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Effects of school quality, school citizenship policy, and student body composition on the acquisition of citizenship competences in the final year of primary education

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This study examines the effects of general educational quality of schools, school citizenship policy, and ethnic homogeneity of the student body on the acquisition of citizenship competences in the final year of primary education. The theoretical framework is based on developmental, psychological, and sociological studies into effects of social context on educational outcomes and research into effective schools. The effects of school quality, school policy, and student population were analysed using 2-level (students, school) multilevel models. The results show that differences in citizenship competences between students and schools are mainly explained by factors at student level. Although the school also appeared to play a role, the school variables used in the analysis did not offer sufficient explanation for these differences. In order to further investigate the relationship between school factors and students' citizenship, more insight is needed into characteristics of citizenship practices of schools.

Keywords: citizenship; youth; effective schools; student body composition; ethnic diversity

Introduction

From the 1990s onwards, Australia, Canada, the US, and almost all European countries (Euridyce, 2005) reinforced citizenship as a compulsory school subject. In different countries, the concept of citizenship is specified differently in relation to political and societal developments (Ainley, Schulz, & Friedman, 2013; Euridyce, 2012). In the education legislation entitled "Promotion of active citizenship and social integration", the Dutch government attempted to promote citizenship as a communal and shared perspective on the part of young people with regard to the contribution that they can make as citizens to society irrespective of ethnic or cultural background (Ministerie van Onderwijs en Wetenschappen [Dutch Ministry of Education and Science], 2005). Due to the constitutional freedom of education, schools are free to design citizenship education in their own manner under the condition that this is done in a systematic manner, with respect for the basic values of the democratic state, and with an underlying vision of citizenship and integration. In educational practice, pedagogical objectives are found varying from a focus on social adjustment and responsible behaviour to a focus on

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being able to make one's own critical contribution to society (Ten Dam & Volman, 2003; Veugelers & De Kat, 2003). As citizenship is a normative and therefore essentially contested concept, more or less the same holds for other countries (e.g., Westheimer & Kahne, 2004). Westheimer's (2008) concept of democratic citizenship reflects such a broad interpretation of citizenship emphasizing the capacity to function in a socially accepted, responsible manner within a community but also the ability to critically evaluate different perspectives, explore strategies for change, and reflect upon (in)equality, and democratic engagement. In most (quantitative) instruments to measure students' citizenship, this wide-ranging perspective on citizenship is unfolded in knowledge, skills, and attitudes (e.g., Schulz, Ainley, Fraillon, Kerr, & Losito, 2010; Ten Dam, Geijssel, Reumerman, & Ledoux, 2011).

Despite an increasing body of research (e.g., Geboers, Geijssel, Admiraal, & Ten Dam, 2013; Keating, Kerr, Benton, Mundy, & Lopes, 2010; Kerr, Sturman, Schulz, & Burge, 2010), empirical knowledge about the effectiveness of schools in promoting citizenship is limited. Research so far has focused primarily on differences in citizenship outcomes between students (related to gender, socioeconomic status [SES], ethnic background, age, academic achievement: e.g., Cleaver, Ireland, Kerr, & Lopes, 2005; Geijssel, Ledoux, Reumerman, & Ten Dam, 2012; Ireland, Kerr, Lopes, & Nelson, 2006; Schulz et al., 2010; Torney-Purta, 2002). To answer the question what schools can accomplish, researchers have mainly concentrated on educational programmes and pedagogical climate. A recent review study shows different effects and effect sizes – ranging from small or medium to substantial – depending on the variables indicating citizenship competences (Geboers et al., 2013). International comparative research, however, shows that variance is largely explained by differences between students, while differences between schools account for approximately 25% of the variance found (Schulz et al., 2010). In a recent study into the effectiveness of secondary schools, Isac, Maslowski, Creemers, and Van der Werf (2014) found that they could predict civic knowledge on the basis of factors at classroom level and national level. They concluded that schooling and educational policy impact students' success in the domain of civic knowledge. Factors at school level which have been found to have a positive influence on students' civic knowledge are related to stimulating a democratic classroom climate, nurturing positive interpersonal relationships, and creating opportunities for students to learn and practice democracy. These results are in line with research into political socialization (cf. Barrett & Brunton-Smith, 2014) and the review study of Geboers et al. (2013) on citizenship education, which shows that an open and democratic classroom climate with room for discussion and dialogue appears to effectively promote the development of citizenship attitudes and skills. Moreover, a formal curriculum that includes citizenship projects and courses also appears to comprise an effective type of citizenship education.

Although research indicates that schools contribute to the acquisition of citizenship competences, little is known about relevant school characteristics besides aspects of curriculum content and pedagogical climate. The aim of this study is to add to the modest knowledge base of school effectiveness in the domain of citizenship by gaining a better understanding of the possible influence of school factors on citizenship competences. To what extent do schools differ with regard to the citizenship competences of their students? How can these differences be explained? In our study, we investigate three tentative explanations: the overall educational quality of the school, aspects of school citizenship policy, and the role of the ethnic composition of the student body. We focus on the final year of Dutch primary education (Grade 6). Although much of the earlier research

concerns the time students spend in secondary education (which is considered to be an important period, cf. Niemi & Junn, 1998), it seems likely that the acquisition of citizenship competences builds on the development of relevant attitudes, skills, and knowledge in primary education. The statutory obligation of Dutch primary schools to teach citizenship, the corresponding learning objectives laid down in legislation, and the way in which schools realize this statutory citizenship obligation (Geboers, 2014; Inspectie van het Onderwijs [Inspectorate of Education], 2011) raise the question to what extent primary schools contribute to citizenship development. There are indications that citizenship development slows down or even stagnates in secondary education (Cleaver et al., 2005; Geijsel et al., 2012), which underlines the importance of an understanding of the contribution of primary education in this respect. Moreover, political socialization research shows that early adolescents (age 10 to 12 years) start to develop a sensitivity to tensions and dilemma's in society and democracy (e.g., Helwig, 1998; Helwig & Kim, 1999). Torney-Purta and Amadeo (2011) argue for directing serious attention to enhancing the citizenship of early adolescents from the age of 10 based on the everyday life experiences, because of the great potential of this developmental phase for acquiring citizenship skills and dispositions.

In international contemporary discussions concerning citizenship, the concept is primarily linked to the notion of democracy (Thayer-Bacon, 2008; Torney-Purta, 2004; Westheimer & Kahne, 2004). However, this still leaves room for different interpretations. As perceptions of citizenship vary, so do objectives of citizenship education. Research conducted by the Dutch Inspectorate of Education shows that schools focus on different aspects of citizenship, varying from social skills, codes of behaviour, and proper conduct to getting acquainted with other cultures, diversity, learning about democracy and key values of democratic societies (Inspectie van het Onderwijs, 2011). In the national cohort study, which we use in this article, citizenship is determined by a broad set of competences which young people need to deal with others in our diverse and democratic society. Actual situations which are meaningful to young people are key in revealing "young citizenship" (see Geijsel et al., 2012). We therefore define citizenship competences as the knowledge, skills, attitudes, and reflection needed by young people in a democratic and multicultural society to adequately fulfil social tasks that are part of their daily lives (Ten Dam & Volman, 2007).

The school in relation to young citizenship

General educational quality and school citizenship policy

Research into effective schools carried out over more than 40 years has convincingly demonstrated that learning outcomes are linked to school factors (e.g., Scheerens & Bosker, 1997; Scheerens, Luyten, Steen, & Luyten-de Thouars, 2007; Townsend, 2007). However, research into school effectiveness has paid only modest attention to non-cognitive learning outcomes, that is, results in the social domain. Hence, when it comes to young citizenship and whether schools make a difference, the empirical knowledge gained thus far is limited.

