

# **Back on Track? How Civic Learning Opportunities Widen the Political Knowledge Gap in a Tracked Education System.**

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## **Abstract**

This article examines how different civic learning opportunities relate to students' political knowledge in different school tracks. Existing studies found out that citizenship teaching can not only enhance overall levels of civic outcomes but also mitigate inequalities. However, educational achievement studies emphasise the risk of a tracked school context exacerbating the general knowledge gap. Combining these findings, we do not know whether efforts in the vocational track to enhance civic outcomes can still reduce civic inequalities. This study relies on the International Civic and Citizenship Education Study (ICCS) 2016 data. It uses multilevel analysis to examine how the civic learning opportunities schools offer (as perceived by students) are related to civic knowledge across different tracks. It finds that cross-track differences in civic knowledge are not smaller in schools rich in civic learning opportunities. We provisionally propose that this is due to differences across tracks in the levels and the nature of the civic learning opportunities provided.

**Keywords:** Civic knowledge; vocational education; acceleration hypothesis; compensation hypothesis; political socialization

## **Introduction**

Social and ethnic background are important determinants of civic knowledge and engagement. As a rule, children of socially disadvantaged and/or ethnic minority backgrounds are less informed about and less engaged with democratic politics than their more privileged peers. Interestingly, several studies within the

civic education literature have pointed out that civic teaching and learning practices, including modes of assessment, can reduce social and racial differences in students' civic knowledge and engagement (Campbell, 2008; Campbell & Niemi, 2016; Hoskins, Janmaat & Melis, 2017; Langton & Jennings, 1968; Kudrnáč & Lyons, 2018, Neundorf, Niemi & Smets, 2016). However, although specific teaching and learning practices in school can thus achieve greater equality of outcomes, equality is usually only one of the subsidiary aims of schools. Often, maximizing pupils' achievement is given higher priority in the context of a performance-driven accountability policy (Lee, 2016). Grouping students by their level of ability has often been suggested as a strategy to enhance achievement as it allows teaching to be tailored to the level and pace of learning of students (Betts & Shkolnik, 2000).

However, when students are allocated to different tracks based on their prior achievement, inequality of outcomes, both that relating to literacy and numeracy skills and that concerning civic competences, is often greater. Students in higher tracks attain better math scores than those in the lower tracks (Gamoran & Mare, 1989), and this difference can partly be attributed to the tracking system itself (Danhier & Martin, 2014). In other words, the tracked context widens pre-existing ability differences. Second, tracking also causes polarization of students' civic attitudes and dispositions (Gamoran & Mare, 1989). Tracking in the upper secondary has been found to deepen the gap in political engagement between students in the academic and those in the vocational track (Hoskins & Janmaat, 2016; Janmaat, Mostafa & Hoskins, 2014).

It is not clear whether the mitigating effects of civic learning opportunities still emerge in the context of a tracked education system. On the one hand, it is possible that the high status tracks simply offer much more of virtually the same civic learning opportunities than lower-status ones and that therefore, the effectiveness of these opportunities in reducing inequalities is diminished. On the other hand, these learning opportunities could also differ in kind across tracks, which might have unintentional inequality-enhancing effects as well. Nieuwelink, ten Dam, and Dekker (2019) explain how goals and expectations related to similar teaching and learning practices can differ between tracks, leading possibly to more considerable gaps in civic outcomes. This study aims to explore whether the difference between tracks in political knowledge is smaller or larger in contexts rich in civic learning opportunities. If it is smaller, these opportunities not only can reduce social

gaps, they can also reduce gaps across tracks. If it is larger, they will only enhance pre-existing inequalities in political knowledge.

### ***Political Knowledge and the Knowledge Gap***

This article will focus on students' political knowledge as a practical kind of knowledge related to students' reasoning and application of concepts. Comparable to the knowledge concept used in the International Civic and Citizenship Education Study (ICCS) 2016, this concept of political knowledge refers to the learned civic and citizenship information that students use when engaging in more complex tasks that help them make sense of the political world (Schulz, Carstens, Losito, & Fraillon, 2018). Both the classical socialization research (Langton & Jennings, 1968; Niemi & Hepburn, 1995) and recent studies provide evidence of the central place of political knowledge among other citizenship outcomes (Lauglo, 2013). Studies relate political knowledge, for example, to specific political attitudes such as political trust (Torney-Purta, Henry Barber, & Richardson, 2004) or behavior such as political participation (Galston, 2001; Solhaug, 2006). As such, these empirical studies underline the importance of political knowledge as a critical aim of civic and citizenship education.

As political knowledge can be seen as an essential aspect of citizenship, it is also an essential task of schools to provide citizenship education to improve students' political knowledge levels. Citizenship education can be implemented as a separate subject, can be a cross-curricular component, or can involve extra-curricular activities. Researchers provide evidence that all these approaches have an impact on students' political knowledge (Amadeo, Torney-Purta, Lehmann, Husfeldt, & Nikolova, 2002; Quintelier, 2015; Quintelier, 2010).

