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ORIGINAL PAPER

Latino Adolescents' Civic Development in the United States: Research Results from the IEA Civic Education Study

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Abstract Many studies have reported gaps between Latino and non-Latino adolescents in academic and political outcomes. The current study presents possible explanations for such gaps, both at the individual and school level. Hierarchical linear modeling is employed to examine data from 2,811 American ninth graders (approximately 14 years of age) who had participated in the IEA Civic Education study. Analyses of large data bases enable the consideration of individual characteristics and experiences, as well as the context of classrooms and schools. In comparison with non-Latino students, Latino adolescents report more positive attitudes toward immigrants' rights but have lower civic knowledge and expected civic participation. These differences were apparent even when controlling for language, country of birth, and political discussions with parents. School characteristics that explain a portion of this gap include open classroom climate and time devoted to study of political topics and democratic ideals. Results are discussed within the framework of developmental assets and political socialization. Implications for educational policy and ways to use large data sets are also discussed.

Keywords Hispanic · Latino · Citizenship · Political socialization · Ethnic identity · Positive youth development

Psychologists increasingly recognize that adolescent development should be interpreted within the context of the social structures of schools and neighborhoods. This is especially true for Latino youth, who live in a variety of geographic areas and socio-economic circumstances and are influenced by a wide range of factors as they develop social and political identities. The Latino population is growing faster than the American population as a whole (U.S. Bureau of the Census, 2003). As this group becomes a larger proportion of the citizenry and becomes more visible politically, it will be crucial to understand the developmental experiences that are relevant to their participation in various facets of democratic life, from voting to participating in activities benefiting the community to mobilizing in support of rights for themselves and others.

Many studies of Latino adolescents focus on inequalities they face and on challenges to healthy development. In many instances researchers suggest potentially beneficial policy directions, and are learning that policy analysts can be allies in creating conditions to enhance young people's social development. However, researchers are hampered in suggesting policies if they base their arguments on studies with small and non-representative samples of students from a few schools. Extensive data sets collected from large and representative samples that include variations in context

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offer opportunities for more convincing policy-relevant analysis.

This paper reports data collected in 1999 from a nationally representative sample of ninth graders, most of them 14 years old, in the United States (one of 28 countries participating in the IEA Civic Education Study).[1] In this sample, nearly 400 of the 2,800 U.S. respondents identified themselves as Hispanic or Latino. Because the data were collected in nearly 130 schools, it is possible to compare Latino with non-Latino students and also to compare schools where classes contain high proportions of Latinos to those with lower proportions.

The analysis presented here is framed within two currents of research. One is the recent discourse on positive youth development, which often addresses policy concerns for young people in urban or poverty-impacted settings, where many Latino students reside. A second framing for the paper is research on Latinos' civic participation and political socialization. The analysis of the IEA survey data from the United States allows a bridging of these two topic areas in a way that can enhance the policy-related dialogue about the knowledge base and future political engagement of this rapidly growing group.

Youth and developmental assets

The youth development literature has focused on outcomes of development, and personal or environmental assets that can affect such outcomes. During adolescence, developmental assets are associated with an increase in positive developmental outcomes (Scales *et al*., 2000). Six outcomes have been delineated: *competence* in academic, social, and vocational areas, *confidence* or a positive self-identity, *connections* to community, family, and peers, *character* or integrity, and moral commitment, *caring* and compassion, and *contribution* to society (Lerner *et al*., 2000; Pittman *et al*., 2001). Of the six Cs (as they are called), those that pertain most to civic and political outcomes are connections, character, and contribution. Students who form connections to their school and community (and to their ethnic group) are likely to care about issues pertaining to these institutions, and therefore to contribute to addressing these issues. Character is relevant because it relates to social responsibility and civic duty (Roth *et al*., 2003).

The development of the Cs is facilitated by the availability of external and internal assets, also called the building blocks of development (Balsano, 2005). External assets are the characteristics of a student's environment that encourage positive development both academically and socially. The Search Institute (n.d.) categorizes external developmental assets into personal support systems, settings that facilitate youth empowerment, clearly established boundaries and expectations, and opportunities for constructive use of time. External assets are thought to contribute to internal assets, or characteristics of individuals that foster development. The four categories of internal assets are a commitment to learning, positive values, social competencies, and positive sense of identity (Search Institute, n.d.). For Latino young people, the development of an ethnic identity may be an important component of positive identity.

The assets an adolescent possesses in the present and has accumulated in the past are multidimensional, including success in school and strategies for overcoming adverse events (Scales *et al*., 2000). The effects of having developmental assets are not merely additive but cumulative. The acquisition of internal assets or access to external assets at one time period positions the individual to acquire more assets at a later period. For example, sense of academic, cultural or social competence, and participation in community programs at middle school prepare the student for achievement and participation in high school (Scales *et al*., 2000). This cumulative effect means that those who start with few developmental assets are in danger of falling farther and farther behind. Some research argues that it is an advantage for young people to acquire competency in more than one context, such as community organization, employment setting, and classroom (Pedersen *et al*., 2005).

Assets relate positively to youth development, but there are also factors that can potentially have a negative effect. Poverty is generally a risk factor, mediated through inadequate institutional resources and an absence of everyday access to contexts in which the young person can feel safe, comfortable, and competent (Call and Mortimer, 2002). Balsano (2005) reports that there are few opportunities for empowerment or to engage in successful civic efforts in low-income communities. Latino young people are especially likely to grow up in poverty, with rates ranging from 50% among Latino children born in the U.S. to 66% among Central American immigrants and 75% among immigrants from Mexico and the Dominican Republic (U.S. Census figures from 2000 cited in Porter, 2006).

Hart and Atkins (2002) document not only insufficient opportunities for civic development in low-income communities, but also the absence of adults who can serve as mentors or provide social support. Since immigration is often associated with separation of children from parents, immigrant youth may be especially vulnerable to inadequate social support. A study of Mexican immigrant youth and adults found that those who were geographically separated from family members had significantly higher levels of stress than immigrants whose family members primarily resided in the United States (Hovey, 2000).

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[1] The countries testing the grade in which the majority of 14-year-olds are enrolled in the IEA Civic Education Study were Australia, Belgium (French speaking), Bulgaria, Chile, Colombia, Cyprus, Czech Republic, Denmark, England, Estonia, Finland, Germany, Greece, Hong Kong (SAR), Hungary, Italy, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, Sweden, Switzerland, and the United States. In the United States, ninth graders were tested in October, and the mean age of the sample was 14.7 years.

The combination of high likelihood of being in poverty and other factors place Latino youth at risk for poor developmental outcomes, including lower educational aspirations and higher dropout rates (Bloomberg *et al.*, 2003). Fuligni and Hardway (2004) report that less than 50% of first generation Latinos graduate from high school, and Latinos (regardless of generation) are less likely than students from other groups to enroll in or graduate from college. Moreover, an absence of the asset of English proficiency is a significant factor related to lowered academic and social outcomes for many Latino students. Students who do not speak fluent English are often placed in diminished subject matter courses (Calderón, 1998). This contributes not only to academic inadequacy, but also to a sense of disconnection between students and their schools. Connection to school can often facilitate successful outcomes for disadvantaged youth (Jessor *et al.*, 1998).