Despite various lines of research focusing on specific factors, we do not have a coherent understanding at the school level of the factors explaining differences in outcomes between schools. Earlier research into aspects of political socialization (e.g., Hahn, 1998; Niemi & Junn, 1998; cf. Barrett & Brunton-Smith, 2014) and citizenship education (cf. Geboers et al., 2013) points to the importance of an open and democratic climate, in

which students are listened to and where there is room for discussion. Factors such as the content taught, the place of the theme in the curriculum, the weight it is given by teachers, and the assessment of outcomes also matter (cf. Keating et al., 2010). We only have a partial understanding, however, of the characteristics that make schools effective in the domain of citizenship and in the interplay between these factors and the characteristics that make schools effective in terms of academic achievement. In this paper, we will build on the knowledge from earlier research into citizenship-specific school factors and combine it with tentative explanations based on studies of the effects of the social context on educational outcomes and research into effective schools.

Our initial assumption is that school characteristics which have a proven positive link to academic achievement also impact social outcomes. This certainly applies to characteristics of the school's overall organization. For example, research into school effectiveness has shown that schools with similar student populations achieve different performance levels (cf. Scheerens & Bosker, 1997; Teddlie & Reynolds, 2000; Townsend, 2007). We expect that successful acquisition of citizenship competences by students also depends to some extent on school characteristics. A distinction can therefore be made between general educational quality, on the one hand, and aspects of school citizenship policy, on the other. Preconditions indicating educational quality and correlating positively with cognitive learning potentially play an important part. General aspects associated with educational quality and academic achievement include quality of the curriculum, quality of teaching, emphasis on achievement, and mastery of basic skills and school climate (see, e.g., Scheerens & Bosker, 1997; Scheerens et al., 2007; Slavin, 2008; Teddlie & Reynolds, 2000; Townsend, 2007). An example of this is effective school leadership. Research has shown that one of the factors which contributes to student engagement, achievement in the academic domain, and successful school development is a school leader who gets the organization behind a vision, organizes for a transfer of the vision into clear goals, and motivates teachers to jointly set a course to realize them (Hallinger & Heck, 2010; Leithwood, Seashore Louis, Anderson, & Wahlstrom, 2004). We assume that strong school leadership will also help to set goals in the social domain and directs the school organization towards these goals, for example, by paying attention to realizing the desired school climate. This leads to the expectation that – all other factors being equal – schools with a strong leader are more successful in teaching citizenship competences. Another example is quality assurance that contributes to systematic and school-wide coordinated activities appropriate to the learning goals, monitoring their implementation and results, and regular readjustment based on this monitoring. We assume that a school with a well-developed quality assurance system will – all other factors being equal – be more successful in teaching citizenship competences, for example, through a pedagogical policy geared to the learning goals and strengthened by a shared approach achieved by regular discussion and evaluation. It may be assumed that factors existing in schools that are effective in the academic domain (e.g., evaluation of what students learn) will also have a positive influence on learning in other domains or contribute to this learning indirectly, by strengthening the conditions and processes for effective citizenship education.

Moreover, differences in aspects of school citizenship policy are expected to generate differences in students' citizenship competences. Students' citizenship competences may be assumed to depend partly on the degree of attention given to aspects of citizenship in the classroom. Citizenship competence further depends on the general pedagogical climate of the school and the emphasis placed on citizenship by the school, that is, the educational goals for citizenship (cf. Geboers et al., 2013; Hahn, 1998;

Keating et al., 2010; Niemi & Junn, 1998; Torney-Purta, Lehmann, Oswald, & Schulz, 2001). Whereas we expect a general effect from the overall characteristics of educational quality on the acquisition of citizenship competences (especially of civic knowledge), we would expect a further effect of school citizenship policy on specific aspects of citizenship.

Effects of student body composition

Research findings have shown that the composition of the student body does affect learning outcomes. Positive effects on both cognitive and non-cognitive outcomes have been found for schools and classrooms featuring larger contingencies of non-minority students and students from higher socioeconomic groups (e.g., Denessen, Driessen, & Bakker, 2010; Perry & McConney, 2010; Sirin, 2005). Studies into the effects of school diversity on non-cognitive outcomes have been based largely on Allport's contact hypothesis (1954). More inter-ethnic contact is associated with less prejudice, for example (Pettigrew & Tropp, 2006). On the other hand, Lindo and Pratsinakis (2007) conclude that mixed classes can in some cases lead to avoidance behaviour, conflict, and/or negative perceptions. This, in turn, may adversely affect the quality of inter-ethnic relationships. Ethnic heterogeneity does not necessarily produce better inter-ethnic relations. This has also been illustrated by research into tensions in multi-ethnic classes (Radstake & Leeman, 2007). Campbell's study (2007), which was based on US data from the Civic Education Study, shows that ethnic diversity leads to less political discussion in the classroom and students who are less likely to take part in elections in the future and to inform themselves about political candidates.

The assumption that school composition influences citizenship outcomes is subject to different interpretations. Earlier research has produced evidence for both positive and negative effects. Comparative international research on social trust (an aspect of citizenship) shows that the average effect of ethnic diversity in high schools, as measured in 22 participating countries, is not significant for the degree of social trust. The 1999 Civic Education Study analysis also points to interaction effects, however; ethnic diversity was found to have a significant negative effect in some countries, while in others a significant positive effect was observed (Kokkonen, Esaïasson, & Gilljam, 2011).

Hence, the assumption that the ethnic composition of the student body influences citizenship outcomes leads to different expectations about the nature of any such relationship. Both positive and negative effects are conceivable, depending on the mechanism which is thought to be at play and the aspect of citizenship focused on. For this reason, current knowledge does not allow us to formulate well-founded specific expectations for the situation in The Netherlands. From one point of view, it could be expected that more homogeneous groups would help to create favourable conditions for the acquisition of citizenship competences. This reasoning is in line with research in the fields of developmental psychology and sociology on the importance of the broader social context for personal development. Based on Bronfenbrenner's ecological development model (1979), it can be assumed that a more congruent social setting is more conducive to development. Education and development take place in a system of concentric circles, such as the family, the peer group, and the wider social environment, which would include the school and the neighbourhood. The more these social settings are in line with each other, and the more the networks within these circles overlap, the greater the mutual trust and the effort put into achieving common goals. This leads to the assumption that such a context is more effective for education and development (cf. Cochran, Larner, Riley, Gunnarsson, & Henderson, 1990).

Coleman's functional community theory similarly emphasizes the importance of consistency. A functional community, as described by Coleman and Hoffer (1987), consists of a relatively closed network characterized by reciprocal social relationships over several generations and a system of values that is strongly interwoven with the network around the school. The social context of such communities is characterized by trust, common goals, and effective norms. According to Coleman and Hoffer, young people living in these communities benefit both socially and academically. Research in Dutch schools has partially confirmed similar effects. Congruence of values is indeed associated with cognitive learning achievements (Dijkstra, Veenstra, & Peschar, 2004). Likewise, a congruent social context may well have a positive effect on the development of citizenship competences. After all, a homogeneous environment is often characterized by relatively strong internal social cohesion. This boosts bonding social capital (Putnam, 2000) and is beneficial to the development of social norms and social commitment (cf. Lott, 2008). The effect of closed networks does have a downside. Morgan and Sorensen (1999), for example, point to the difference between norm-enforcing and horizon-expanding social capital. Depending on the network's values and norms and the citizenship components that are deemed important, arguments for both positive and negative effects can be put forward. A homogeneous environment has the potential to contribute to bonding social capital, for example, by strengthening in-group trust. A heterogeneous environment, on the other hand, may strengthen out-group trust. As for the acquisition of citizenship competences, various effects may be expected. In view of the above mechanisms, we can imagine, for example, that homogeneous environments have a positive effect on the acquisition of civic knowledge, social skills, and rules of conduct, whereas heterogeneous settings kindle the potential for dealing with diversity and conflict resolution. Our analysis of this point cannot pretend to be more than exploratory.