Political knowledge is also known to be sensitive to contextual differences. The most recent ICCS 2016 cycle pointed out that the gap between high and low achievers varies considerably across countries (Schulz, Ainley, Fraillon, Losito, Agrusti and Friedman, 2018). This gap could be related to certain institutional features of education systems, such as the age of first selection into different educational tracks. Indeed, recent research found significant gaps in political knowledge between students in the pre-vocational and

general tracks in the Netherlands and Flanders, as two systems that select relatively early at age 12 (Munniksma et al., 2017; Sampermans et al., 2017). These findings show the need to reflect more on the influence of tracked school contexts.

### ***The Role of Schools in Closing the Political Knowledge Gap.***

Citizenship researchers show an increased awareness related to the risks of inequality in the school context. A seminal work in this field is the one by Niemi and Junn (1998). In their book, they describe how political knowledge differences relate to school and individual-level characteristics. More recent research provides further evidence on how school-level efforts such as group work at school or a democratic classroom climate where students can freely discuss social or political topics can contribute to students' political knowledge (Hooghe & Dassonneville, 2011; Isac, Maslowski, & Van der Werf, 2011; Kahne & Middaugh, 2009). When schools then differ in these efforts, they can contribute to unequal citizenship. This is at odds with their moral duty to ensure that all young people are equally well prepared for civic participation (ten Dam & Volman, 2003).

There are two different ways to conceptualize this duty. First, it can be understood as equal access to teaching and learning opportunities at school. Schools then provide teaching and learning practices, such as learning about civic topics, open discussions in the class, and activating participatory activities in school, in an equal way to all students (Hoskins et al. 2017; Kahne & Middaugh, 2009). The other perspective focuses on the effects of these learning practices on civic outcomes for different groups of students. It highlights two possible effects: accelerating ones, which refer to the possibility that students of privileged backgrounds benefit more from these practices than those from disadvantaged families (Gregory & Miyazaki, 2018; Witschge & van de Werfhorst, 2016), and compensatory ones, which refer to the opposite possibility (i.e., the mitigating ones mentioned in the introduction and demonstrated by the research discussed there). This 'effects' perspective does not necessarily imply that a similar provision of citizenship education across schools is the best approach to minimize inequalities of civic outcomes. It may suggest that a differentiated approach in which students of disadvantaged backgrounds are offered more civic education is more effective.

Studies confirming the compensation hypothesis do have their limitations when examining interactions in the school context. Firstly, promising findings of existing research mostly relate to specific teaching and learning practices. Campbell and Niemi's (2016) study for example civic testing, Castillo and his colleagues (2015) and Kudrnáč and Lyons (2018) investigate classroom climate relationships, and Levinson (2012) explores the influence of service-learning opportunities in school. An exception is the study of Neundorff, Niemi, and Smets (2016), as they explore multiple civic education practices in one study. They include formal civic education, classroom climate, group projects, and volunteering. We will do likewise and include various civic education practices, but the critical feature distinguishing our study from the previous ones is that we will explore whether these multiple practices also have compensatory effects across tracks. In other words, are cross-track differences in political knowledge diminished if all tracks provide ample citizenship education?

Secondly, and more importantly, earlier studies on the topic of acceleration and compensation effects only relate to the compensation of family background differences and neglect the inequality-enhancing potential of a tracked education system. There is every reason to bring the tracking dimension into the research on accelerating versus compensatory effects. First, as selection on the basis of ability into different tracks invariably has social sorting effects - with students of disadvantaged socioeconomic backgrounds consistently ending up disproportionately in the low-status pre-vocational tracks (Hallinan, 1994; Loveless, 1999) – any citizenship education practice that can be shown to reduce cross-track inequalities in political knowledge will also diminish social gaps in this outcome. Second, there may well be differences across tracks in the amount and kind of civic learning opportunities provided. Indeed, focusing on the Netherlands, Nieuwelink and his colleagues (2019) found that open discussions of political and social issues happened much less frequently in pre-vocational tracks than in the academic ones.

Similarly, Hoskins and Janmaat (2019) found possibilities to engage in political activities at school to be more limited for students in pre-vocational tracks in Flanders and Switzerland. These findings are in agreement with the observations of Ichilov (2002) and Ten Dam and Volman (2003), who noted that inculcating social manners and 'fitting in' are central objectives in the pre-vocational track while critical

thinking and independent inquiry are fostered in the general track. Ichilov (2002) notes that teachers in the (pre-) vocational tracks may be reluctant to allow open discussions of political issues because they fear a breakdown of classroom order. The likely differences between tracks in the volume and nature of the civic learning opportunities provided may well make it impossible for these opportunities to reduce cross-track gaps in political knowledge and thereby show the compensatory effects noted above. In other words, because the civic learning opportunities provided in the pre-vocational tracks are different, they may have insufficient power to enhance students' political knowledge in these environments. Therefore, we hypothesize that:

Civic learning opportunities are not diminishing the cross-track difference in political knowledge

To understand how the tracked school context plays a unique role in students' political knowledge, we will examine the interaction between school tracks and teaching and learning practices. When observing the interaction with the tracked school context, we expect to find evidence that teaching and learning practices (open classroom discussions, participation in school, opportunities to learn about civic topics) only maintain or enhance pre-existing differences between students in their political knowledge.

