AN OVERVIEW OF SECONDARY ANALYSIS OF THE IEA CIVIC EDUCATION STUDY, ITS IMPACT AND DIRECTIONS FOR THE FUTURE.

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Abstract

The paper provides details of secondary analysis of the IEA Civic Education Study at the University of Maryland, College Park conducted since 2001, and reviews the relevant theoretical frameworks for the analysis. Examples of both 28-country analysis and between-student analysis in groups of countries (e.g., Chile, Colombia, Portugal and the United States) are presented, providing a map of areas where analysis has been relatively full and other areas where there has been limited analysis. There is included a listing of scales recently developed (e.g., expected social movement participation, ethnic tolerance, participation in political discussion) and their properties and a discussion of the impact of the study in the United States (especially through a document entitled *The Civic Mission of Schools*). Continuing work at the University of Maryland in the CEDARS Center (Civic Education Research and Data Services Center), which will be initiated at the time of the IRC meeting, is outlined.

BACKGROUND

The IEA, a consortium of educational research institutes in nearly 60 countries, focused its large-scale data collections on literacy, mathematics, and science during the 1980s. In the early 1990s, spurred by recent massive changes in political and social structures, some member countries asked IEA to organize a study of civic education that would have a strong knowledge test as well as measures of young people's attitudes and behaviors. The IEA Civic Education Study began its planning in 1993. From the beginning it was clear that it would differ from many IEA studies. A set of national case studies was necessary as a first phase. Since Civic Education is not an established subject with a designated curriculum in many school systems, it was essential to gather information about the expectations in different countries for what students should know and believe about citizenship. It also became clear very

early in the process that there was considerable skepticism about whether it would be possible to carry out a study that would be informative to educators in different types of democracies (relatively newly established as well as long-standing ones) and whether it would be possible to develop a psychometrically sound yet fair test. A consensus building process was thus essential during the first phase. The final instrument, which met IEA psychometric standards and was acceptable in the participating countries, was about equally divided between test items (with correct answers keyed) and survey items (concepts, attitudes, and expected behaviors without correct answers).

The Study's aim was to look at the effects of schools on civic education outcomes (in the context of other institutions) and to take advantage of the IEA organization's perspective and resources, which brought to this effort a wide network of research institutes in different countries and a wealth of technical and methodological expertise in cross-national comparative education research. A brief review will set the context.

Much of the previous research on the development of political knowledge and attitudes (the field known as political socialization research) had been conducted from 1955 to 1975. To give a very brief outline, Jennings and Niemi's work following secondary school students into adulthood was pivotal for political scientists (1974). Other research from this period suggested that schools contribute little to the civic education process (Langton and Jennings, 1974) and that each young adult generation recreates itself in response to the political climate (Barnes and Kaase, 1979). As other issues and theoretical models took a central place in political scientists' research agenda, there was a steep decline in the extent of this research in the late 1970's (Cook, 1985). Many of the young scholars who had prepared dissertations in this area took their research energies to other topics with greater visibility in the profession.

A few psychologists and educators continued to study politically relevant attitudes building on early studies using interviews (Connell, 1971) and surveys (Hess and Torney, 1967). In the early 1970s, a Civic Education Study organized by IEA tested 32,000 students in nine countries. That study concluded that an open climate for classroom discussion of controversial issues was especially likely to foster greater civic knowledge and less authoritarianism (Torney, Oppenheim, and Farnen, 1975). A reanalysis of the 1971 IEA data from three countries, including the United States, showed that older students gave less positive ratings of both local and national government than did younger students, were more comfortable with conflict in the political system, and showed more interest in political discussion (Torney-Purta, 1984). Some psychologists suggested that the adolescent develops concepts in the political and economic domain through processes similar to those operating in other domains and that background knowledge influences whether a socialization agent's message is understood or internalized. However, there was a gap of about 15 years in research on the developmental perspective in political socialization as well.

Since the early 1990s there has been new attention to the citizenship and political education of adolescents. Special issues of psychology journals focusing on political

socialization and engagement (Haste and Torney-Purta, 1992; Sherrod, Flanagan, and Youniss, 2002) and of political science journals (Niemi and Junn, 1998) appeared. Qualitative studies identified the "hidden curriculum" and its political dimensions in informal and formal educational settings (Bhavnani, 1991; Gordon, Holland, and Lahelma, 2000) especially in England. Conover and Searing's (2000) study contrasted four communities in the United States (and also England). Niemi and Junn (1998) analyzed 1988 data from high school seniors in the National Assessment of Education Progress and found that taking civic-related classes in school did make a difference for high school seniors' civic knowledge. Studies by Hahn (1998) and by Flanagan and her colleagues (1999) took a cross-national perspective.