In sum, the present study focuses on answering three questions: *To what extent are there positive correlations between students' citizenship competences and (a) general aspects of school quality, (b) aspects of school citizenship policy, and (c) ethnic composition of the student body?*

Research design

Data

Research was based on data from a number of sources. We started with COOL⁵⁻¹⁸, a large-scale and representative national longitudinal cohort study, for which the surveys were conducted in the spring of 2008. This database contains data on the citizenship competences of students in the final year of Dutch primary education (Grade 6, age 11). Part of the sample is representative for the country as a whole (approximately 400 schools). Another part features an overrepresentation of schools with a relatively high percentage of students from disadvantaged groups. As we wanted to have sufficient variation in ethnic and social origin to allow for a fairly reliable estimate of the connection between school body composition and ethnic and social background and the dependent variables, we included the supplementary sample, thus creating an a-priori, non-representative sample of students (e.g., Peetsma, Van der Veen, Koopman, & Van Schooten, 2006), covering approximately 550 primary schools and 12,000 students.

The Dutch Inspectorate of Education gathered information on general school quality characteristics and citizenship education in schools. These data were collected as part of the regular school inspections conducted by the Inspectorate in order to monitor the

development of citizenship education. All schools in The Netherlands are subject to standardized quality assessments. The citizenship education data used in this study were taken from annual random samples of primary schools taken between 2006 and 2010. Characteristics of citizenship education hardly varied from one year to the next (Inspectie van het Onderwijs, 2011). Analyses performed to determine the effects of a particular year of measurement confirm this. On that basis, we combined the various representative samples (based on identical sampling procedures) into a single database which included 1,448 schools. Similarly, the Dutch Inspectorate of Education gathered data on general school characteristics related to educational quality. For our analyses, we used the assessments of the educational quality of primary schools between 2006 and 2010.

The data used for our analyses pertain to students and schools included in each of the above data sets. After combining the various data, we ended up with a dataset of 91 primary schools in The Netherlands and 1,730 students in their final year (Grade 6) of primary education (see Appendix 1). Although the distributions of both the final and the initial data sets used in our analysis are representative of the population (see Appendix 1), the purpose of our exploratory analysis, however, is not population estimates but the analysis of characteristics that can explain differences between schools.

Variables

Student background variables

Student variables included gender, migrant background, and educational level of parents as measured in COOL⁵⁻¹⁸. Information was drawn from school records. The educational level of parents was used as an indicator of socioeconomic status (SES). This variable was classified into four ordinal categories (see Appendix 1) and determined by the parent with the highest level of education. Migrant background was defined as a nominal variable. If the mother was born in The Netherlands, the student was classed as non-migrant; if not, the student was classed as having a migrant background. COOL⁵⁻¹⁸ also includes the students' scores on national standardized achievement tests (Cito) in numeracy and reading comprehension. These scores were used as an indicator of the students' cognitive ability.

School variables

One variable was constructed as an indicator of school body composition. The school's ethnic diversity was determined by calculating the Herfindahl index (0 to 1) based on the percentages of students of a particular ethnic group (Dronkers, 2010).¹ To construct the school variables, calculations were based on all available COOL data of a school, including data on Grade 0 and Grade 3 students, for whom data on ethnic background and socioeconomic status were also collected. To control for the correlation between migrant background of students and socioeconomic status of parents, the analysis also included the percentage of students in the class with low-educated parents. Low-educated parents were defined as those having completed only primary or junior secondary vocational education.

The variables measuring the general educational characteristics of schools are based on expert judgements given by professional inspectors as part of the assessment of the educational quality of primary schools. All variables were coded using 4-point scales (ranging from *poor* to *good*) as part of a standardized framework containing detailed

observation instruments and meticulous instructions for rating, thus offering high inter-rater reliability. The quality aspects assessed by the Inspectorate correspond significantly with characteristics found to be relevant in research into effective schools (Scheerens, Seidel, Witziers, Hendriks, & Doornekamp, 2005). The educational characteristics of schools were defined by approximately 30 variables measuring subject matter, teaching time, the educational approach and strategies used by teachers, the tailoring of teaching to students' needs, students' attitude towards learning, school climate, support and counselling, the school's quality assurance system, and the students' learning achievements. An initial selection was made from these variables: Variables with more than 15% missing values and variables without variance were left out. Of the remaining variables, all variables which were significantly associated with one or more of the dependent variables in a multilevel analysis (with variables at individual level and variables relating to student body composition) were retained for further analysis.²

Four indicators were available to assess the characteristics of the school's citizenship education. These ordinal variables were taken from school self-reports (questionnaire by school principal) and indicate:

- whether the school had developed a vision for citizenship education (No; Yes, but vision not yet fully developed; Yes, vision developed);
- the frequency with which attention was paid to various aspects of citizenship (No attention; A few times every year; Once a month; Almost weekly; Daily);
- the extent to which the school had formulated learning objectives for these aspects (No learning objectives; General learning objectives; Learning objectives for each grade; Learning objectives for each student); and
- whether the school had experienced difficulties in implementing citizenship education (No; Yes)

In order to understand the nature of citizenship education, the Dutch Inspectorate of Education gathered information on citizenship content taught by schools, also on the basis of school self-reports. Content categories included social skills, rules of conduct, learning about other cultures, values and democracy, the school as a place to practice citizenship, and citizenship as part of the school's religious or moral education. For each category, information was gathered on learning objectives, the schools' vision, and how often the category received attention.

After the initial selection process described above, significant variables were included in the analyses. They included the extent to which the school's vision for citizenship was developed, the amount of time dedicated to teaching social skills, and the extent to which learning about other cultures had been formulated as a learning objective.

Students' citizenship competences

Citizenship competences were measured using the Citizenship Competences Questionnaire (CCQ; for an extensive description, including information on the construct validity, see Ten Dam, Geijsel, Ledoux, & Meijer, 2013; Ten Dam et al., 2011), which distinguishes four social tasks considered to be representative of and meaningful for the actual practice of citizenship by young people between 11 and 16: acting democratically, acting in a socially responsible manner, dealing with conflicts, and dealing with differences (see Appendix 2 for the conceptual framework and a description of the content of the scales). The questionnaire measures the knowledge, skills, attitudes, and reflection that

young people need to adequately address the everyday social challenges of living in a democratic and pluralistic society. The questionnaire consists of 94 items on citizenship competences, which were divided into four components: knowledge, attitude, skills, and reflection (see [Appendix 2](#)).

Knowledge was tested using multiple-choice items with three response options (dichotomous measurement level). The students had to choose what they considered the best option, for example: “All children have a right to: (a) an allowance, (b) choose who they want to live with, (c) education” (the correct answer is “c”) or “Your teacher is looking for five pupils to organize a school party. What is a democratic manner for choosing these pupils? (a) the teacher chooses five pupils who are good at organizing, (b) the teacher has the class vote on who will be allowed to do this, (c) the teacher closes his or her eyes and points to five pupils” (the correct answer is “b”).