### ***Track differences and early segregation in Flanders and the Netherlands***

In Flanders and the Netherlands, there are sharp contextual differences between schools starting in Grade 7 caused by the division into tracks. From Grade 7 on, these tracks differ in the level and kind of subject matter provided. The general or academic track(s) offer only theoretical subjects (such as languages, mathematics, geography, biology, physics) at the highest or intermediate level. The (pre-)vocational tracks provide both some theoretical subjects, but at a lower level, and several practical courses linked to certain professions. While practical learning goals predominate in the latter, independent inquiry, critical thinking, and a love of learning are fostered in the general track(s) (Leenders, Veugelers, & de Kat, 2012). Upon leaving primary school, students are allocated to these tracks based on their prior achievements. Lower

secondary education in the two countries can thus be described as an early tracking system based on past performance. In other countries, this ability segregation starts only two, three, or four years later.

Belgian and Dutch studies confirm that the segregation into different education tracks can affect student math and reading outcomes and compound pre-existing socioeconomic differences in these outcomes (Bol, Witschge, van de Werfhorst, & Dronkers, 2014; Danhier, 2018; Vanhoutte, 2004). Therefore, this context is valuable to examine the role that school-level characteristics play in the socialization process. As inequality in civic outcomes is more pronounced among Flemish and Dutch students than among the students of the other countries participating in the ICCS 2016 survey (Schulz, Ainley et al., 2018), it is plausible to expect that this inequality is connected to the organizational structure in these countries. In countries such as Sweden, Denmark, or Norway, the tracked school context starts later at Grade 11. van de Werforst (2014) describes how tracking can increase inequality of citizenship education when it is implemented during lower secondary and contrast this to the uniform provision of citizenship education in countries with comprehensive systems, such as the Scandinavian countries.

## **Data and Methods**

### ***The ICCS 2016 Study***

To examine the different civic learning practices in the tracked school system, the International Civic and Citizenship Survey (ICCS) in Flanders and the Netherlands represents a valuable data resource for further inequality research. This cross-sectional dataset entails a great deal of information on citizenship education, and the 2016 cycle includes a broader range of teaching and learning practices than the previous ICCS cycles.

The International Civic and Citizenship Survey (ICCS 2016) is an important IEA study. The International Association for the Evaluation of Educational Achievement (IEA) aims to measure and internationally compare students' civic competencies together with the context of citizenship education (Schulz, Ainley, et al., 2018). In the 2016 cycle, twenty-four international countries participated in the survey. In each country, students, teachers, and school principals participate in the ICCS study. At the student level, the data contains

a knowledge score, context information, and specific context information only gathered in the European or Latin American region. In this article, we use data from the students' knowledge test, the general context questionnaire measuring teaching and learning practices, and school-level information on the tracked school context.

The samples in each country were designed in a two-stage way. In the first stage, Probability Proportional to Size (PPS) procedures were used to select schools within each country. In the second stage, within each sampled school, an entire class from the target grade was chosen at random, with all the students in this class participating in the study. These student-classroom level results can be linked to the school level (Schulz, Carstens, et al., 2018).

Flanders and the Netherlands are regions characterized by an early tracking system (Vanhoutte, 2004). In Flanders, there are two main tracks; the general track (A-stroom) and the vocational track (B-stroom). This track information was added to the ICCS dataset by the Flemish researchers. The Dutch track information is already included in the ICCS context survey. In the Netherlands, there are multiple tracks. HAVO, Atheneum and Gymnasium can be considered general tracks. VMBO, with its sub-tracks of BBL (practical education), KBL (basic vocational programme), GL (combined programme), TL (academic programme), is comparable to the Flemish vocational track. Although it is a simplification of reality to examine the Dutch tracks as general versus vocational tracks, this categorization makes the different country contexts comparable. To confirm this similarity between contexts, we performed the analyses on the samples of Flanders and the Netherlands separately and found comparable results for the two contexts. In both contexts, the level of political knowledge was significantly higher in the general track taking individual and family background features into account (see Table A1.1 and A1.2 in Appendix 1). Hence, we can use these two cases as one pooled dataset to examine context differences in schools. Pooling provides a dataset of 278 schools to observe at the second level, 160 schools in Flanders, 116 schools in the Netherlands. This bigger sample provides a methodological advantage because it reduces the risk of biased estimates of the second-level standard errors (Hox, 2010). When two classrooms from the same track context were selected, the data was withheld and pooled together. Data from two schools where different tracks were included in the

observation were withdrawn—this way, two Flemish schools were deleted from the observations. The final track-dataset includes 5478 student-level observations.