The study of political socialization in the United States still tends to be somewhat bifurcated, with the interests of political scientists and psychologists (or educators) seldom in concert. Although there is mention of multidimensional views of engagement, political scientists are most likely to focus on young people's likelihood of turning out to vote, civic educators (and some political scientists) on knowledge of political structures, and psychologists on youth engagement in community-based civic activities. The IEA Civic Education Study was initiated as these issues were being revived by researchers in some countries.

THE STUDY AND THIS PRESENTATION

The first phase of the IEA Civic Education Study (1994–1998) consisted of the collection of structured national case studies used as the basis for a consensus process to develop content specifications for a test of civic knowledge (with right and wrong answers) and also a survey of political attitudes and civic behavioral report items. These case studies 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, Schwille, and Amadeo, 1999; and Steiner-Khamsi, Torney-Purta, and Schwille, 2002).

The second phase of the IEA Civic Education Study began in 1997. An International Steering Committee, together with National Research Coordinators, constructed items, pre-piloted, and then piloted an instrument (test and survey) that would be suitable for early and late adolescents and would take about two class periods to complete. The attitude survey included a number of scales drawn (with revisions) from political scientists' surveys of adults and was substantially the same for the two age groups. The test of civic knowledge administered to the older students, however, contained some more difficult items as well as items about economics, political efficacy, and international relations not administered to the 14-year-olds. Thirteen scales based on Item Response Theory (IRT) were developed for the knowledge items and for sets of attitudes items (with means set to 100 for knowledge and 10 for attitudes). IRT scaling allows estimation of missing responses. The inclusion of anchor items at both age levels makes it possible to compare older and younger respondents on the same metric. To give an idea of the scope of the instrument, in addition to the knowledge test there are 52 items about concepts of democracy, citizenship and government, including 4 IRT scales; 22 items dealing with trust in

institutions and efficacy, including 2 IRT scales; 12 items dealing with attitudes toward the nation including 1 IRT scale; 28 items dealing with attitudes toward diversity including 2 IRT scales; 41 school and organization participation items including 2 IRT scales; and 22 items about expected political and civic engagement items including 1 IRT scale.

Nationally representative samples of students in the modal grade for 14-year-olds (a total of about 90,000 students from 28 countries) were tested in 1999; students ranging in age from 16 to 19 (a total of about 50,000 students from 16 countries) were tested in 2000. Each student participating in the study took the same instrument; there was no matrix sampling (see Torney-Purta, Lehmann, Oswald and Schulz, 2001; and Amadeo, Torney-Purta, Lehmann, Husfeldt, and Nikolova, 2002 for a description of scaling and analysis of the 28 and 16 countries, respectively, for early and late adolescents).

Twenty-eight countries tested 14-year-olds: 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. Sixteen countries tested upper secondary students: Chile, Colombia, Cyprus, Czech Republic, Denmark, Estonia, Hong Kong (SAR), Israel, Latvia, Norway, Poland, Portugal, Russian Federation, Slovenia, Sweden and Switzerland (German speaking).

Because of lack of resources, the extent of primary analysis that could be undertaken and included in the IEA reports was relatively minimal when compared to the amount of information available from each of the 150,000 students and the teachers and principals (headmasters) surveyed. The two major IEA publications from the Civic Education Study (Torney-Purta, et al., 2001; and Amadeo, et al., 2002) presented only a small proportion of the data available from the students and teachers tested and surveyed during the study. For example, of the approximately 130 student survey items, only about one-third were included in the 11 IRT scales because of limitations of resources and time (and because to be included a scale had to meet scaling criteria in all of the 28 countries). Some important sections of the student survey were not included in IRT scales or the IEA reports at all, for example, participation in political discussion, perceptions of educational inequality, expected future participation in social movement activities, and political efficacy. Some items included in the report were limited to descriptive data (e.g., percentages of students joining different organizations or experiencing different school learning objectives by country) but very little was said about the correlates of this participation or of teaching with these objectives. This is the reason secondary analysis has special importance in the CivEd study. The status of analysis in the primary reports is indicated in a map of areas of the instrument showing where analyses have been relatively full (based on IRT scales) or less full (without scales) (Appendix 1).