Attitudes, skills, and reflection were measured on 4-point Likert scales with survey-style items. The general question accompanying the attitude items is “How well does this statement apply to you?” Sample statements are: “I like knowing about different types of religions” or “People should listen carefully to each other, even when they have different opinions”. The basic form of the skill (i.e., self-efficacy) questions is: “How good are you at...” and then, for example: “finding a solution which everyone is satisfied with for a disagreement” or “making clear what you want in a discussion”. The basic form of the reflection questions is: “How often do you think about...”, for example, “whether students are listened to at your school” or “what you can do for people who are less well off than you”.

[Appendix 3](#) shows the reliability coefficients, average scores, and standard deviations for the component scales based on all students in the total COOL⁵⁻¹⁸ sample.

Analyses

Multivariate multilevel analyses were performed at school and student level by using MLwiN 2.30. As dependent variables, we took the four aspects of citizenship competence (knowledge, attitude, skills, and reflection). The four dependent variables were included simultaneously in the analyses. Advantages of this multivariate model compared to separate analyses for each dependent variable are that the statistical power is greater (reducing Type II error: failing to find an effect where in reality an effect does exist) and that the risk of Type I error (finding an effect where in reality no effect exists) is reduced because the correlation between the dependent variables is explicitly modelled (De Maeyer, Van den Bergh, Rymenans, Van Petegem, & Van Rijlaarsdam, 2010; Hox, 2002). Correlations on the student and school level were: between knowledge and reflection .11 and $-.30$; between knowledge and attitude .31 and .07; between knowledge and skills .22 and $-.08$; between reflection and attitude .56 and .86; between reflection and skills .46 and .83; and between attitude and skills .71 and .94, respectively. Six models were tested. First, the null model without independent variables was used to determine the distribution of variance over the two levels. Then the various group variables were added in five separate steps. In every step, separate regression coefficients for the independent variables were estimated.

In Model 1, the background variables were added: gender, migrant status, educational level of parents, and academic achievement in numeracy and reading comprehension. In Model 2, we included the variables relating to the research question on student body

composition (the ethnic diversity of the school) and to control for the effect of the parental level of education, the percentage of students with low-educated parents.

In the subsequent models, variables for the other research questions were added. Model 3 included the variables that measured the general educational quality of the school. Model 4 included the variables relating to the school's citizenship education. Finally, Model 5 included both the general quality variables (from Model 3) and the variables measuring the school's citizenship education (from Model 4).

Models 3, 4, and 5 were then tested to find out whether they deviated significantly from Model 2 (explanation of the variance based on student body composition). The sizes of the significant effects were calculated. The coefficients indicate the average effect of the significant variables when controlled for the other variables in the model. In our interpretation, we designated effect sizes in the usual manner: small (0.2), medium (0.5), and large (0.8). The results of the analyses are presented in the next section. Each of the four components of citizenship competences is described, followed by a summary table showing the effect sizes for Model 5. Effect sizes were calculated by dividing the raw effect scores by the square root of the total residual variance in the null model.³

The series of model tests are presented in [Tables 1 to 4](#) and summarized in [Table 5](#).⁴

Results

Knowledge

[Table 1](#) summarizes the results of the multivariate multilevel analyses of the knowledge component of citizenship for each of the models, assessing the effects of student and school variables on academic achievement test scores. Of the variance explained by the variables, 11% can be ascribed to factors at school level (see null model, intra-class correlation [ICC] .107), a quarter of which can be explained by student background variables (25%, Model 1).

The variables for student body composition (Model 2) explained 4% of the variance at school level, and variables for the schools' educational quality (Model 3) explained 8%.

The variables designed to measure aspects of citizenship teaching in the school explained 12% of the variance at school level (Model 4). When the citizenship aspects were combined with the general school quality variables (Model 5), they explained a total of 21% of the variance at school level. One of these variables correlated significantly with students' citizenship knowledge: Students in schools which worked with more specific objectives for learning about other cultures showed higher results on the knowledge test.

The analysis in Model 5 also resulted in significant estimates. The effect of ethnic diversity in schools on citizenship knowledge appeared significant (.052). It emerged, for example, that boys (.063) scored lower than girls. Students of Turkish descent (.057) scored lower than non-migrant Dutch students. Students from other migrant groups did not differ significantly in their scores from non-migrant students. Students who were better at reading comprehension and obtained higher scores in numeracy also scored better on the citizenship knowledge test.

Attitudes

Of the explained variance for citizenship attitudes, 11% can be ascribed to factors at school level (see [Table 2](#), null model, ICC = .111), a quarter of which is explained by student background variables (24%, Model 1). Student body composition (Model 2)

Table 1. Multilevel analysis – citizenship: knowledge.

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
School	0.003	0.001	0.002	0.001	0.002	0.000	0.002	0.000	0.002	0.000	0.002	0.000
Student	0.025	0.001	0.018	0.001	0.018	0.001	0.018	0.001	0.018	0.001	0.018	0.001
Total	0.028		0.020		0.020		0.020		0.020		0.020	
% explained variance at school level			25%		+4%		+8%		+12%		+21%	
% total explained variance			28%		+0%		+1%		+1%		+2%	
ICC	0.107											
Constant	0.752	0.007	0.219	0.048	0.218	0.049	0.085	0.126	0.268	0.074	0.095	0.142
Sex												
Boy			-0.064	0.007	-0.064	0.007	-0.063	0.007	-0.063	0.007	-0.063	0.007
Ethnic origin (ref = non-migrant)												
Turkey			-0.058	0.017	-0.058	0.018	-0.058	0.018	-0.058	0.018	-0.057	0.018
Morocco			-0.020	0.018	-0.020	0.018	-0.020	0.018	-0.020	0.018	-0.020	0.018
Suriname/Antilles			-0.001	0.020	-0.001	0.020	0.003	0.020	-0.002	0.020	0.002	0.020
Eastern Europe & other Western countries			-0.003	0.021	-0.005	0.021	-0.003	0.021	-0.007	0.021	-0.005	0.021
Other non-Western countries			0.006	0.017	0.004	0.017	0.005	0.017	0.004	0.017	0.005	0.017
Parents' education (ref = max. senior secondary vocational education)												
Max. primary school			-0.015	0.015	-0.013	0.015	-0.012	0.015	-0.013	0.015	-0.012	0.015
Max. junior sec. voc.			-0.017	0.009	-0.015	0.009	-0.015	0.009	-0.015	0.009	-0.015	0.009
Max. higher education			0.003	0.009	0.002	0.009	0.003	0.009	0.002	0.009	0.003	0.009
Learning achievements												
Test score for reading comprehension			0.004	0.000	0.004	0.000	0.004	0.000	0.004	0.000	0.004	0.000
Test score for numeracy			0.003	0.000	0.003	0.000	0.003	0.000	0.003	0.000	0.003	0.000
School composition												
% students with parents of low education					-0.001	0.000	-0.001	0.000	-0.001	0.000	-0.001	0.000
Ethnic diversity			0.048	0.028	0.048	0.028	0.046	0.027	0.055	0.027	0.052	0.026

(continued)

Table 1. (Continued).