### *Variables*

Student's political knowledge is the dependent variable in this study. The ICCS team constructed it as a composite index based on 87 items from a political knowledge test. The test items cover four content and two cognitive domains divided into eight clusters (Schulz, Ainley, et al., 2018). Each student was assigned a test consisting of three of these clusters. This way, each student had to answer a selection of approximately thirty-three questions. To handle the missing values and calculate a correct knowledge score, five plausible values were introduced in the knowledge dataset (Brese, Jung, Mirazchiyski, Schulz, & Zuehlke, 2014). In this article, we will handle these plausible values using an Mplus analysis function that takes into account each of these plausible values to correctly estimate the relation between teaching and learning practices, the school context and students' political knowledge levels.

In line with the study of Neundorff and her colleagues (2016), this article investigates the influence of various teaching and learning practices in school. There are three ready-made scales in the ICCS database capturing these practices. These scales concern student perceptions of the prevalence of these practices and meet all the requirements of internal consistency and measurement invariance (see Schulz, Carstens, et al., 2018). In this article, we will rely on these three scales. The first measures students' level of active participation in school (PART). Many questions ask students about the opportunities they experienced in school to participate in various political activities, such as holding mock elections, electing and standing as a candidate for a student council, etc. An overview is provided in Appendix 2. The second scale examines students' opportunity to have open discussions in class on political and social issues (OPDISC). An overview of the different items underlying this scale is provided in Appendix 3. Thirdly, the ICCS survey examines students' opportunity to learn about specific civic topics in school (CVLN). The list of seven specific issues is provided in Appendix 4. The IEA used item response theory as a scaling methodology to scale the test items included in the scales and reported this scaling method in the technical report (Schulz, Carstens, et al., 2018, p. 117). The IEA also reports factor tests to underline the validity of the scales

measuring students' participation at school (Schulz, Carstens, et al., 2018, p. 174) and students' perceptions related to classroom discussions and opportunities to learn about civic topics (Schulz, Carstens, et al., 2018, p. 158). Following Campbell (2008), Lüdtke et al. (2009) and Barber et al. (2015), we include both the original individual-level scales in the analyses and their aggregated versions (aggregated to the level of classrooms). The reason to also include the latter is that the scales tap aspects of the learning *environment*, which by definition are classroom or school characteristics. It also makes sense empirically to include the aggregate versions as at least 9% of the variance in the scales is located at the classroom level (10.2, 12.9 and 9.6% for PART, OPDISC and CVLN, respectively), suggesting that there are meaningful differences between classrooms in the teaching and learning activities reported by students. These differences could have an independent effect on political engagement, complementing that of individual student reports (Campbell 2019).

We created a track variable with the values 0 = vocational track and 1 = general track. As explained above, we labelled all the sub-tracks within the Dutch VMBO as vocational and the HAVO, Atheneum, and Gymnasium as general.

Our dependent variable political knowledge is strongly linked to the academic achievement of students. Hence, cross-track differences between students in political knowledge might be associated with the sorting mechanism that allocates students to different tracks related to their achievement level. In this article, we claim that also the tracked context might enlarge pre-existing citizenship differences. Nevertheless, we have no clear-cut control variables related to student' achievement. Hence, we will include other available control variables and implement a further analysis using students' political engagement as the dependent variable. Because political engagement, as an attitudinal outcome, is less strongly related to students' achievement levels (Niemi & Junn 1998), this extra analysis can be seen as a robustness check. If track also shows a significant effect in the analysis on political engagement, we can be more confident that the effect of track does not merely represent that of prior achievement (in which case it would merely be a selection effect).

Comparable to Jennings, Stoker, and Bower (2009), we use students' engagement in political discussions as a proxy for their political engagement. The higher students' interest in politics and their amount of

discussions outside the school, the more likely they are to participate in civil society. We use a scale that measures all types of discussions outside the school context. Students could indicate how often ("never" or "hardly ever," "monthly," "weekly," or "daily") they talk with friends about political or social issues or speak with friends about what is happening in other countries.

In this article, we control for student background characteristics by implementing students' sex (0 = boy), the students' immigration status, and the students' expected educational attainment, their parents' highest occupational status. The immigration status observes where the parents and the student were born (1 = at least one parent is born in the country, 2 = student is born in the country, parents are born in another country, 3 = both the student and parents are born in another country).

## ***Methods***

In the central part, we investigate the interaction between school tracks and teaching and learning practices in Flanders and the Netherlands. We use Mplus software and apply multilevel regression analysis to look into the predicted interactions (Snijders & Bosker, 2012). Multilevel analysis is required because the data has a nested structure, whereby students are nested in schools. For the analyses, we will include school-level and student-level weights, as advised by Zuehlke and Vandenplas (2011). Multilevel analyses also allow us to focus on individual-level outcomes taking individual-level perceptions of citizenship education at school into account.