This paper will summarize some of the secondary analyses undertaken in the past two years, beginning to fill in some of the gaps in international analysis of the Civic Education instrument. In particular, the IEA Civic Education group established

during the 1990s at the University of Maryland (consisting largely of doctoral and post-doctoral students) has explored different modes of secondary analysis relating to educational issues.

The two major IEA publications appropriately considered all participating countries in their primary analyses. This paper will summarize three secondary analyses that have used data from 4 to 6 countries. These analyses are less unwieldy than using the full group of 28 countries for 14-year-olds or 16 countries for the upper secondary population, and they offer interesting insights on educational issues. It is hoped that this presentation will stimulate other researchers to think about models and methods they might use in further secondary analysis using groups of countries.

The paper concludes with some reflections about the study and ways in which it has been received by educators, policy makers and journalists, especially in the United States.

WITHIN-COUNTRY ANALYSIS IN SUBGROUPS OF COUNTRIES

Three sets of analysis, each utilizing a slightly different group of countries, will be presented in this section. The first tackles the issue of differences between age groups (and the countries are chosen to be maximally comparable). The second deals with predictors of different types of participation. Initiated by concerns of educators and policy makers in the United States, this analysis also used data from three other long-standing democracies. The last analysis was initiated by questions about ways to improve civic education in Latin America. Funded by the Organization of American States, the countries included Chile and Colombia, and, for comparison, Portugal and the United States.

Profiles of Differences between Younger and Older Adolescents in Six Countries

Examination of age differences in political and economic attitudes has a long history in political socialization research (Adelson and O'Neil, 1966; Hess and Torney, 1967; Moore, Lare, and Wagner, 1985). Although age differences are not "all there is" to the developmental interest in this area, they are a useful starting point.

Fifteen countries tested both early and late adolescents, but the decision was made to examine a maximum of six to allow clear graphic presentation (Torney-Purta and Amadeo, 2003). In sampling older adolescents one country tested students with a mean age of 16.6 years, while another tested a sample with mean age 19.4 years. This was a much larger age variation than for the samples of early adolescents (14.3 to 15.3 years). Also the dropout rate among students from less advantaged home backgrounds after age 14 is very substantial in some countries. For this analysis a subset of six countries was chosen that met the following criteria: the late adolescents had a mean age between 17.5 and 18.9 and the percentage of the relevant age cohort still in school (available to be sampled) was 65% or greater at this upper secondary level. The following six countries are included in this analysis of age differences: Chile, Czech Republic, Norway, Poland, Portugal, and Sweden. Although they met the criteria, because they are the smallest countries in the study, Cyprus and Slovenia were not included here.

Figure 1 shows that in each of the six countries older adolescents had substantially higher scores on the civic knowledge test than younger adolescents. The slopes of growth are remarkably similar, with the exception of Poland, where a significant but smaller difference between age groups was observed. Examination of the data for Cyprus shows a slope similar to that in the other countries: mean for 14-year-olds of 108 and for 17-year-olds of 118.