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Aspects of school quality												
Language and numeracy offered to sufficient students up to & incl. Grade 6							0.045	0.026			0.048	0.025
Language and numeracy tailored to students' educational needs							0.004	0.020			0.007	0.019
Teachers ensure that students treat each other with respect							0.006	0.020			0.013	0.019
Teachers create a task-oriented working environment							0.011	0.019			0.010	0.018
School results are at least up to the level expected							-0.019	0.021			-0.021	0.020
Citizenship aspects at school												
Vision of citizenship developed in detail									-0.011	0.008	-0.013	0.008
Emphasis on learning social skills									-0.015	0.011	-0.012	0.011
Objectives for learning about other cultures									0.015	0.008	0.017	0.008

Note: Significant effects printed in bold.

Table 2. Multilevel analysis – citizenship: attitudes.

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
School	0.019	0.004	0.014	0.003	0.013	0.003	0.010	0.003	0.012	0.003	0.008	0.002
Student	0.152	0.005	0.133	0.005	0.132	0.005	0.132	0.005	0.133	0.005	0.132	0.005
Total	0.171		0.147		0.145		0.142		0.144		0.141	
% explained variance at school level			24%		+9%		+23%		+11%		+36%	
% total explained variance			14%		+1%		+2%		+1%		+3%	
ICC	0.111											
Constant	2.968	0.018	2.772	0.124	2.642	0.132	2.398	0.307	2.544	0.193	2.270	0.345
Sex												
Boy			-0.196	0.019	-0.197	0.019	-0.196	0.019	-0.198	0.019	-0.196	0.019
Ethnic origin (ref = non-migrant)												
Turkey			0.100	0.047	0.081	0.049	0.075	0.049	0.079	0.049	0.070	0.049
Morocco			0.304	0.047	0.287	0.049	0.281	0.049	0.287	0.049	0.280	0.048
Suriname/Antilles			0.132	0.053	0.115	0.054	0.123	0.053	0.118	0.054	0.123	0.053
Eastern Europe & other Western countries			0.068	0.056	0.060	0.056	0.061	0.056	0.064	0.056	0.066	0.056
Other non-Western countries			0.230	0.046	0.214	0.047	0.211	0.047	0.213	0.047	0.210	0.047
Parents' education (ref = max. senior sec. vocational education)												
Max. primary school			-0.022	0.041	-0.041	0.042	-0.042	0.041	-0.041	0.042	-0.044	0.041
Max. junior sec. voc.			-0.018	0.023	-0.025	0.024	-0.025	0.024	-0.025	0.024	-0.026	0.024
Max. higher education			0.030	0.024	0.030	0.024	0.029	0.024	0.032	0.024	0.031	0.024
Learning achievements												
Test score for reading comprehension			0.004	0.001	0.004	0.001	0.004	0.001	0.004	0.001	0.004	0.001
Test score for numeracy			0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
School composition												
% students with parents of low education					0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
Ethnic diversity					0.129	0.070	0.119	0.066	0.115	0.069	0.103	0.064

(continued)

Table 2. (Continued).

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Aspects of school quality												
Language and numeracy offered to sufficient students up to & incl. Grade 6							0.195	0.063			0.194	0.060
Language and numeracy tailored to students' educational needs							0.011	0.048			0.010	0.047
Teachers ensure that students treat each other with respect							-0.037	0.049			-0.052	0.047
Teachers create a task-oriented working environment							0.074	0.045			0.081	0.044
School results are at least up to the level expected							-0.154	0.050			-0.149	0.048
Citizenship aspects at school												
Vision of citizenship developed in detail									0.024	0.020	0.023	0.018
Emphasis on learning social skills									0.030	0.028	0.040	0.027
Objectives for learning about other cultures									-0.032	0.020	-0.029	0.019

Note: Significant effects printed in bold.

explained 9% of the variance at school level. General school quality (Model 3) explained 23% of the variance at school level. Adding aspects of the school's citizenship education (Model 4) did not lead to a significantly better fit but the combined model did (Model 5). Citizenship factors combined with general school quality factors (Model 5) explained 36% of the variance at school level. Student body composition showed no significant effect.

As for general aspects of the schools' educational quality, we found that the greater the number of students, including students at risk, benefiting from the full content of the core curriculum (language and numeracy), the higher the scores on citizenship attitudes (.194). The model also shows higher attitude scores in schools where students had achieved lower academic results in earlier stages of their school careers (.149).

With regard to background variables, significant effects were found for gender (boys .196 lower), migrant status (higher scores for students of Moroccan [.280], Surinam, Antillean [.123] and other non-Western [.210] descent, but no significant effects for students of Turkish and Western descent) and for reading comprehension (.004).

Skills

As Table 3 shows, 8% of the variance at school level ($ICC = .080$) was found for the citizenship skills component. Student body composition (Model 2) explained 6% of the variance at school level. General school quality (Model 3) explained 39% of the variance at school level. Citizenship education variables (Model 4) explained 18%. Together, the two groups of school variables explained 51% of the variance at school level (Model 5). Student body composition showed no significant effect. Providing the full teaching content for language and numeracy to all students, including those at risk, showed a positive effect (.183). Earlier academic achievement produced negative effects (.126), as did working with well-defined objectives for learning about other cultures (.037).

We found a negative effect for gender (.128, boys scored lower) and positive effects for migrant status (Moroccan [.241] and other students of non-Western descent [.185]) and reading comprehension (.003).

Reflection

The results for reflection (Table 4) more or less paralleled those for the other components of citizenship. There was 11% variance at school level ($ICC = .108$), of which over a third was explained by the background variables (36%, Model 1). Student composition (Model 2) explained 14% of the variance at school level. The effect of the school's educational quality (Model 3) was slightly weaker (15%). Citizenship education variables (Model 4) explained 33%. Combined, the school's educational quality and citizenship education variables explained 51% of the variance at school level (Model 5). As with the results for knowledge, the effect of ethnic diversity appeared significant, with a medium effect of .214. The only general school characteristic which proved significant for reflection was offering the full core curriculum (language and numeracy) to all students (.232). More effects were observed in relation to specific quality aspects of citizenship education. Schools with a developed vision for citizenship education and specific objectives for learning social skills had relatively higher scores. Significant effects were also found for gender (boys scored lower: .136), migrant status (students of Moroccan descent [.272] and students from other non-Western countries [.149] scored higher), and reading comprehension (better readers scored higher: .003).

Table 3. Multilevel analysis – citizenship: skills.

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
School	0.012	0.003	0.010	0.003	0.009	0.002	0.006	0.002	0.007	0.002	0.004	0.002
Student	0.143	0.005	0.133	0.005	0.133	0.005	0.133	0.005	0.133	0.005	0.133	0.005
Total	0.155		0.143		0.143		0.139		0.141		0.138	
% explained variance at school level			23%		+6%		+39%		+18%		+51%	
% total explained variance			8%		+0%		+3%		+1%		+3%	
ICC	0.080											
Constant	3.021	0.015	3.015	0.122	2.935	0.130	2.250	0.271	3.032	0.180	2.365	0.302
Sex												
Boy			-0.126	0.018	-0.129	0.019	-0.128	0.019	-0.129	0.019	-0.128	0.019
Ethnic origin (ref = non-migrant)												
Turkey			0.077	0.046	0.062	0.049	0.062	0.048	0.065	0.048	0.063	0.048
Morocco			0.252	0.046	0.238	0.048	0.236	0.048	0.246	0.048	0.241	0.048
Suriname/Antilles			0.065	0.051	0.053	0.052	0.075	0.050	0.064	0.052	0.083	0.050
Eastern Europe & other Western countries			0.039	0.055	0.031	0.056	0.041	0.056	0.033	0.056	0.042	0.056
Other non-Western countries			0.194	0.045	0.180	0.047	0.181	0.047	0.185	0.047	0.185	0.047
Parents' education (ref = max. senior sec. vocational education)												
Max. primary school			-0.011	0.041	-0.020	0.041	-0.015	0.041	-0.021	0.041	-0.017	0.041
Max. junior sec. voc.			-0.015	0.023	-0.015	0.024	-0.014	0.024	-0.014	0.024	-0.014	0.024
Max. higher education			-0.008	0.024	-0.009	0.024	-0.007	0.024	-0.010	0.024	-0.008	0.024
Learning achievements												
Test score for reading comprehension			0.004	0.001	0.003	0.001	0.003	0.001	0.003	0.001	0.003	0.001
Test score for numeracy			-0.001	0.001	-0.001	0.001	-0.001	0.001	-0.001	0.001	-0.001	0.001
School composition												
% students with parents of low education					0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001
Ethnic diversity					0.103	0.063	0.083	0.057	0.088	0.061	0.069	0.056

(continued)

Table 3. (Continued).