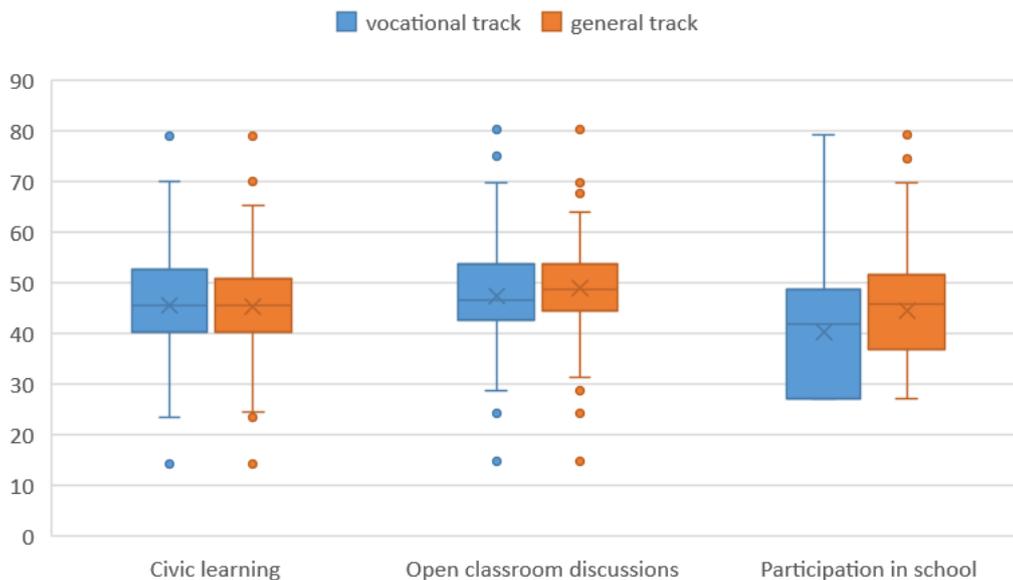
To do the multilevel analysis, we follow a forward stepwise procedure. We build the interaction model step by step. The first model is the null-model. In this model, we can discern the variance partitioning of students' political knowledge between the individual and the track-level context. In the following steps, we introduce independent variables that can explain the variance. In the first model, we include the three teaching and learning practices both as individual-level and as classroom-level variables and examine whether they are significantly related to students' political knowledge levels. In the second model, we add the schools' track as we expect this variable to influence students' political knowledge levels. This model also includes control

variables. In the third model, we examine how this track interacts with the teaching and learning practices as individual-level variables. The fourth model shows these interactions for the teaching and learning practices as classroom-level variables.

## Results

Figure 1 provides a descriptive overview of the differences between the school tracks in the civic learning opportunities provided. It shows that students in the general track report more classroom discussions and opportunities to participate at school compared to students in the vocational track. Given these track differences, we might not find these learning opportunities to show the mitigating inequality effects discussed earlier. On the other hand, as differences between students' opportunities to learn about civic topics at school are rather diffuse and small, such mitigating effects might well emerge for this learning opportunity.

Figure 1: Boxplots of teaching and learning practices by school track



Data: source 2016 IEA International Civic and Citizenship Survey - ICCS 2016  
 NB: The results are based on the Flemish and Dutch sample (n=5612), General track (n=4874), Vocational track (n=738). The mean values of the two school types in the civic learning condition are not significantly different. The other differences presented by the box plots are significant.

In Table 1, we examine the interactions between the two teaching and learning practices and students' track. The coefficients in this model are standardized, making it easier to compare the influence of the different variables, and by examining the variance partitioning in Flanders and the Netherlands, we can estimate the school-level impact of these variables on students' political knowledge levels. The variance partitioning provided by the null model (Model 0) in Table 1 shows that as much as 48.9% of the variance in students' political knowledge is between schools and 51.1% is between individuals within schools. In comparison to that of other individual-level outcomes such as attitudes and behaviours, the school-level variance in political knowledge is huge. It more than justifies doing a multilevel analysis to see if school-level conditions such as track have an impact on political knowledge. Two of the three teaching and learning practices in Model 1 are significantly related to students' political knowledge levels. The more often students perceive they can participate in politics or discuss politics, the higher their political knowledge. The effect of classroom discussions on political knowledge is stronger than that of the other teaching and learning practices. At the classroom level, classroom discussion has the strongest relation with students' political knowledge levels. The relation between formal civic learning opportunities and students' knowledge levels is negative at this level. Classroom level participation in school (PART) is not significantly related to political knowledge.

Model 2 in Table 1 includes the schools' track and the control variables. Students in the academic track appear to have significantly higher political knowledge levels than students in the vocational track, controlling for social and ethnic background, gender, and the six teaching and learning variables. The effects of the latter are similar to those in Model 1. We investigate the interactions in the next models. Model 3 shows there is a positive interaction between the schools' track and students' perceived opportunities to participate in school (PART\*Track) and the level of classroom discussions students report (OPDISC\*Track). Although Model 4, is less interesting to examine as it shows no additional explained variance compared to Model 2, it still shows there is also a comparable interaction effect at the classroom level between the schools' track and students' perceived opportunities to have classroom discussions. There

is a negative interaction effect between track and opportunities to learn about civic topics, but this effect is barely significant.