There are only a few studies of Latino adolescents in the U.S. within the positive youth development framework. A recent review found that only about six percent of the articles reported results for Latino youth (Rodriguez and Morrobel, 2004). French *et al.*, (2006) reported increases in positive feelings toward their ethnic group among Latinos as they progressed through adolescence; this increase was less substantial than for a comparison group of African American students and more substantial than for European American students. School attachment was studied as an asset for Latino youth in rural Minnesota (Diaz, 2005). Other assets that predict positive outcomes in Latino youth include interpersonal competence, a sense of responsibility, family support, and the presence of a caring community (Scales *et al.*, 2000). Other protective factors include interactions with prosocial adults and peers, leaders who are skilled at involving students, and "opportunities to design, plan, and implement community service initiatives" (Bloomberg *et al.*, 2003, p. 47). These findings pertain to the other literature framing this article, studies of the political and civic dimensions of the Latino youth experience.

Political socialization among Latino adolescents

Research on Latino young people's civic knowledge and political attitudes is also limited. There are several insightful ethnographic studies, for example, Ramos-Zayas' (2003) study of class, race, and space among Puerto Ricans. Larson and Hansen (2005) report an analysis of an intervention emphasizing the acquisition of political action skills by Latino adolescents. These two studies took place in Chicago, while other areas of the Midwest, Texas, Florida, and Southern California have been the locus for other research (Berry *et al.*, 2006; Sanchez Jankowski, 1992). Analysis of data collected from national samples is rare. Furthermore, although prominent groups such as the National Academy of Sciences have released reports on Hispanics and America's future (Tienda and Mitchell, 2006), separate chapters cover schooling, personal development, and political participation.

We do have evidence that in comparison with Caucasian and African American youth, Latino youth are more likely to view voting participation as a choice or preference rather than a right or responsibility. In addition, Latino youth are less likely to report that voting is an important activity in which to participate (Lopez, 2003). Differences in civic engagement among non-Latino and Latino students may be partially explained by differences in socialization experiences among native-born and immigrant young people, and in particular the quality and quantity of experience with the United States political system (Stepick and Stepick, 2002). In a review on the civic engagement of immigrant youth, these authors discussed the influence of socialization and acculturation on youth voting, finding that those who have resided in the United States longest are the most politically active. In a study of immigrant youth in 13 countries Berry and colleagues (2006) also found that the extent of integrated and national identity was associated with the length of time an immigrant had been in the receiving country. Because a sizeable proportion of Latino students are first-generation immigrants, they are likely to have had less exposure to political socialization processes.

Regardless of ethnicity or place of birth, a large portion of students' political socialization is filtered through their families' political attitudes and sense of engagement. Although students of age 14 are too young to vote, their families' participation in the voting process and other political engagement activities may influence their own expectations of electoral participation. Adult Latino citizens have lower voter turnout than White and Black citizens, although on average turnout is higher in this group than among Asian citizens (U.S. Bureau of the Census, 2002). Garcia (1997) found that Latino adults' political participation varies depending upon their geographical location and national origin.

Another explanation for low political engagement of Latino students' families is the immigrant status of family members. Many Latino students, even if born in the United States, have parents or grandparents who were born outside of the country. If these parents or grandparents could not vote because they did not hold citizenship, their children may not be socialized about the importance of voting.

Concern about political participation should not be restricted to voting, however. Latino adults and adolescents in communities that are politically aware have increased competence in advocating for educational and employment opportunities (Driever, 2004; Sanchez Jankowski, 1992). Sanchez Jankowski also found that the attitudes of older siblings toward activism or protest played an important role in the Latino families he studied in the 1980s. Barreto and Munoz (2003) point to activities among Mexican American adults such as attending a rally or donating to a political cause. Families and other societal institutions in Latino communities may have considerable impact on their children's political socialization in particular localities or in periods of time when there is a perception of heightened discrimination (Schildkraut, 2005).

Formal education has the potential to influence all students' civic engagement by contributing to understanding how policies affect individuals' lives and how to engage in effective forms of political participation (Torney-Purta, 2002). The school also serves as a "community of practice" in which students are able to develop participatory skills in political discussion and decision-making (Torney-Purta *et al*., 2006). Gandara (2005) has argued that quality schooling has the potential to interrupt the link between low socioeconomic status and educational achievement for Latino students. However, many assert that in fact teaching methods marginalize minority adolescents (Walsh, 1987). Laosa (1989), among others, believes that the curriculum taught to Latinos is reduced to basic literacy and numeracy, while Reimers (2005) suggests that Latino students have few opportunities for civic skill development because of inadequate instruction in relevant subjects provided in the schools they attend. This amounts to a failure to assist young people in accumulating positive developmental assets in the political, civic, and community arenas. Previous educational research has examined the gap between Latino and white students in various domains (Lee, 2002; Schmid, 2001), but the unique relationship of civic knowledge to social and political participation makes gaps in achievement in this area particularly important to examine.

In this paper we advance the understanding of how schools, families, and communities contribute to the development and the preparation for democratic citizenship of Latino adolescents by looking at indices of political socialization outcomes and processes for a nationally representative sample of ninth graders tested in 1999. We analyze data from students tested and surveyed in the IEA Civic Education Study to look at the civic knowledge, expectations of informed voting, and attitudes toward immigrant rights comparing Latino with non-Latino students. The purpose is to examine influences at the individual and the school level, including those associated with the home and with the school's curriculum and environment. The ultimate purpose is to address the policy-related dialogue integrating the research on developmental assets with the research on political socialization of Latino adolescents.

Background of the IEA civic education study

During the 1980s, the International Association for the Evaluation of Educational Achievement (IEA), a consortium of educational research institutes in nearly 60 countries, focused its large-scale data collections on literacy, mathematics, and science. In the early 1990s countries who were members of IEA proposed a study of civic education that included measures of young people's civic-related knowledge, attitudes, and behaviors. Their aim was to study schools in the context of other institutions using the IEA organization's resources, which include connections to a wide network of research institutes in different countries and a wealth of methodological expertise in cross-national comparative education research.

The first phase of the IEA Civic Education Study (1994–1998) consisted of the collection of structured national case studies and a consensus process to develop content specifications for a test of civic knowledge (with right and wrong answers) and a survey of political attitudes and civic behavioral report items. These qualitative data also provided contextual information for interpreting the more quantitative data collected in 1999–2000. For analysis within and across countries of the data collected during Phase 1, see Torney-Purta *et al.* (1999), Steiner-Khamsi *et al.* (2002), and Hahn and Torney-Purta (1999).

The second phase of the IEA Civic Education Study began in 1997. An International Steering Committee and National Research Coordinators constructed items and piloted an instrument (test and survey) that took two class periods to complete. Torney-Purta *et al.* (2001) and Amadeo *et al.* (2002) reported the main results from this international survey for students in the modal grade for 14-year-olds tested in 28 countries (approximate $N = 90{,}000$) and the upper secondary students tested in 16 countries, respectively (approximate $N = 50{,}000$).

Each country could add "national option questions" tailored to its educational and political context and demographics. For example, the United States included questions asking students about their racial and ethnic background, using categories employed by the United States Census. Finally, the students' surveys were complemented by surveys completed by one teacher and one administrator per school. This allows for data from students to be linked to contextual data about classrooms and schools.