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Aspects of school quality												
Language and numeracy offered to sufficient students up to & incl. Grade 6							0.191	0.053			0.183	0.051
Language and numeracy tailored to students' educational needs							0.069	0.041			0.059	0.040
Teachers ensure that students treat each other with respect							0.042	0.042			0.032	0.040
Teachers create a task-oriented working environment							0.070	0.039			0.065	0.038
School results are at least up to the level expected							-0.131	0.043			-0.126	0.041
Citizenship aspects at school												
Vision of citizenship developed in detail									0.036	0.017	0.028	0.016
Emphasis on learning social skills									-0.011	0.025	0.003	0.023
Objectives for learning about other cultures									-0.046	0.018	-0.037	0.016

Note: Significant effects printed in bold.

Table 4. Multilevel analysis – citizenship: reflection.

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
School	0.036	0.008	0.023	0.006	0.020	0.005	0.017	0.005	0.013	0.004	0.010	0.004
Student	0.300	0.010	0.290	0.010	0.288	0.010	0.288	0.010	0.288	0.010	0.288	0.010
Total	0.336		0.313		0.308		0.305		0.301		0.298	
% explained variance at school level			36%		+14%		+15%		+33%		+51%	
% total explained variance			7%		+1%		+1%		+2%		+4%	
ICC	0.108											
Constant	2.278	0.025	2.299	0.181	2.074	0.192	1.711	0.427	1.636	0.258	1.426	0.446
Sex												
Boy			-0.137	0.027	-0.142	0.027	-0.141	0.027	-0.138	0.027	-0.136	0.027
Ethnic origin (ref = non-migrant)												
Turkey			0.082	0.068	0.011	0.071	0.007	0.071	0.004	0.071	-0.004	0.071
Morocco			0.342	0.068	0.277	0.071	0.276	0.071	0.276	0.071	0.272	0.071
Suriname/Antilles			0.181	0.077	0.132	0.077	0.138	0.077	0.127	0.075	0.129	0.074
Eastern Europe & other Western countries			0.139	0.082	0.104	0.082	0.108	0.082	0.111	0.082	0.115	0.082
Other non-Western countries			0.207	0.067	0.145	0.069	0.146	0.069	0.149	0.069	0.149	0.069
Parents' education (ref = max. senior sec. vocational education)												
Max. primary school			0.045	0.060	0.010	0.061	0.011	0.061	0.009	0.061	0.007	0.061
Max. junior sec. voc.			-0.035	0.034	-0.043	0.035	-0.043	0.035	-0.042	0.035	-0.043	0.035
Max. higher education			-0.005	0.035	-0.007	0.035	-0.005	0.035	-0.003	0.035	-0.003	0.035
Learning achievements												
Test score for reading comprehension			0.003	0.001	0.003	0.001	0.003	0.001	0.003	0.001	0.003	0.001
Test score for numeracy			-0.001	0.002	0.000	0.002	-0.001	0.002	-0.001	0.002	-0.001	0.002
School composition												
% students with parents of low education					0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Ethnic diversity					0.282	0.094	0.283	0.091	0.212	0.087	0.214	0.082

(continued)

Table 4. (Continued).

Variance	Null model		Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
Aspects of school quality												
Language and numeracy offered to sufficient students up to & incl. Grade 6							0.239	0.086			0.232	0.076
Language and numeracy tailored to students' educational needs							-0.005	0.066			-0.017	0.059
Teachers ensure that students treat each other with respect							-0.038	0.067			-0.075	0.060
Teachers create a task-oriented working environment							0.033	0.062			0.037	0.056
School results are at least up to the level expected							-0.096	0.069			-0.101	0.061
Citizenship aspects at school												
Vision of citizenship developed in detail									0.092	0.024	0.094	0.023
Emphasis on learning social skills									0.082	0.036	0.085	0.034
Objectives for learning about other cultures									-0.042	0.025	-0.045	0.024

Note: Significant effects printed in bold.

Strength of effects

Table 5 offers an overview of the strength of the effects found. The results are based on the final models for knowledge, attitude, skills, and reflection. The coefficients in Table 5 show the increase or decrease in scores for subsequent categories of each independent variable (see the Research design section).

Concerning citizenship factors and general school quality, knowledge produced fewer significant effects than attitude, skills, and reflection. The strongest effects were found for background characteristics of students: Migrant status had medium effects and gender had small to medium effects. The correlations with academic achievement were minimal. Effects of student body composition played a small to medium part in effects regarding knowledge and reflection. Once again, only a limited number of aspects of general school quality proved to be associated with the students' citizenship competences. Citizenship education provided by the school had little effect. The three variables which showed effects were the extent to which the school had a vision for citizenship education, the degree of emphasis on learning social skills, and the extent to which the school had set objectives for learning about other cultures.

Table 5. Effect sizes of the significant variables on students' citizenship competences.

	Knowledge	Attitude	Skills	Reflection
Sex				
Boy	-0.38	-0.47	-0.32	-0.24
Ethnic origin (ref = non-migrant)				
Turkey	-0.34			
Morocco		0.68	0.61	0.47
Suriname/Antilles		0.30		
Eastern Europe & other Western countries				
Other non-Western countries		0.51	0.47	0.26
Parents' education (ref = max. senior sec. vocational education)				
Max. primary school				
Max. junior sec. voc.				
Max. higher education				
Learning achievements*				
Test score for reading comprehension	0.02	0.01	0.01	0.01
Test score for numeracy	0.02			
School composition				
% students with parents of limited education				
Ethnic diversity	0.31			0.37
Aspects of school quality				
Language and numeracy offered to sufficient students up to & incl. Grade 6		0.47	0.46	0.40
Language and numeracy tailored to students' educational needs				
Teachers ensure that students treat each other with respect				
Teachers create a task-oriented working environment				
School results are at least up to the level expected		-0.36	-0.32	
Citizenship aspects at school				
Vision of citizenship developed in detail				0.16
Emphasis on learning social skills				0.15
Objectives for learning about other cultures	0.10		-0.09	

Note: *Effect size is per point on test.

Conclusions

In this study, we examined the effects of general factors of educational quality of schools, citizenship-specific school characteristics, and the ethnic composition of the student body on citizenship competences in Grade 6 (age 11) of primary schools. Understanding the influence of school factors on citizenship competences of students could provide a more coherent empirical basis for citizenship education and policy. The results of the analyses presented in this study show that a model of school effectiveness regarding citizenship outcomes can be tested for primary education by using quantitative large-scale student data and expert judgements on school characteristics.