Since the mentioned interactions at the individual level between participation, classroom discussions, and the schools' track are positive, this indicates accelerating effects: students from the general track, who are likely to be already more knowledgeable, gain more political knowledge from opportunities to participate in school or from classroom discussions than students from the vocational track.

Table 1: an overview of analyses explaining students' political knowledge in relation to schools' track

	Model 0 Null model		Model 1 3 T&L-practices		Model 2 + track		Model 3 + track&interaction PART		Model 4 + track&interaction OPDISC		Model 5 + track & interaction CVLN		Model 6 + track&interactions control variables	
Within	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE			Coefficient	SE
Knowledge variance	1.000***	0.000	0.894***	0.015	0.893***	0.015	0.891***	0.015	0.891***	0.015	0.893***	0.015	0.876***	0.016
CVLN			0.027 <sup>n.s.</sup>	0.027	0.025 <sup>n.s.</sup>	0.027	0.026 <sup>n.s.</sup>	0.027	0.025 <sup>n.s.</sup>	0.027	0.018 <sup>n.s.</sup>	0.050	0.083 <sup>n.s.</sup>	0.046
OPDISC			0.269***	0.022	0.268***	0.022	0.269***	0.022	0.136*	0.062	0.268***	0.022	0.147*	0.059
PART			0.118***	0.028	0.121***	0.000	0.035 <sup>n.s.</sup>	0.035	0.123***	0.028	0.121***	0.027	0.032 <sup>n.s.</sup>	0.043
PART*Track							0.096*	0.048					0.089 <sup>n.s.</sup>	0.046
OPDISC*Track									0.142*	0.024			0.131*	0.059
CVLN*Track											0.007 <sup>n.s.</sup>	0.052	-0.057 <sup>n.s.</sup>	0.053
Sex (0=boy)													0.075***	0.019
Parents highest occupation													0.029 <sup>n.s.</sup>	0.024
IMM (0= no migration background)													-0.073***	0.016
Between														
Track (0=voc)					0.710***	0.031	0.712***	0.031	0.724***	0.030	0.710***	0.031	0.727***	0.030
Knowledge intercept	8.732***	0.396	9.751***	0.513	8.272***	0.506	8.267***	0.505	8.111***	0.508	8.273***	0.506	8.230***	0.520
Knowledge variance	1.000***	0.000	1.000***	0.000	0.496***	0.041	0.490***	0.044	0.475***	0.044	0.496***	0.044	0.471***	0.044
ICC	0.489		0.427		0.430		0.430		0.427		0.430		0.427	

NB: The results are based on the Flemish and Dutch sample (n=5478). For each model the first column shows the coefficients, the second column shows the standard errors. \*\*\* Significant at the .001 level, \*\* significant at the .01 level, \*significant at the 0.5 level, <sup>n.s.</sup> not significant.

When examining similar relationships related to students' political engagement, Appendix 5 shows a comparable positive relation between teaching and learning practices and students' political engagement. Model 3 shows that, when students perceive more opportunities for classroom discussions or opportunities to learn about civics in the classroom, they also report higher levels of political engagement. Model 3 also shows at the school level, when classes report more opportunities to participate, students in these classrooms seem to be more engaged. We can further see that the relationship between students' background characteristics and their political engagement is less clear in Appendix 5. This table in Appendix 5 only shows that girls are more engaged than boys. Comparable to the model on political knowledge, the tracking variable is positively related to students' engagement. Although the effect is not significant, the coefficient is not affected by the inclusion of control variables, suggesting that this effect is not merely representing a selection effect.

Next, we also examined whether the results are any different if we conduct the analysis on the Netherlands and Flanders samples separately (Appendix 1; Table A1a and A1b). In the Dutch models (Table A1b, we see a positive interaction of PART with track (Model 3) and positive interactions of PART and OPDISC with track at the classroom level (Model 4). In Flanders (Table A1a) we find a positive interaction between OPDISC and track (Model 3) and a comparable interaction at the classroom level (Model 4) These results are in line with those based on the pooled sample in that none of them show significant *negative* interaction effects (which would indicate cross-track compensatory effects of the civic learning opportunities).

## **Conclusion and Discussion**

This article investigates how students' perceptions of civic teaching and learning practices (classroom discussion, participation in school and civic learning opportunities) relate to their political knowledge in different educational tracks in Flanders (Belgium) and The Netherlands. First of all, the study provides evidence of the positive relationship between teaching and learning practices and students' political knowledge. The more activating teaching and learning practices schools use, the better the students' political knowledge. These results are in agreement with the findings of earlier research (Quintelier, 2010; Torney-Purta, Lehmann, Oswald, & Schulz, 2001).

This article moreover confirms that institutional characteristics matter. Even when controlling for the individual background characteristics, students in general tracks show higher political knowledge levels than students in the vocational track. These findings highlight the impact educational tracking can have in widening disparities in civic competences and are in line with earlier research (Danhier & Martin, 2014; Hoskins & Janmaat, 2016; Janmaat, Mostafa & Hoskins, 2014). Also, when looking into other dependent variables, like civic engagement, the differences between tracks persist.