The current analysis

We conducted the current analysis on the test and survey data from the IEA Civic Education's nationally-representative (weighted) sample of 2,811 ninth-grade students (i.e., the modal grade for 14-year-olds) from the United States. We also used data from a survey of teachers, one per school, matched to the students who took the tests within each school ($N = 124$) and one question answered by administrators. The weighted sample size in each school ranged from 3 to 60, with a median sample size of 21. Baldi *et al.* (2001) present specific information about the IEA Civic Education Study in the United States, while Hahn (2001) and Torney-Purta (2002) suggest the implications of the results for educators.

The focus of the current analysis is on similarities and differences between Latino and non-Latino students' civic knowledge, expectations of voting, and positive attitudes toward immigrants' rights. Civic knowledge is thought to be an important precursor of informed citizenship. Voting is the most commonly studied type of political participation. We were also interested in the extent to which Latino students identify with calls for recognition of immigrant rights. The analysis of contextual influences on these outcomes reported here focuses on characteristics of teachers' practices and characteristics of students attending the school.

In this sample there were 380 Latino students and 2,373 non-Latino students (58 students did not answer this question and were excluded from analysis). The proportion of Latino students in a school ranged from 0 to .95, with a median proportion of .08. It is important to remember that Latino ethnicity was considered in this study separately from "race." Students who responded that they were Hispanic or Latino were also separately asked to identify themselves as American Indian/Alaskan Native, Black/African-American, Asian, Native Hawaiian/Pacific Islander, or White. The current analysis examines only the Latino/non-Latino differences.

Outcomes

In order to assess these students across a range of outcomes important in civic engagement we compared groups on scales developed from items in the student survey. These scales were created using item response theory (IRT) techniques based on the results of confirmatory factor analyses (see Husfeldt *et al.*, 2005, for a complete list of IRT scales constructed and additional references). IRT scales offer several advantages over simple composite scales, most notably an improved handling of missing data and the ability to develop comparable scores across countries and age groups.

A multi-dimensional approach to understanding and measuring the outcomes of civic education that goes beyond a simple focus on factual knowledge is an important characteristic of the IEA Civic Education Study. Therefore, we chose three scales to analyze as outcomes in this analysis, representing important characteristics of students' knowledge, expected participation, and attitudes. First, our scale of *civic knowledge* was comprised of two types of items: content knowledge of basic democratic processes and concepts, and skills related to interpreting political information. A sample content knowledge question read, "In democratic countries, what is the function of having more than one political party?" In assessing cognitive civic skills, students were asked to interpret political information presented as a political cartoon or a mock election leaflet (see Torney-Purta *et al.*, 2001 for details of this scale which was also used in international comparisons). Second, our scale of *informed voting* consisted of two items, measuring whether students expected to vote and, more specifically, to collect information on candidates before voting. Finally, our scale of *positive attitudes toward immigrants' rights* focuses on political and social rights for those not born in the United States (e.g., "Immigrants should have the opportunity to keep their own customs and lifestyle"). We examined preliminary models for a measure of likelihood of illegal protest participation (e.g., blocking traffic or occupying buildings), but chose not to use it because in addition to the absence of significant differences between Latino and non-Latino students, a very small proportion of respondents indicated they were likely to participate in such activities.

Table 1 contains descriptive statistics and shows differences between Latino and non-Latino students in the three outcomes and in potential predictors (e.g., individuals' reports of the openness of the classroom climate and whether politically relevant topics had been studied).

Analytic techniques

We analyzed the three outcomes with multilevel modeling techniques using HLM software (Raudenbush *et al.*, 2004). Multilevel techniques are ideal for the IEA Civic Education Study's student data, which sampled clusters of students by school. The student-level score variance is separated from the school-level variance, giving a more appropriate estimate of the size of effects that can be attributed to differences between individuals rather than groups. This is especially important for the study of ethnic minority and/or immigrant students, who tend to be clustered into relatively few schools. This analytic method also allows for the use of school-level characteristics and the responses of a teacher linked to students in his or her school to predict student knowledge and attitudes. We identified predictors at both the school and the student level that might contribute to an understanding of how schools influence Latino and non-Latino students' civic development, and subsequently selected several predictor variables that were potentially malleable through changes in educational or social policy. Finally, HLM also allows us the opportunity to test whether the size of the gap between Latino and non-Latino students varies among schools and, if so, what school characteristics influence the size of this gap. In fact, the size of the gap varied significantly for only

Table 1 Descriptive statistics

	Non-Latino	Latino
Student-level		
Outcomes:		
Total civic knowledge	110.24**(22.18)	98.62 (19.41)
Expectation of informed voting	10.34**(1.91)	9.77 (2.15)
Positive attitudes toward immigrant rights	10.24 (2.08)	11.01**(2.32)
Step 2:		
Not born in U.S.	0.08 (.27)	0.25**(.44)
Speak English at home	0.96**(.19)	0.66 (.47)
Step 3:		
Read news in newspaper	0.63 (.48)	0.59 (.49)
Discuss politics with parents	0.05 (.98)	−0.02 (1.06)
Step 4:		
Openness of classroom climate	10.61*(2.19)	10.24 (2.40)
Study political topics	0.88*(.41)	0.70 (.45)
	Low Latino enrollment	**High Latino enrollment**
School-Level		
Outcomes:		
Total civic knowledge	107.32**(12.98)	97.62 (8.32)
Expectation of informed voting	10.51**(.84)	9.71 (.69)
Positive attitudes toward immigrant rights	10.26 (.62)	10.43 (.98)
Step 3:		
Suburban location	0.57 (.50)	0.50 (.50)
Step 4:		
Teacher's use of interactive activities	– 0.03 (1.07)	0.03 (.83)
Avg. parental education	0.38**(.71)	−0.20 (.82)
Avg. classroom climate	0.14 (.84)	0.16 (.62)
Teacher's use of official curricula	0.80 (.39)	0.76 (.46)

Note. Standard deviations are indicated in parentheses. Standard errors for the t-tests at level 1 are corrected to take into account design effects.

**T-test indicates that difference between two groups on variable is significant, $p < .01$.

*T-test indicates that difference between two groups on variable is significant, $p < .05$.

one of the three outcomes (positive attitudes toward immigrants' rights), and modeling this gap will also be part of this analysis.

Breaking from more traditional model-building procedures, in which level 1 predictors are entered before level 2 predictors, we entered predictors in 4 blocks relating to various explanations of differences between Latino and non-Latino students. Further information on the construction of these variables, including handling of missing data, can be found in Appendix A. Descriptive statistics for the predictors, reported separately for Latino and non-Latino students, can be found in Table 1.

The first set of predictors entered related to *Latino ethnicity* itself. At the student level we included a dichotomously coded predictor indicating Latino or non-Latino ethnicity. At the school level, we included a dichotomously coded predictor indicating whether the school had an above-average or below-average number of Latino students as compared to other schools surveyed in the study. By entering these predictors first, we could determine the average differences between non-Latino and Latino students, as well as the average differences in schools with high or low Latino enrollment, that exist in each of these three outcomes.

