.8</b> (0.1)
Dominican Republic (s)	<b>0.9</b> (0.2)	0.3 (0.2)	<b>1.3</b> (0.3)	<b>0.8</b> (0.2)	<b>3.5</b> (0.3)	<b>1.4</b> (0.2)
Estonia <sup>1</sup>	0.3 (0.2)	0.1 (0.2)	<b>4.0</b> (0.2)	<b>3.0</b> (0.2)	<b>3.3</b> (0.2)	<b>1.4</b> (0.2)
Finland	<b>0.7</b> (0.2)	0.2 (0.2)	<b>4.3</b> (0.2)	<b>3.1</b> (0.2)	<b>3.8</b> (0.2)	<b>0.9</b> (0.2)
Italy	<b>0.8</b> (0.2)	0.2 (0.2)	<b>2.1</b> (0.2)	<b>1.4</b> (0.2)	<b>3.5</b> (0.2)	<b>1.4</b> (0.2)
Latvia <sup>1</sup>	<b>0.5</b> (0.2)	-0.1 (0.2)	<b>3.7</b> (0.2)	<b>2.6</b> (0.2)	<b>3.6</b> (0.2)	<b>1.6</b> (0.2)
Lithuania	0.2 (0.2)	0.0 (0.2)	<b>3.4</b> (0.3)	<b>2.3</b> (0.2)	<b>3.2</b> (0.2)	<b>1.5</b> (0.2)
Malta	<b>0.7</b> (0.2)	0.0 (0.2)	<b>3.8</b> (0.2)	<b>2.7</b> (0.2)	<b>4.4</b> (0.2)	<b>1.9</b> (0.2)
Mexico	<b>0.8</b> (0.1)	<b>0.2</b> (0.1)	<b>2.0</b> (0.2)	<b>1.4</b> (0.2)	<b>3.9</b> (0.2)	<b>1.4</b> (0.2)
Netherlands <sup>+</sup>	<b>1.3</b> (0.2)	<b>0.6</b> (0.2)	<b>3.4</b> (0.2)	<b>2.7</b> (0.2)	<b>3.7</b> (0.3)	<b>0.6</b> (0.2)
Norway (9) <sup>1</sup>	<b>0.4</b> (0.1)	0.0 (0.1)	<b>3.7</b> (0.2)	<b>2.6</b> (0.2)	<b>3.5</b> (0.2)	<b>1.0</b> (0.1)
Peru	<b>0.8</b> (0.2)	0.2 (0.1)	<b>1.8</b> (0.1)	<b>1.4</b> (0.1)	<b>3.1</b> (0.1)	<b>1.1</b> (0.2)
Russian Federation	<b>0.7</b> (0.3)	0.4 (0.2)	<b>3.7</b> (0.2)	<b>2.4</b> (0.2)	<b>4.0</b> (0.3)	<b>1.9</b> (0.3)
Slovenia	0.2 (0.2)	-0.3 (0.2)	<b>3.5</b> (0.2)	<b>2.3</b> (0.2)	<b>3.6</b> (0.2)	<b>1.4</b> (0.2)
Sweden <sup>1</sup>	-0.2 (0.2)	- <b>0.5</b> (0.2)	<b>4.0</b> (0.2)	<b>2.9</b> (0.2)	<b>3.8</b> (0.2)	<b>1.0</b> (0.2)
ICCS 2016 average	<b>0.6</b> (0.0)	<b>0.1</b> (0.0)	<b>3.1</b> (0.0)	<b>2.2</b> (0.0)	<b>3.7</b> (0.0)	<b>1.3</b> (0.0)
Countries not meeting	sample par	ticipation re	auirements	i		
Hong Kong SAR	<b>0.9</b> (0.3)	<b>0.5</b> (0.3)	<b>3.2</b> (0.3)	<b>2.4</b> (0.2)	<b>3.9</b> (0.2)	<b>1.0</b> (0.2)

 $^{\ast}$  Statistically significant (p<0.05) coefficients in  $\, {\rm bold}$  .

() Standard errors appear in parentheses.

Korea, Republic of<sup>2</sup>

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup> National Defined Population covers 90% to 95% of National Target Population

<sup>2</sup> Country surveyed target grade in the first half of the school year.