The first finding which stands out is that differences in citizenship competences between students and schools are largely explained by factors at student level. The differences found are in line with recent research on citizenship knowledge and attitudes of students in secondary education (Geijssel et al., 2012; Isac, Maslowski, & Van der Werf, 2011; Isac et al., 2014; Schulz et al., 2010).

Girls appear to know more about citizenship than boys. Results linked to migrant status point to a dividing line, not so much between non-immigrant and immigrant students in general but between young people of Turkish descent (low scores), on the one hand, and other immigrant groups and the majority population of non-immigrant students, on the other (see also, Geijssel et al., 2012).

Differences in students' citizenship attitudes were also related to gender: Boys scored lower than girls. International research has shown that girls are more interested in politics and social issues (Amadeo, Torney-Purta, Lehmann, Husfeldt, & Nikolova, 2002), although this difference was found to be small in a recent study (Schulz et al., 2010). Ethnic backgrounds of students also played a role in earlier studies. The more general difference between non-immigrant and immigrant students with respect to citizenship attitudes reported here has also been found in international research. Cleaver et al. (2005) found that young people from ethnic minority groups were relatively more interested in politics, although recent international data suggest that this difference is relatively small (Schulz et al., 2010).

Our results also show that high scores for reading comprehension were somewhat associated with higher scores for citizenship attitudes. This raises the question to what extent this effect can be explained by the academic achievement level of the students in general, bearing in mind that no differences were found with respect to numeracy.

We did not find any differences between students' citizenship competences associated with the educational level of their parents. With respect to the knowledge component of citizenship, this finding is inconsistent with international research findings, in which socioeconomic status of parents has been found to have an effect on citizenship knowledge (Schulz et al., 2010).

The second conclusion is that differences in citizenship competences between students cannot be explained entirely by the student background characteristics available. Our analyses showed that the school also plays a role: Students in some primary schools – other circumstances being equal – scored higher than students in others. Although the effects were small (approximately 10% of the variance is explained by factors at school level), it appears that characteristics of citizenship education, general school quality, and the composition of the student body all have a significant influence on citizenship competences of students.

The analyses in this study show that aspects of school citizenship policy explain between approximately 11% (for attitudes) and 33% (for reflection) of the differences

between schools. Our results show that students in schools with a detailed vision for citizenship education and students in schools emphasizing the learning of social skills scored higher on the reflection component of citizenship.

The analyses also show that schools which claimed to have well-defined objectives for their citizenship education programmes, in particular with regard to learning about other cultures, achieved lower scores for citizenship skills than schools with less developed objectives. We suspect that schools pay attention to this particular subject to address difficulties students have in dealing with diversity. Most Dutch schools formulate their citizenship education objectives only in general terms (Inspectie van het Onderwijs, 2011). Thus, if a school has formulated more specific objectives, we assume it has reasons for doing so. Paying attention to other cultures, for example, could point to weak social interaction due to limited ability to deal with diversity or resulting tensions, indicated by low citizenship competences. To understand this finding, data are needed on the reasons why schools decide to focus on this dimension of citizenship.

Overall, school quality also contributes to higher citizenship competences of students. These educational characteristics explain between 8% (for knowledge) and 39% of the variance (for skills) in citizenship competences between schools. Primary schools which were successful in providing the full teaching content for language and numeracy to all students, including those at risk, produced higher scores on three of the four components of citizenship competencies (attitudes, skills, and reflection). This finding suggests that schools which manage their curriculum well also achieve better results in terms of citizenship. Of all the factors included in our analysis, this characteristic had the greatest effect. Students in such schools scored almost half a point higher, all other circumstances being equal.

It further appears that there is a link between citizenship attitudes and skills, on the one hand, and average academic results achieved by students having completed half of their school career, on the other. The lower their academic achievement, the higher their citizenship scores. In attempting to interpret these findings, it is important to know that schools with relatively large numbers of disadvantaged students have a greater chance of lower test results over the students' school careers. On average, students from migrant groups are over-represented in these schools. These are also students who generally show better scores on these aspects of citizenship.

Finally, differences in citizenship competences between schools are also related to the composition of the student body. Our analyses indicate that models in which student body composition was included contribute to the explanation of variance at school level, ranging from 4% (for knowledge) to 14% (for reflection). In most cases, however, no significant effects on citizenship knowledge, attitudes, skills, and reflection were found for the variables which measured aspects of the schools' student body composition, except for the effect of the schools' ethnic diversity on knowledge and reflection. Our analysis does not confirm a general positive effect of homogeneous groups on citizenship competences. These results in primary education largely resemble recent findings in various other groups of students (Geijssels et al., 2012; Isac et al., 2011). Detailed data, including in-depth qualitative research, are needed to better understand the complex issue of the influence of homogeneity versus heterogeneity of values and backgrounds on the development of citizenship competences.

In conclusion, we note that our analyses using school citizenship policy variables, general educational characteristics reflecting the quality of schools, and, to a lesser extent, student body composition lead to a better fit of the models. The analyses include a number of variables with modest but significant effects on the citizenship

competences of students. One of the variables is learning about other cultures as an objective for citizenship education. For reflection, relevant variables include attention to social skills and the development of a vision for citizenship education by the school. In addition, two general characteristics of schools proved important: the level of academic achievement halfway through the school career and the degree to which all students in the school benefit from its core cognitive curriculum. Overall, these results confirm the importance of using multiple indicators to assess the quality of the school referring to both cognitive and non-cognitive outcomes, providing a wider range of effectiveness (Gray, 2004).

The main result, however, seems to be that the variables used in our analysis only show a limited relationship between differences in citizenship competences among schools and general educational characteristics of those schools. Initial analyses show that citizenship competences are not related to subject matter, teaching time, the teachers' educational approach, tailoring of teaching to student needs, and other variables (see the Research design section). Similarly, for most aspects of school quality, no significant effects were found in further multilevel models (see Results section). The same goes for most of the characteristics of citizenship education which we investigated.

Before drawing any further conclusions, it should be noted that our study had some limitations. First of all, the student factors available (gender, migrant background, and educational level of parents) cover not all possible student background factors. Another limitation is that we had only access to a limited set of school variables. In our study, we made use of COOL⁵⁻¹⁸, a Dutch Cohort Study, consisting of multipurpose data, containing no specific data on school factors (potentially) relevant for citizenship and overlooking aspects of school curriculum. Available data of the Dutch Inspectorate of Education on general and citizenship-specific school characteristics concern a limited number of variables only. Information about, for example, teachers and actual citizenship classroom practices is lacking. Finally, we only could focus on school effect, as data on family and peer effects were not available. It is very likely, however, that citizenship competences are not only learned at school.

Nevertheless, one should bear in mind that citizenship education is not yet well established in The Netherlands. While it has only been a statutory duty for Dutch schools since 2005/2006, most Dutch schools are still in the process of developing their citizenship education programmes. Lacking a tradition in citizenship education, many schools find it quite a challenge to develop coherent content (Peschar, Hooghoff, Dijkstra, & Ten Dam, 2010). Findings of the Dutch Inspectorate of Education (Inspectie van het Onderwijs, 2011) show that in many schools citizenship education is characterized by a patchwork approach. Development of a systematic curriculum based on a vision for citizenship education is often still inadequate. Little progress has been made since 2006 towards a detailed curriculum with firm objectives and teaching geared to meet them (Inspectie van het Onderwijs, 2011).