The second set of predictors included factors likely to be associated or confounded with Latino ethnicity. In the analysis of civic knowledge, we included an indicator of whether the student always *spoke the language of test (English) at home*. This is designed to address students' comprehension of English, which could potentially explain lower civic knowledge scores among Latino students. In the analysis of expectations of voting and attitudes toward immigrants' rights (but not civic knowledge), we included an indicator of whether the student was *born in the United States*. This is designed to address citizenship in the analysis of voting (as those not born in the United States cannot vote unless naturalized), and to address immigrant status in the analysis of attitudes toward immigrants' rights (as those Latino students who consider themselves immigrants may have different opinions about immigrant rights). Further examination of this relationship between Latino ethnicity and immigrant status is the subject of a related analysis in Torney-Purta *et al.* (in press).

The third set of predictors related to home factors. As the ultimate purpose of this analysis is to determine how school influences political socialization, it is important to consider other potential influences that come from activities at home, including interactions with parents. This includes the extent to which students *discuss politics with parents,* and whether students *read national news in the newspaper* (presumably at home). At the school level, *suburban locale* was added to control for neighborhood type.

The fourth and final set of predictors related to school factors, which are the main variables of interest in our analyses. At the student level, we included individual students' *perceptions of the openness of their classroom climate* for discussion (especially of potentially controversial topics), and a categorical variable indicating whether they have *studied several political topics in school* (for example, the Constitution or the courts). At the school level, we included four variables. First, the *average perception of open classroom climate* assessed a school's overall discussion climate, over and above how an individual student experienced the school. Second, the *average parental education of students in the school* represented the educational resources at home for all students in the school. Finally, we considered two characteristics of teachers surveyed in the school: their *use of interactive activities* in the classroom (e.g., role play activities), and their *use of official curriculum and materials* from state or local authorities in planning civics lessons. In the context of this particular study we were interested not only in whether these school characteristics were significant predictors of various student outcomes, but even more in the extent to which the addition of these predictors helped to explain the gaps that remained between Latino and non-Latino students (level 1) and between high-Latino and low-Latino schools (level 2) after including other variables.[2]

Results

Latino and non-Latino students' means are compared in Table 1. Non-Latino students have significantly more civic knowledge, are more likely to expect to vote, and are less likely to hold positive attitudes toward the rights of immigrants than Latino students. The gap is about half a standard deviation for knowledge, and between a quarter and half a standard deviation for expected voting and immigrants' rights attitudes.

In terms of individual level variables, Latino students, as expected, are more likely to be immigrants and less likely to speak English at home than non-Latinos. There are no significant group differences in the two home variables (newspaper reading and discussion with parents). On both of the school variables (perceiving an open classroom climate and studying political topics) Latinos give lower ratings. The only school level variable with a significant difference is average parent education in the school, with schools of low-Latino enrollment having more educated parents on average.

The results from multilevel analyses of students' civic knowledge, expectations of informed voting, and positive attitudes toward immigrants' rights are found in Tables 2, 3, and 4, respectively. To facilitate understanding, we included the results from each step of adding predictors for each outcome. This allows for a more explicit illustration of how each group of predictors can help to explain the gaps observed between Latino and non-Latino students, and in particular how school-level factors can help to explain these gaps over and above other influences such as individual characteristics and home background.

Civic knowledge analysis

A multilevel analysis of civic knowledge is especially appropriate given that a sizeable proportion of the variation in students' scores exists between schools (ICC = 30.56%). In particular, as illustrated in the first column of Table 2, it is important to conduct a multilevel analysis of the gap in civic knowledge between Latino and non-Latino students, as significant differences are found both at level 1 (between Latino and non-Latino students) and at level 2 (between schools with high and low Latino enrollment). Latino students have lower civic knowledge scores than non-Latino students. Likewise, schools with larger numbers of Latino students have lower civic knowledge scores than schools with fewer Latinos (Tables 1 and 2).

The second column of Table 2 indicates that while the knowledge gap between Latino and non-Latino students does decrease when adding a predictor for English spoken

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[2] In each set, all level 2 predictors were centered on their grand mean, with the exception of whether the school had high or low Latino enrollment. This was done to facilitate interpretation of the intercept as the average score for schools with low Latino enrollment, considering all other variables at their averages. Additionally, all level 1 variables were entered centered on their grand mean. This allows for the effects of these individual variables to be completely addressed both within and across schools. (Had the variables been group-mean centered, individual variables would have only controlled for the variation within schools that could be attributed to these predictors.) Because of this centering, however, it is important to remember that the addition of individual predictors can influence school predictors. What follows should not be considered separate but concurrent analyses of individual and average scores of knowledge, voting expectations, and immigrant attitudes. Rather, they should be considered singular analyses providing pictures of how school characteristics and individual experiences simultaneously impact the civic development of young people.

Table 2 Multilevel model of civic knowledge (HLM coefficients)

	Latino only	Add individual variables	Add at-home variables	Add school effects
Intercept (average)	109.067	109.094	109.257	107.224
High-Latino school	−11.900**	−11.393**	−10.042**	−4.647**
Suburban school			7.203**	3.435†
Teachers' use of interactive activities				n.s
Teachers' use of official materials in planning				n.s
Avg. openness of school climate				2.206†
Avg. parental education in school				5.892†
Latino ethnicity	−3.643**	−2.294†	−2.763†	−2.517†
Speak English at home		6.769**	5.582**	3.391**
Reads national news in the newspaper			2.999**	2.240*
Discusses political topics with parents			3.432**	2.735**
Perception of open classroom climate				0.724**
Studies political topics in the classroom				5.239**

Note. Variables in *italics* have been centered on the grand mean. Other variables are uncentered.

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$.

at home, it does not fully explain the gap. This student-level gap does not appear to be further explained away with the addition of at-home variables or of individual experiences in school. This is indicated in the bottom portions of columns 3 and 4, respectively. In other words, discussing politics with parents, reading the newspaper, studying political topics in the classroom, and experiencing an open classroom climate all relate positively and significantly to higher civic knowledge across the sample of students. However, these variables do not explain why non-Latino students score higher on tests of civic knowledge than Latino students.

The addition of school variables in column 4 (top portion), however, does help explain why high-Latino schools have lower civic knowledge scores on average than low-Latino schools. Taking into account level 1 characteristics, suburban location, and various other school characteristics, the gap between schools with high-Latino and low-Latino populations decreases from 10 points to 5 points, or from a .5 SD difference to under a .25 SD difference (Table 2; see Appendix A for information about standard deviations). To contrast, the gap between Latino and non-Latino students at level 1 (discussed in the previous paragraph) is only lowered from .18 SD to .12 SD. In particular, it appears that differences in average civic knowledge between high-Latino and low-Latino schools are largely related to differences between these two groups of schools in the extent to which students in the school perceive an open climate for discussion in classrooms and in the average parental education of students within the school.

Table 3 Multilevel model of expectations of informed voting

	Latino only	Add individual variables	Add at-home variables	Add school effects
Intercept (average)	10.300	10.293	10.239	10.159
High-Latino school	−0.443**	−0.389**	−0.275*	n.s
Suburban school			0.281*	0.179†
Teachers' use of interactive activities				n.s
Teachers' use of official materials in planning				0.209†
Avg. openness of school climate				n.s
Avg. parental education in school				0.160*
Latino ethnicity	−0.432**	−0.387**	−0.296*	n.s
Not born in the U.S.		−0.381*	−0.458**	−0.414**
Reads national news in the newspaper			0.630**	0.480**
Discusses political topics with parents			0.589**	0.485**
Perception of open classroom climate				0.158**
Studies political topics in the classroom				0.655**

Note. Variables in *italics* have been centered on the grand mean. Other variables are uncentered.