An "(s)" indicates that data are available for less than 70% of students.

Table 7 summarises the results of the two regression model in terms of their variance explanation. Model 1 explained on average 22 percent of the variation in students' expected school participation, ranging from nine percent in the Dominican Republic (where the results were based on less than 70% of their participating students) to 32 in Estonia. For Model 2, the predictors explained 37 percent on average, ranging from 25 percent in the Dominican Republic to 45 percent in Estonia and Finland.

**1.6** (0.3)

**1.5** (0.3)

**0.9** (0.2) **0.6** (0.2) **4.0** (0.3) **3.6** (0.3)

## Table 6Percentage of variance in students' willingness to participate at school explained by<br/>multiple regression models 1 and 2

1

Country	Model 1	Model 2
Belgium (Flemish)	20	35
Bulgaria	23	38
Chile	18	37
Chinese Taipei	18	31
Colombia	18	38
Croatia	19	34
Denmark†	27	38
Dominican Republic (s)	9	25
Estonia <sup>1</sup>	32	45
Finland	30	45
Italy	19	35
Latvia <sup>1</sup>	22	38
Lithuania	26	40
Malta	21	41
Mexico	14	33
Netherlands <sup>+</sup>	22	35
Norway (9) <sup>1</sup>	26	39
Peru	16	30
Russian Federation	26	42
Slovenia	22	37
Sweden <sup>1</sup>	25	39
ICCS 2016 average	22	37

### **Countries not meeting sample participation requirements**

Hong Kong SAR	19	33
Korea, Republic of <sup>2</sup>	24	29

\* Statistically significant (p<0.05) coefficients in **bold**.

() Standard errors appear in parentheses.

(9) Country deviated from international defined population and surveyed adjacent upper grade.

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

<sup>1</sup> National Defined Population covers 90% to 95% of National Target Population

<sup>2</sup> Country surveyed target grade in the first half of the school year.

An "(s)" indicates that data are available for less than 70% of students.

## Conclusion

With regard to its first research question, this paper shows that more passive forms of engagement (such as voting) are more likely to be chosen for students' engagement at school, however, on average about 40 percent of students reported in ICCS 2016 that they had done more active forms of participation at school. In quite a number of countries there were also significant increases in student participation since 2009. When comparing scale score results for past or current engagement at school with expected student participation, there is pattern in the distribution of scale scores across countries as well as moderate association at the level students. Similar patterns emerge from a comparison of scale scores reflecting students' sense of self-efficacy and their valuing of student participation at school, with positive correlations between scales both within and across countries.

The multiple regression analysis shows that student background variables have only minor net effects on students' expected participation at school, while students' interest, their reports on having learned about civic issues at school, and positive perceptions of an open classroom climate have positive effects before including beliefs about self-efficacy and the value of participation in the model. It is interesting to note that civic knowledge had either no or weak negative effects on students' willingness to participate at school. The strongest predictors were past or current school participation and students' sense of citizenship self-efficacy. Their valuing of student participation at school had consistently positive effects, however, these were not as strong as for the other two consistent predictor mentioned before.

When interpreting the results of this paper, reader should be cautioned that the questionnaire formats used in ICCS to gauge respondents' attitudes or perceptions across diverse national contexts may not always measure respondents' beliefs consistently across the different languages and cultures (Desa, van de Vijver, Carstens, & Schulz, in press; Heine, Lehman, Peng, & Greenholtz, 2002; van de Gaer, Grisay, Schulz, & Gebhardt, 2012). While ICCS undertook extensive reviews of measurement invariance during the development stage of both cycles of the study (see Schulz, 2009; Schulz & Fraillon, 2011), variations of scale scores across countries could also be reflective of differences related to cultural or linguistic contexts. Furthermore, it is important to note that results from the multiple regression models should not be interpreted in terms of causality, given the limitations of research data from a cross-sectional design.

ICCS has provided two rich databases with information derived from surveys in 2009 and 2016 that can be used as tools to generate new research and insights into civic and citizenship education. These data should be used for further secondary research on issues such as those highlighted in the rather explorative analyses presented in this paper. In particular, findings such as weak negative effects of civic knowledge on expected student participation should be explored further and ICCS provides robust data for such additional analyses.

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