In this study, we add to the results of these studies by analyzing how teaching and learning practices interact with the educational track in explaining variations in students' political knowledge. Among the three learning practices that we examined, both participation in school and the opportunity for classroom discussions showed a significant interaction with track. These interactions are positive, meaning that students from the general track benefit more from these opportunities than those in the vocational track. We can conclude that teaching and learning practices to foster civic knowledge and engagement are not able to compensate for the differences between tracks in civic knowledge. On the contrary, these practices, particularly classroom discussions, even widen the cross-track political knowledge gap. This finding is supported by the analysis on political engagement, which confirms that in a tracked schooling system, the teaching and learning practices do not diminish cross-track differences in civic outcomes. The significance of this finding is that it is likely to undermine the compensatory effects of these practices in terms of diminishing differences in political engagement between disadvantaged and privileged students, as found by various previous studies (Campbell 2008, Neundorf et al. 2016; Hoskins et al. 2017). It is established that students from disadvantaged backgrounds are overrepresented in vocational tracks. While they might get the same quantity of teaching and learning opportunities than their general track peers, the quality of the teaching efforts can be poorer and hence less stimulating for them than for students from middle-class backgrounds. Also, for civic education, good differentiation is the key to success in both the vocational and the general track. Results here indicate that indeed, the mere quantity of civic learning opportunities is not enough, and inequalities in civic knowledge and participation persist and grow between tracks. High quality differentiated learning opportunities in each track might counteract this acceleration dynamic.

This paper also has its limitations. Firstly, the results are based on student perceptions of teaching and learning practices. Both students from the vocational and general track answered the same questions. When both groups give the same answers, we assume that the teaching and learning practices are comparable. However, the students' perceptions related to their citizenship and involvement at school may not be the same in different contexts (Nieuwelink et al., 2019). Schulz (2009) explains how a measurement invariance test is needed when comparing perceptions. He describes how the IEA includes multiple measurement tests to analyze how the scales can be used and compared in different international contexts. Future research examining the differences between teaching and learning practices can include a comparable invariance test to assess whether perceptions related to teaching and learning practices in the vocational and the general track are comparable. As suggested by citizenship education review studies (Barton, 2019; Knowles, Torney-Purta, & Barber, 2018), this type of invariance testing would also benefit quantitative studies assessing the effect of civic learning opportunities on civic outcomes.

It is possible that the teaching and learning practices are not the main or most important difference between tracks. It can be that these practices coincide with teachers' expectations connected to the different tracks. Teachers in the vocational track, for example, have different expectations than teachers in the general track (Leenders, Veugelers, & De Kat, 2008). Hence, student-teacher relationships can differ and influence the way teachers, as role models, can influence students' civic outcomes (Sampermans & Claes, 2018). If we want to gain more insight into the differential impact of teaching and learning practices between the various tracks, we will need to learn more about how these relationships and expectations differ quantitatively and qualitatively because an equal and comparable provision of high-quality teaching and learning practices can be the key to a more equal kind of citizenship.

Future research should focus on the differences in the civic learning processes related to the teaching and learning practices to better understand how the learning process of vocational students regarding civics differs from the students in the general tracks. This article has shown that vocational students do not benefit more from civic learning opportunities in terms of enhanced political knowledge than students from the

general track. Future research should try to unravel how schools in a tracked system can provide more equal civic outcomes. Our support for the hypothesis that civic learning opportunities do not show their mitigating effects in a tracked context suggests it is not sufficient to only provide an equal amount of opportunities to students.

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## Appendices

### Appendix 1

Table A1a: An overview of analyses explaining students' political knowledge in relation to schools' track: Model 2 – Model 4. The

#### Netherlands

	Dutch Model 2		Dutch Model 3		Dutch Model 4 Part		Dutch Model 4 Sopd		Dutch Model 4 Cvln	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Within										
Knowledge variance	0.897***	0.019	0.892***	0.019	0.879***	0.020	0.881***	0.019	0.882***	0.019
CVLN	0.054 <sup>n.s.</sup>	0.035	0.055 <sup>n.s.</sup>	0.035	0.060 <sup>n.s.</sup>	0.035	0.059 <sup>n.s.</sup>	0.034	0.024 <sup>n.s.</sup>	0.059
OPDISC	0.264***	0.029	0.265***	0.029	0.266***	0.029	0.137 <sup>n.s.</sup>	0.081	0.265***	0.029
PART	0.095**	0.036	-0.019 <sup>n.s.</sup>	0.055	-0.026*	0.055	0.086*	0.036	0.083*	0.036
PART*Track			0.129*	0.059	0.124*	0.059				
SOPD*Track							0.138 <sup>n.s.</sup>	0.081		
CVLN*Track									0.038 <sup>n.s.</sup>	0.064
Sex (0=boy)					0.096***	0.022	0.095***	0.022	0.098***	0.022
Parents highest occupation					0.018 <sup>n.s.</sup>	0.029	0.019 <sup>n.s.</sup>	0.029	0.018 <sup>n.s.</sup>	0.029
IMM (0= no migration background)					-0.047*	0.022	-0.047*	0.023	-0.045*	0.023
Between										
Track (0=voc)	0.704***	0.039	0.711***	0.038	0.710***	0.038	0.719***	0.037	0.703***	0.039
Knowledge intercept	7.847***	0.603	7.828**	0.600	7.848***	0.600	7.689***	0.602	7.877***	0.598
Knowledge variance	0.504***	0.054	0.494***	0.054	0.496***	0.054	0.483***	0.054	0.506***	0.055
ICC	0.459		0.459		0.453		0.461		0.453	