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$.

Table 4 Multilevel model of positive attitudes toward immigrants (HLM coefficients)

	Latino only	Add individual variables	Add at-home variables	Add school effects
Intercept (average)	10.302	10.324	10.337	10.325
High-Latino school	n.s	n.s	n.s	n.s
Suburban school			$-0.247^{\dagger}$	-0.304^{*}
Teachers' use of interactive activities				n.s
Teachers' use of official materials in planning				n.s
Avg. openness of school climate				0.181^{*}
Avg. parental education in school				$-0.130^{\dagger}$
Latino Ethnicity	0.759^{**}	0.690^{**}	0.735^{**}	0.711^{**}
Teachers' use of interactive activities				0.363^{*}
Not born in the U.S.		0.527^{**}	0.571^{**}	0.653^{**}
Reads national news in the newspaper			0.224^{*}	n.s
Discusses political topics with parents			0.178^{**}	n.s
Perception of open classroom climate				0.158^{**}
Studies political topics in the classroom				0.512^{**}

Note. Variables in *italics* have been centered on the grand mean.

Variables in **bold** only have been centered on the group means. Other variables are uncentered.

$^{\dagger}p < .10$, $^{*}p < .05$, $^{**}p < .01$.

Informed voting analysis

Although the differences in expectations of voting that exist between schools are somewhat smaller than the observed between-school differences in civic knowledge (ICC = 9.20%), there is still a sizeable enough proportion that analyzing between-school differences is warranted. In particular, there is approximately a difference of .4 (or a difference of .2 SD) between high-Latino and low-Latino schools that we attempt to explain at level 2, along with a similarly sized gap between Latino and non-Latino students that we attempt to explain at level 1.

Column 2 of Table 3 indicates that overall, non-immigrant students (i.e., those who were born in the U.S.) rate themselves as more likely to vote than immigrant students. However, the immigrant variable does not have a substantial effect on the size of the gap in expected likelihood of voting between Latino and non-Latino students. Adding at-home experiences of students in column 3, however, somewhat reduces the size of the gap for informed voting. Taking into account suburban location, whether students read the newspaper, and whether students discuss political topics with their parents reduces the gap between Latino and non-Latino students to less than .3 at level 1, and the difference between high-Latino and low-Latino schools to less than .3 at level 2.

It is with the inclusion of *school-related variables* in the model in column 4 that the gaps between Latino and non-Latino students (at level 1) and between high-Latino and low-Latino schools (level 2) are rendered non-significant. Thus, after considering home background and place of birth, the discrepancies in voting expectations between these groups can be further explained by differences in the extent to which students study political topics and perceive an open classroom climate for discussion, and in whether a school's students come from high home educational backgrounds and have teachers who refer to official curricula as they choose content for and prepare civic-related lessons.

Attitudes toward immigrants' rights analysis

In the previous two analyses we were interested in explaining why Latino students (and schools with many Latino students) had lower civic knowledge scores and were less likely to expect to vote. Here Latino students have *higher* scores on a measure of positive attitude toward rights for immigrants than non-Latino students. Although the between-school proportion of variability in attitudes toward immigrants' rights is smaller than the between-school variability for either of the other two outcomes (ICC = 5.05%), multilevel analysis is still warranted because of the significant variability between schools in the size of the attitude differences between Latino and non-Latino students. Overall, Latino students have significantly more positive attitudes toward immigrants' rights than do non-Latino students; however, this difference between the two groups in some schools is larger than the difference between groups in other schools. Thus in this analysis (in contrast to the previous ones), school characteristics can be used not only to explain average differences at level 2, but also to explain differences in the size of this gap in different schools.[3]

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[3] In order to facilitate the modeling of the gap between Latino and non-Latino students, Latino ethnicity was centered on its group mean, rather than its grand mean, when entered into the analysis.

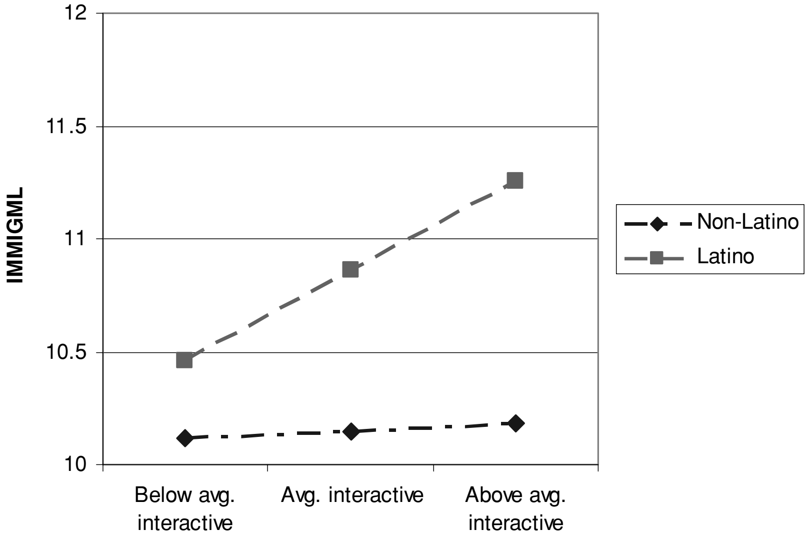

Fig. 1 Interaction between Latino Ethnicity and Teachers' Use of Interactive Class Activities in Predicting Positive Attitudes toward Immigrant Rights

As illustrated in Table 4, the difference between high-Latino and low-Latino schools at level 2 is not significant, even without considering additional variables. The gap between Latino and non-Latino students at level 1, however, is significant, with .759 points (or .4 SD) separating the two groups before adding other variables. Being an immigrant, at-home experiences, and school practices have little impact on the magnitude of this gap (though some of these variables have a positive relation to these attitudes for the students overall). Of considerable interest, a significant cross-level interaction is found: in schools where the teacher reports more frequent use of interactive class activities such as role-playing or group work, Latino students report more positive attitudes toward immigrants' rights. The use of these activities, however, has little impact on the attitudes that non-Latino students have toward immigrants' rights. This interaction is displayed graphically in Fig. 1.

Discussion

This analysis comparing Latino and non-Latino students from a nationally representative sample of ninth graders tested in 1999 allows an examination of the extent of differences in preparation for citizenship and life in a democratic system. This is examined at both the individual and school levels and allows us to investigate aspects of context that vary in a large data set. These results, when considered in light of previous work on Latino adolescents' developmental assets and political socialization, have implications for policy and also for further research using both quantitative and qualitative methodologies. These analyses also extend the developmental assets framework by examining internal and external assets in more than one social context (school as well as family) and by looking simultaneously at several strands of developmental outcomes. Outcomes include academic competence in the form of civic knowledge, character or positive values reflected in support for immigrants' rights, and contribution to democratic society in the form of willingness to participate in voting. It is clear that 14-year-olds are already members of the political cultures they share with adults, and that schools can provide experiences that serve as external assets to provide a foundation for the development of civic and political knowledge and engagement. The results extend the study of Latino political engagement by looking at precursors to activity among adolescents.