Against this background, our first conclusion is that, although The Netherlands does not have a long-standing tradition of citizenship education and it may be questioned whether a fully developed citizenship curriculum exists at all, differences in citizenship competences of students in different schools cannot be explained by general school effectiveness factors only. Second, it emerges that, at least in the present situation, specific characteristics of citizenship education, such as the degree of attention paid to aspects of citizenship in the school's curriculum, also fail to serve as an explanation. The school's vision for citizenship education (or the lack of it) and the teaching of social skills does seem to relate to different outcomes in the way

students reflect on citizenship issues. Although the fairly limited citizenship tradition in Dutch education means that it is too early for it to have far-reaching implications for the educational practice and its evaluation, the results show that particularly the way in which schools implement citizenship education and the extent to which this implementation fits the characteristics of the student body are important. Assessment, evaluation, and school development should therefore, in addition to general aspects of quality, also be geared to factors relating to an effective and school-specific organization of citizenship education. In this light, careful selection of learning objectives and a specific organization of the teaching – including content, approach, and pedagogical climate – are important areas of attention. Based on the results of research into educational effectiveness in the domain of citizenship education, schools cannot simply rely on their basic quality to achieve goals of citizenship education. As shown by research on school effectiveness, the general quality of the school is important for explaining academic learning outcomes (cf. Timmermans, 2012). Effective citizenship education, however, seems to rely more significantly on the school's choices regarding content, pedagogical approach, and interpersonal relationships. To increase our knowledge on citizenship education, more specific information is needed about the way schools educate their students and the embedded purposes that steer students in their citizenship development during school time (Biesta, 2009). We also need to construct variables to measure these issues at school level. This calls for further research into the characteristics of effective citizenship education, including those reflecting the more normative choices that educators can endorse while educating.

Notes

1. The formula used to calculate the school's ethnic diversity is: $Diversity = 1 - ((\text{proportion ethnic background}_1)^2 + (\text{proportion ethnic background}_2)^2 + \dots + (\text{proportion ethnic background}_n)^2)$. For example, the Herfindahl index for a school with 60% students of Dutch descent and 40% of students of Turkish descent is $1 - (.60)^2 - (.40)^2 = .48$. But for a school where 60% of the students are of Dutch descent, 10% of Turkish descent, 20% of Moroccan descent, and 10% of Surinam descent, the diversity is $1 - (.60)^2 - (.10)^2 - (.20)^2 - (.10)^2 = .60$. Both schools have the same percentage of students of Dutch descent, but the latter school is more ethnically diverse.
2. As is shown in the Analyses section, except for the variables in Tables 1 to 4, none of the school variables measuring subject matter, teaching timing, educational approaches, and strategies used by teachers, tailoring the teaching to students' needs, students' attitudes to learning, school climate and the school's quality assurance system, did show a significant effect.
3. For example, the effect size of being a boy compared to being a girl in Table 3 (Model 5) is: $(1-0) \cdot -0.063 / \sqrt{0.028} = -0.38$.
4. Model information (Schools $n = 91$; Students $n = 1,730$; and number of units on dependent variable level 6,901)

	<i>Model 0</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
<i>–2*loglikelihood</i>	2745.146	1996.449	1955.071	1908.502	1911.15	1865.113
<i>Improvement of fit</i>		748.7	41.4	46.6	43.9	90.0
<i>Difference df</i>		11	2	5	3	8

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Appendix 1. Sample information (N = 1,730 students)

	This study		National representative sample COOL		
	%		%	p	effect size
Sex					
Girl				0.630	–
Boy	50.3		51.0		
Ethnic origin¹				0.000	–
The Netherlands	77.9		81.3		
Turkey	5.2		4.3		
Morocco	5.5		3.7		
Surinam/Antilles	4.2		3.0		
Eastern Europe & other Western countries	2.5		2.5		
Other non-Western countries	4.6		5.1		
Parents' education				0.000	–
primary school	7.9		6.6		
junior sec. voc. education	23.5		19.2		
max. senior sec. voc. education	45.5		43.6		
max. higher education	23.1		30.6		
	Mean		Mean	p	d
Learning achievements					
Test score for reading comprehension	56.29		56.15	0.728	0.00
Test score for numeracy	116.39		116.86	0.050	0.00
School composition (school level)					
% students with parents of low education	31.60		23.83	0.001	0.40
Ethnic diversity	0.33		0.26	0.023	0.27

¹Although Dutch society has become increasingly multi-ethnic since the 1970s, native Dutch students still make up three quarters of the student composition and so remain the dominant culture. With regard to migrants, two of the four largest groups in The Netherlands stem from the former Dutch colonies of Suriname and the Antilles. The other two large migrant groups are immigrant workers and their children from Turkey and Morocco. Most of the children from these groups were born in The Netherlands and are therefore second generation.

Appendix 2. Conceptual definitions of citizenship competences in terms of components of citizenship and social tasks

COMPONENTS	Knowledge <i>Knowing, under-standing, insight</i>	Attitudes <i>Thoughts, desires, willingness</i>	Skills <i>An estimate of what one can do</i>	Reflection <i>Contemplation of topics</i>
SOCIAL TASKS	A young person with such knowledge ...	A young person with such attitudes ...	A young person with such skills ...	A young person with such reflection ...
Acting democratically <i>Acceptance of and contribution to a democratic society.</i>	... knows what democratic principles are and what acting in accordance with them involves.	... wants to hear everyone's voice, enter into a dialogue and make an active, critical contribution.	... is able to assert own opinion and listen to the opinions of others.	... thinks about issues of democracy, power/powerlessness, equal/unequal rights.
Acting in a socially responsible manner <i>Taking shared responsibility for the communities to which one belongs.</i>	... knows social rules (i.e., legal or unspoken rules for social interaction).	... wants to uphold social justice, is prepared to provide care and assistance, does not want to harm another or the environment as a result of his or her behaviour.	... can adopt a socially just position.	... thinks about conflicts of interest, social cohesion, social processes (e.g., inclusion, exclusion), and own contribution to social justice.
Dealing with conflicts <i>Handling of minor situations of conflict or conflicts of interest to which the child him/herself is a party.</i>	... knows methods to solve conflicts such as searching for win-win solutions, calling in help from others, admission of mistakes, prevention of escalation.	... is willing to explore conflicts, prepared to consider the standpoint of another, jointly searches for an acceptable solution.	... can listen to others, put oneself in someone else's position, seek win-win solutions.	... thinks about how a conflict can arise, the role of others and oneself, and the possibilities to prevent or solve conflicts.
Dealing with differences <i>Handling of social, cultural, religious, and outward differences.</i>	... is familiar with cultural differences, has knowledge of rules of behaviour in different social situations, knows when one can speak of prejudice or discrimination.	... has a desire to familiarise him/herself with the opinions and lifestyles of others, has a positive attitude towards differences.	... can adequately function in unfamiliar social situations, adjust to the desires or habits of others.	... thinks about the nature and consequences of the differences between people and cultural backgrounds for behaviour and processes of inclusion and exclusion.

Appendix 3. Reliability coefficients (Cronbach's α), average scores, and standard deviations of the component scales from the citizenship competences questionnaire for students ($N = 10,063$)

	No of items	Cronbach's α	Average score	Standard deviation
Knowledge	27	.81	.76	.17
Attitude	24	.90	2.98	.41
Skills	15	.85	3.03	.40
Reflection	28	.94	2.28	.56

Source: COOL primary education, Grade 6.