Survey data of the 2016 IEA International Civic and Citizenship Survey - ICCS 2016

NB: The results are based on the Flemish (n=2811) and Dutch (n=2667) sample (n=5478). For each model the first column shows the standardized coefficients, the second column shows the standard errors.\*\*\* significant at the .001 level, \*\* significant at the .01 level, \*significant at the 0.5 level, <sup>n.s.</sup> not significant.

Table A1b: An overview of analyses explaining students' political knowledge in relation to schools' track: Model 2 – Model 4. Flanders

	Flemish Model 2		Flemish Model 3		Flemish Model 4 Part		Flemish Model 4 Sopd		Flemish Model 4 CvlN	
	Coefficient	SE								
Within										
Knowledge variance	0.888***	0.018	0.887***	0.018	0.868***	0.020	0.886***	0.020	0.867***	0.020
CVLN	-0.035 <sup>n.s.</sup>	0.035	-0.035 <sup>n.s.</sup>	0.035	-0.025 <sup>n.s.</sup>	0.034	-0.024 <sup>n.s.</sup>	0.034	0.024 <sup>n.s.</sup>	0.059
OPDISC	0.272***	0.026	0.272***	0.025	0.268***	0.026	0.137 <sup>n.s.</sup>	0.086	0.268***	0.025
PART	0.166***	0.032	0.188*	0.075	0.170*	0.074	0.159***	0.031	0.159***	0.031
PART*Track			-0.023 <sup>n.s.</sup>	0.068	-0.013 <sup>n.s.</sup>	0.068				
SOPD*Track							0.141 <sup>n.s.</sup>	0.088		
CVLN*Track									-0.073 <sup>n.s.</sup>	0.071
Sex (0=boy)					0.034 <sup>n.s.</sup>	0.032	0.032 <sup>n.s.</sup>	0.032	0.033 <sup>n.s.</sup>	0.032
Parents highest occupation					0.054 <sup>n.s.</sup>	0.041	0.056 <sup>n.s.</sup>	0.041	0.054 <sup>n.s.</sup>	0.041
IMM (0= no migration background)					-0.188***	0.024	-0.110***	0.024	-0.108***	0.024
Between										
Track (0=voc)	0.728***	0.052	0.728***	0.053	0.735***	0.053	0.749***	0.050	0.732***	0.052
Knowledge intercept	8.971***	0.839	8.969***	0.841	9.386***	0.899	9.283***	0.909	9.462***	0.902
Knowledge variance	0.469***	0.075	0.470***	0.077	0.459***	0.077	0.439***	0.076	0.464***	0.075
ICC	0.459		0.459		0.359		0.362		0.358	

Survey data of the 2016 IEA International Civic and Citizenship Survey - ICCS 2016

NB: The results are based on the Flemish (n=2811) and Dutch (n=2667) sample (n=5478). For each model the first column shows the standardized coefficients, the second column shows the standard errors. \*\*\* significant at the .001 level, \*\* significant at the .01 level, \*significant at the 0.5 level, <sup>n.s.</sup> not significant.

## **Appendix 2: Students' participation at school**

Students were asked how often they participated in civics related activities ("within the last twelve months," "more than a year ago," or "never."):

- a) Voluntary participation in school-based music or drama activities outside of regular lessons
- b) Active participation in a debate
- c) Voting for <class representative> or <school parliament>
- d) Taking part in decision-making about how the school is run
- e) Taking part in discussions at a <student assembly>
- f) Becoming a candidate for <class representative> or <school parliament>

## **Appendix 3: Students' perception of openness in classroom discussions**

Students were asked how frequently ("never," "rarely," "sometimes," "often") social and political issues were discussed during lessons:

- a) Teachers encourage students to make up their own minds
- b) Teachers encourage students to express their opinions
- c) Students bring up current political events for discussion in class

d) Students express opinions in class even when their opinions are different from most of the other students

e) Teachers encourage students to discuss the issues with people having different opinions

f) Teachers present several sides of the issues when explaining them in class

#### **Appendix 4: Students' civic learning opportunities at school**

Students were asked to what extent they have learned about the multiple topics ("to a large extent," "to a moderate extent," "to a small extent," "not at all")

a) How citizens can vote in local or national elections

b) How laws are introduced and changed in <country of test>

c) How to protect the environment (e.g., through energy-saving or recycling)

d) How to contribute to solving problems in the <local community>

e) How citizen rights are protected in <country of test>

f) Political issues and events in other countries

g) How the economy works