In this section we will first review the group differences (Latino/non-Latino), then discuss findings relating to home and school influences for the group as a whole. The discussion will then turn to gaps at the individual level and the school level including home and school influences. We will consider strengths and weakness of the analytic method and this data set, then conclude with future research directions and policy recommendations following from the analysis. The advantages of conducting analysis of large data sets will be highlighted at several points.

Looking first at the extent and direction of differences, non-Latino students have higher civic knowledge and are more likely to expect to vote than Latinos, while Latino students are more likely than non-Latino students to endorse rights and opportunities for immigrants. The differences at the individual level hold even when controlling for language spoken at home, whether the student was born in the United States, and experiences at home such as discussion with parents. The size of the gap between the scores of Latino and non-Latino students is fairly similar across schools for civic knowledge and for voting. However, for immigrant rights the gap is larger in some schools than in others. These differences by school (and associated contextual characteristics) can only be examined effectively in a large data set where schools have been drawn at the first level of sampling, followed by drawing a class of students.

A number of school-related characteristics predict the three outcomes across the entire sample, in ways that are consistent with the positive youth development framework. This indicates that these aspects of school experience can function as external assets and therefore make a difference for both Latino and non-Latino students. Creating an open climate for discussion, and explicitly including the study of political topics in the curriculum should be encouraged in practice and by policy. Including interactive classroom activities as part of classroom pedagogy also appears to have potential benefits (particularly in building identity). Although educational policy is the focus of our recommendations, the finding that discussion with parents plays a role in encouraging political knowledge and engagement is also of interest. Studies of immigrant youth playing a role in mediating a new culture for their families (Jones and Trickett, 2005) and also studies of students who bring home school programs encouraging electoral participation suggest that there are policy directions to be explored in the involvement of families in their children's positive political development. McDevitt (2006) describes the "trickle up" effect of in-school programs such as Kids Voting.

Much of the discussion that follows has a focus on the size of the *gaps or differences* between Latino and non-Latino students and the gaps between schools with high and low proportions of Latino students. The nature of these *gaps* differs for the three outcomes, and illustrates the importance of considering political socialization as multidimensional. In civic knowledge, for example, differences in the school's climate for discussion serve to explain part of the achievement gap between high-Latino and low-Latino schools, which indicates that the presence or absence of external assets can affect academic outcomes. When analyzed at the individual level, however, the gap between Latino and non-Latino *students* is much more difficult to explain away. This mirrors the findings from studies of achievement gaps between white students and marginalized minorities, including African-American students, which have been observed in large national data sets. On average, Latino students differ from non-Latino students not only in language spoken and cultural background, but in educational background of the home and socioeconomic status. A detailed consideration of the home environment supporting education might help to further address these differences in knowledge. This analysis certainly makes it clear that various school activities (most notably, respectful classroom climates encouraging political discussion and teaching of civic or politically-related topics) can foster civic knowledge regardless of background. However, it is important also to identify other factors associated with knowledge inequalities between groups.

In contrast, it does appear that certain school factors have a considerable influence in explaining the gap between Latino and non-Latino students in their expectation to vote. Following the notion of a school as a community of practice (Torney-Purta *et al.*, 2006), those students who experience the most exposure to the practice of democratic ideals in their classrooms are those who plan on participating the most in the democratic process as adults. On one hand, this exposure may come in the form of formal instruction in civic-related topics. The gap between Latino and non-Latino students in expected likelihood of voting at level 1 is explained partially by the presence or absence of instruction in these topics and at level 2 by the use of official curricular guidelines (which often revolve around conventional citizenship activities like voting: Gonzales *et al.*, 2001). On the other hand, this gap also seems to be driven in part by differences in students' perceptions of an open classroom climate, in which students' own ideas about these political topics are respected and welcomed. A supportive educational environment is important for positive development, as indicated by outcomes such as civic participation. Students from varied backgrounds who feel as if their ideas are respected in the classroom environment are more likely to expect to extend their participation into the broader society as adults. It follows that teachers who are interested in reducing between-group differences in expectations of participating in the political process should work to create a classroom in which all students—regardless of background—feel encouraged to express their opinions. Early adolescence is not too early to begin to make discussion a regular part of classroom activities. Future research should use a variety of methods to explore more directly why Latino students perceive their classroom climates as less open to discussion, with the purpose of identifying those ways in which teachers may best target their efforts to encourage participation. In short, policy support for teacher preparation (at both the pre- and in-service level) to establish and maintain an open and respectful class climate is vital.

Finally, the analysis of positive attitudes toward immigrants' rights extends the notion of the school as a "community of practice" (Torney-Purta *et al.*, 2006) by taking into account the important role of cultural identity and democratic practice in the everyday contexts of students. These findings suggest that active participation in the classroom encouraged by teachers relates to a stronger positive attitude toward immigrants' rights among Latino students. Even in the case where the Latino students themselves were born in the United States, their families' immigrant history leads many to identify with immigrants' perspectives. When they have an increased chance to practice democracy through the school, most notably through an open classroom climate or through participating in interactive activities with the leadership of their teacher, these students appear to be encouraged to engage in political issues relevant to their own identities. Just as political awareness within a community relates to a higher political engagement on the part of Latino students, schools that encourage students to become more politically aware may encourage political engagement because of an interest in the needs and rights of immigrants. Future analysis in this area could focus on how this strengthening of attitudes toward immigrants' rights in turn may lead to an increase in expected political participation, either through community involvement or through various petitioning or protest activities.

The mode of analysis used in this article (modeling the gap between individuals from two groups and between schools where these groups are concentrated) and presenting it in a series of hierarchical models (first adding at-home experiences and then at-school experiences) has illustrated a methodology that could expand the value of analyzing large-scale data sets. These techniques could be used to study socioeconomic gaps or gaps between immigrants and non-immigrants, or gaps between college bound and non-college bound students.

This data set has some weaknesses, however. The surveys did not ask the students about their parents' status as immigrants or citizens, nor regarding the country from which they had immigrated. This precluded replication of some analyses of adult Latinos' participation. Furthermore, ninth-grade students have difficulty accurately reporting their parents' educational level, and this could be analyzed only as a school average. Analysis at the individual level could provide more in-depth understanding of the effects of socioeconomic status on the development of Latino students.

A number of further hypotheses can also be generated from the current analysis regarding the role of the school in forming identities, fostering attitudes, and providing instruction to effectively develop knowledge and skills among Latino adolescents and immigrant adolescents in the United States (and also elsewhere in the world). Earlier analysis (Torney-Purta, 2002) has shown the significant role of schools in civic education cross-nationally. These analyses indicate the importance of looking at immigrants' preparation for citizenship along multiple dimensions of knowledge, engagement, and attitudes, recognizing the potential strengths of cultural identities in fostering adolescent development, and enhancing the aspects of civic education at school that relate to higher knowledge and engagement. Future analysis will address aspects of political socialization in the United States left unexplored in this analysis, and will also look at patterns among various ethnic minority and immigrant groups in other countries (including those which have more comprehensive policies about immigrants' acculturation such as Sweden, or a different mixture of ethnic groups such as England or Australia). Further, the role of peer groups and formal organizations in and outside school will be explored. Some hypotheses could be derived from the adult literature and tested with this national data set, such as the extent to which perceived discrimination prompts political activity and how activities in the community such as volunteering or signing petitions function as political engagement

Other hypotheses could be drawn from the youth development literature and tested using national data sets, for example, the role of student empowerment in schools and the influence of the peer group context. Although the study of Latino students in the ninth grade is important, given the high drop out rate for this group, it would also be valuable to study older adolescents and the developmental assets related to political and civic engagement that they possess.

The developmental assets literature helps to formulate policy directions by focusing on the aims of policy in different arenas. Benson and Pittmann (2001) identify six arenas of action in youth development, which we have elaborated. First is the research arena, which includes statistical analysis of large data sets, ethnographies in particular locales or settings, and evaluations of interventions; second is the arena of philanthropy carried out through public, private, and non-profit entities; third is policy itself, including legislation at every level from local school boards to state mandates to federal laws and regulations; fourth is advocacy at the grass-roots level as well as by organized national interest groups; fifth is public opinion; and sixth is practice which is reflective, documented, and evaluated.

To move effectively in these policy arenas requires clear aims. We want to increase civic knowledge and the likelihood of voting on the part of all students (as well as reduce the gap between Latino and non-Latino students); both of these outcomes are critical to learning to participate in a democratic society. We want to better understand how support for immigrant rights develops and motivates students, especially Latino students, when it becomes part of their identity. Conditions in school that can be addressed by education policy can help to achieve these goals. This includes mandating a curriculum rich in conceptual content for all students, developing and teaching toward standards, and encouraging open and respectful discussion in all classrooms. The fact that such contextual factors have a significant influence on students' knowledge and attitudes, even when they have only been in high school a short time, speaks volumes about the potential effectiveness of such policies.

Analysis of a large-scale database cannot provide the texture of examples of qualitative research, but it can provide evidence for enhanced attention (and funding) for the development of civic-related standards and improved teacher preparation and implementation (Torney-Purta and Vermeer Lopez, 2006). It can also provide educators with encouragement that school programs and classroom climate can play a role in reducing the gap between Latino and non-Latino students in their preparation to live in a democratic society.

At the same time it can suggest ways in which identification with immigrants as a group may serve as a positive developmental asset and cumulate with other internal and external assets to enhance competence and contribution to society.

Appendix A

Summary of variables

Outcome variables

Civic knowledge: Total civic knowledge scale, comprised of both content knowledge and interpretative skills items (IRT: see Schulz and Sibberns, 2004). International Mean = 100, SD = 20.

Expectations of informed voting: Two-item IRT scale (Husfeldt *et al.*, 2005; Schulz and Sibberns, 2004). International Mean = 10, SD = 2.

Positive attitudes toward immigrants' rights: Five-item scale of individual's attitudes toward political and social rights of immigrants (IRT: see Schulz and Sibberns, 2004). International Mean = 10, SD = 2.

Latino ethnicity predictors

Latino ethnicity: Student's report that they are of Latino ethnicity (recoded from national options: 1 = yes; 0 = no).

High Latino school: School has more Latino students in the school's sampled class than average across all schools in the sample. Created from aggregated student data (recoded 1 = high Latino concentration; 0 = low Latino concentration).

Individual covariate predictors

Not born in country of test: Student's report that they were not born in the United States; i.e., that they are a first-generation immigrant (recoded from part 2, item 4: 1 = not born in U.S.; 0 = born in U.S.).

Speak language of test: Student's report that they always speak the language of the test (English) at home (recoded from part 2, item 6: 1 = yes; 0 = no).

Home background

Read news in the newspaper: Reports that they read about national news in the newspaper (recoded from item L7: 1 = yes; 0 = no).

Discuss political topics with parents: Composite scale of frequency with which students discuss topics with their parents from items L2, L5: Mean = 0, SD = 1.

**Suburban locale:* Location in the suburbs (recoded from national option in school questionnaire: 1 = in suburbs; 0 = in urban or rural area).

School variables

Perception of Open classroom climate: Individual student perception that their classroom is open to discussion of political topics (IRT: Schulz and Sibberns, 2004). International Mean = 10, SD = 2.

Studies political topics in the classroom: Individual studied topics related to national politics in social studies class (from latent class analysis of national options items: 1 = likely to have studied these topics; 0 = unlikely to have studied these topics).

**Teachers' use of interactive activities:* Teacher questionnaire report of the extent to which they use activities in their class that require student interaction, such as role-playing or group reports (from confirmatory factor analysis of teacher items I2, I5, and I6). Mean = 0, SD = 1. Missing data are imputed by taking the average score from schools from the same locale (urban/suburban/rural) and region (northeast/southeast/central/west).

**Teachers' use of official materials in planning*: Teacher questionnaire reports of the importance of official curriculum requirements in planning civics classes (recoded from confirmatory factor analysis of teacher items G1 and G2: 1 = important; 0 = not important). Missing data are imputed randomly, while preserving the ratio of teachers who do use official materials to those who do not.

**Average perception of open classroom climate:* School average of students' perceptions of an open classroom climate for discussion (aggregated from student IRT).

**Average parent education:* School average of students' reports of their mothers' and fathers' education (aggregated from part 2, item 12 of student survey). Mean = 0, SD = 1.

* Level 2 variable

Note: Cases with missing data on student-level variables were deleted from the analysis on an analysis-by-analysis basis.

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References

Amadeo J, Torney-Purta J, Lehmann R, Husfeldt V, Nikolova R (2002) Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement. [Available: http://www.wam.umd.edu/ ∼ iea]

Baldi S, Perie M, Skidmore D, Greenberg E, Hahn C (ed) (2001) What democracy means to ninth graders: U.S. results from the IEA Civic Education Study. National Center for Educational Statistics, Washington, DC

Balsano AB (2005) Youth civic engagement in the United States: Understanding and addressing the impact of social impediments on positive youth and community development. Appl Dev Sci 9:188–201

Barreto MA, Muñoz JA (2003) Reexamining the "Politics of in-between": Political participation among Mexican immigrants in the United States. Hispanic J Behav Sci 25:427–447

Benson P, Pittmann K (2001) Trends in youth development: Visions realities, and challenges. Kluwer Academic Publishers, Boston

Berry J, Phinney J, Sam D, Vedder P (eds) (2006) Immigrant youth in cultural transition: Acculturation, identity, and adaptation across national contexts. Lawrence Erlbaum Associates, Mahwah, NJ

Bloomberg L, Ganey A, Alba V, Quintero G, Alcantra LA (2003) Chicano-Latino Youth Leadership Institute: An asset-based program for youth. Am J Health Behav 27:S45–S54

Calderón M (1998) Adolescent sons and daughters of immigrants: How schools can respond. In: Borman K, Schneider B (eds) The adolescent years: Social influences and educational challenges: Ninety-seventh Yearbook of the National Society for the Study of Education, Part I. The National Society for the Study of Education, Chicago, IL

Call KT, Mortimer JT (2002) Arenas of comfort in adolescence: A study of adjustment in context. Lawrence Erlbaum Associates, Mahwah, NJ

Diaz J (2005) School attachment among Latino youth in rural Minnesota. Hispanic J Behav Sci 27:300–318

Driever SL (2004) Latinos in polynucleated Kansas City. In: Arreola DD (ed) Hispanic spaces, Hispanic places. University of Texas Press, Austin, TX

French SE, Seidman E, Allen L, Aber JL (2006) The development of ethnic identity during adolescence. Dev Psychol 42:1–10

Fuligni AJ, Hardway C (2004) Preparing diverse adolescents for the transition to adulthood. The Future of Children: Children of Immigrant Families (vol. 14). Retrieved May 17, 2006 from www.futureofchildren.org

Gandara P (2005) Fragile futures: Risk and vulnerability among Latino high achievers. Educational Testing Service, Princeton, NJ

Garcia JA (1997) Political participation: Resources and involvement among Latinos in the American political system. In: Garcia FC (ed) Pursuing power: Latinos and the political system. University of Notre Dame Press, Notre Dame, IN

Gonzales MH, Riedel E, Avery PG, Sullivan JL (2001) Rights and obligations in civic education: a content analysis of the National Standards for Civics and Government. Theory Res Soc Educ 29(1):109–128

Hahn C, Torney-Purta J (1999) The IEA Civic Education Project: National and international perspectives. Soc Educ 65(7):425–431

Hahn C (2001) Student views of democracy: The good and bad news. Soc Educ 65:456–460

Hart D, Atkins R (2002) Civic competence in urban youth. Appl Dev Sci 6:227–236

Hovey JD (2000) Psychosocial predictors of acculturative stress in Mexican immigrants. J Psychol 134:490–502

Husfeldt V, Barber C, Torney-Purta J (2005) Students' social attitudes and expected political participation: New scales in the enhanced database of the IEA Civic Education Study. College Park, MD: Civic Education Data and Researcher Services, Department of Human Development, University of Maryland College Park. Retrieved July 20, 2006 from http://www.wam.umd.edu/ ∼ iea

Jessor R, Turbin MS, Costa FM (1998) Risk and protection in successful outcomes among disadvantaged adolescents. Appl Dev Sci 2:194–208

Jones CJ, Trickett EJ (2005) Immigrant adolescents behaving as culture brokers: A study of families from the former Soviet Union. J Soc Psychol 145:405–427

Laosa L (1989) Psychological stress, coping, and the development of the Hispanic immigrant child. Educational Testing Service, Princeton, NJ

Larson R, Hansen D (2005) The development of strategic thinking: Learning to impact human systems in a youth activism program. Hum Dev 48:327–349

Lee J (2002) Racial and ethnic achievement gap trends: Reversing the progress toward equity. Educ Res 31(1):3–12.

Lerner RM, Fischer CB, Weinberg RA (2000) Toward a science for and of the people: Promoting civil society through the application of developmental science. Child Dev 71:11–20

Lopez MH (2003, March). Electoral engagement among Latino youth. College Park, MD: The Center for Information & Research on Civic Learning & Engagement. Retrieved January 18, 2006 from http://www.civicyouth.org

McDevitt M (2006) The partisan child: Developmental provocation as a model of political socialization. Int J Public Opin Res 18:67–70

Pedersen S, Seidman E, Yoshikawa H, Rivera AC, Allen L, Aber JL (2005) Contextual competence: Multiple manifestations among urban adolescents. Am J Community Psychol 35:65–82

Pittman KJ, Irby M, Tolman J, Yohalem N, Ferber T (2001) Preventing problems, promoting development, encouraging encouragement: Competing priorities or inseparable goals? Forum for Youth Investment, Takoma Park, MD

Porter N (2006) Report of the APA expert summit on immigration: Immigration policy is child policy. The Advocate 29(1):7–8

Ramos-Zayas A (2003) National performances: The politics of class, race and space in Puerto-Rican Chicago. University of Chicago Press, Chicago

Raudenbush SW, Bryk AS, Cheong YF, Congdon R (2004) HLM 6: Hierarchical Linear and Nonlinear Modeling. Scientific Software International, Lincolnwood, IL

Reimers F (2005, August). An incomplete education. Civic education of immigrant students in the United States. Paper presented at the conference on Education and Democracy in the Americas, San Jose, Costa Rica

Rodriguez M, Morrobel D (2004) A review of Latino youth development research and a call for an asset orientation. Hispanic J Behav Sci 26(2):107–127

Roscigno VJ (2000) Family-school inequality and African American/Hispanic achievement. Soc Probl 47:266–290

Roth J, Borbely CJ, Brooks-Gunn J (2003, October). Service-learning and positive youth development: How service-learning programs relate to the goals and processes of positive youth development. Paper presented at the Service-Learning and Developmental Science Conference, Colorado Springs, CO

Sanchez Jankowski M (1992). Ethnic identity and political consciousness in different social orders. In: Haste H, Torney-Purta J (eds) The development of political understanding: a new perspective. Jossey-Bass, San Francisco

Scales PC, Benson PL, Leffert N, Blyth DA (2000) Contribution of developmental assets to the prediction of thriving among adolescents. Appl Dev Sci 4:27–46

Schildkraut D (2005) The rise and fall of political engagement among Latinos: The role of identity and perceptions of discrimination. Pol Behav 27(3):285–312

Schmid CL (2001) Educational achievement, language-minority students, and the new second generation. Sociol Educ 74: 71–87

Schulz W, Sibberns H (2004) Technical report for the IEA Civic Education Study. IEA, Amsterdam

Search Institute (n.d.). Asset Categories. Retrieved May 19, 2006 from http://www.search-institute.org/assets

Steiner-Khamsi G, Torney-Purta J, Schwille J (ed) (2002) New paradigms and recurring paradoxes in education for citizenship, vol. 5. Elsevier Science, Oxford

Stepick A, Stepick CD (2002) Becoming American, constructing ethnicity: Immigrant youth and civic engagement. Appl Dev Sci 6:246–257

Tienda M, Mitchell F (eds) (2006) Hispanics and the future of America. National Academy of Sciences Press, Washington, DC

Torney-Purta J (2002) The school's role in developing civic engagement: A study of adolescents in twenty-eight countries. Appl Dev Sci 6:203–212

Torney-Purta J, Barber C, Wilkenfeld B (in press) Differences in the civic knowledge and attitudes of U.S. adolescents by immigrant status and Hispanic background. Prospects

Torney-Purta J, Homana G, Barber C (2006, April). Young people's social and political attitudes and communities of practice in four countries. In: Veugelers W (Chair) Human development and citizenship. Paper symposium at the American Education Research Association annual conference, San Francisco, CA

Torney-Purta J, Lehmann R, Oswald H, Schulz W (2001) Citizenship and education in twenty-eight countries. Amsterdam: International Association for the Evaluation of Education Achievement. [Available: http://www.wam.umd.edu/ ∼ iea]

Torney-Purta J, Schwille J, Amadeo J (1999) Civic education across countries: Twenty-four national case studies from the IEA civic education project. International Association for the Evaluation of Educational Achievement, Amsterdam

Torney-Purta J, Vermeer Lopez S (2006) Developing citizenship competencies from kindergarten through grade 12: A background paper for policymakers and educators. Education Commission of the States, Denver, CO

U.S. Bureau of the Census (2002). Voting and registration in the election of November 2000. Washington, DC. Retrieved January 9, 2006 from http://www.census.gov/prod/2002pubs/p20-542.pdf

U.S. Bureau of the Census (2003). Young, diverse, urban. Washington, DC. Retrieved January 9, 2006 from http://www.census.gov/Press-Release/www/2003/cb03-100.html

Walsh CE (1987) Schooling and the civic exclusion of Latinos: Toward a discourse of dissonance. J Educ 169:115–131