Figure 1: IRT Scale Means on Knowledge for Early and Late Adolescents by Country
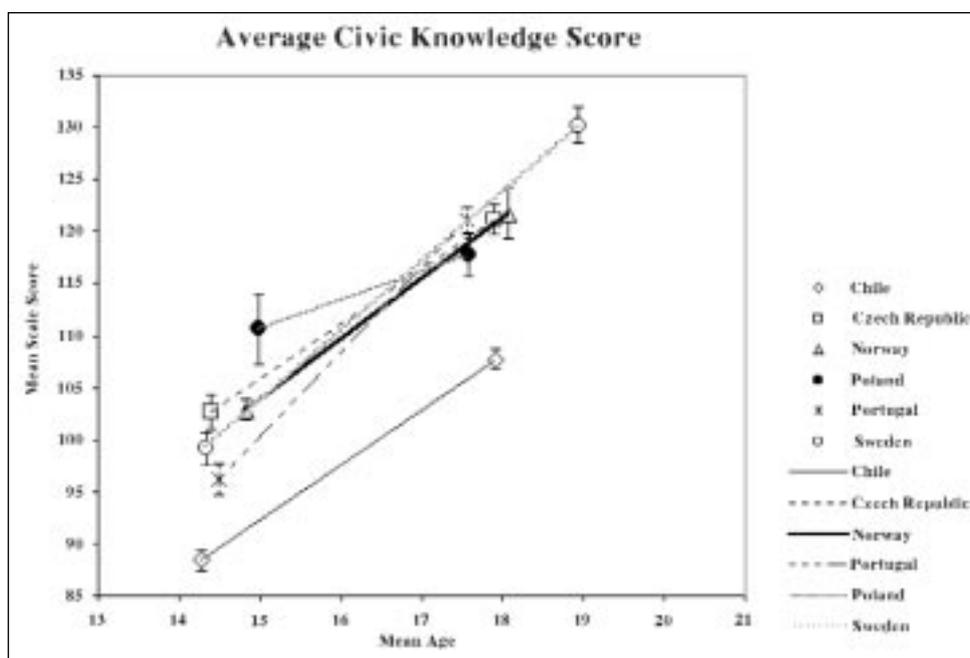
In contrast to the increase in knowledge, Figure 2 shows substantially less trust in government-related institutions among 17–18 year olds than among 14-year-olds in five of the six countries. Sweden and Norway stand out at both age levels as having high levels of trust in government. In Sweden, that level of trust is similar for the two age groups, while in Norway trust is lower for the older adolescents. In Cyprus the decline is similar (from 10.5 to 9.9). A similar age-related difference is found in the extent of positive or patriotic feeling about their nation (significant in every country except Sweden; see Amadeo et al., 2002). This replicates findings in the first IEA Study (1975) as well as a trend noted by other authors.

Figure 2: IRT Scale Means on Trust for Early and Late Adolescents by Country
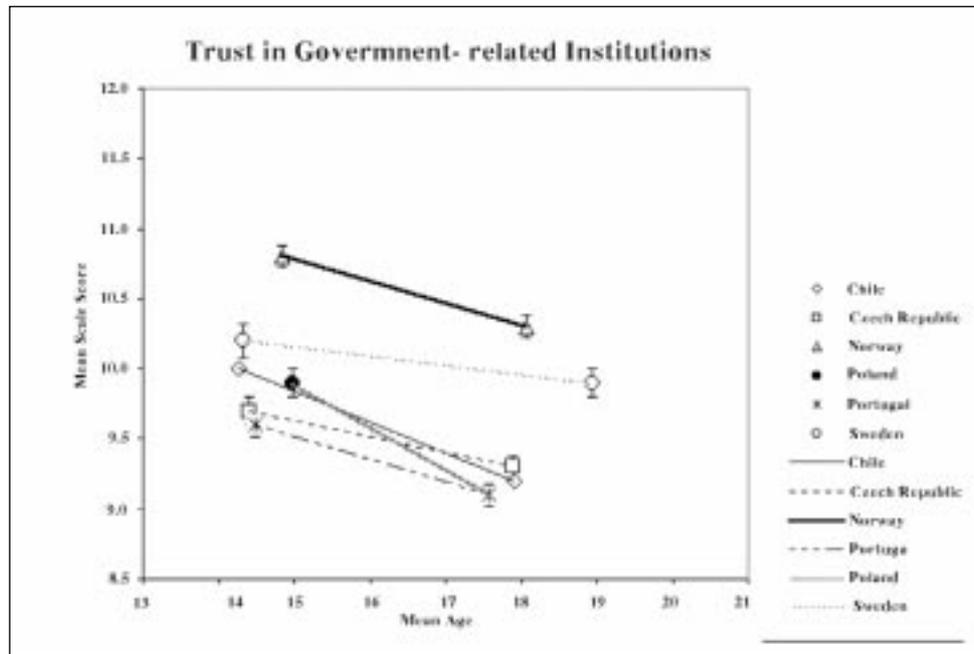
A slightly different picture emerges from those scales and items related to involvement or participation. Figure 3 shows that there is considerable stability or a slight increase across age in acceptance of the norms about what is important for a good adult citizen in the realm of conventional citizenship. This suggests that by age 14 the schools have successfully transmitted norms about good citizenship to most young people. Other analysis (not presented graphically) compared expected participation for the early and late adolescents; there is a significant increase in all six countries in the percentage of students saying that they expect "definitely" to vote. A larger proportion of late adolescents (than of early adolescents) in Chile and Portugal expect to participate in non-violent protests.

In summary, late adolescents are more knowledgeable and more likely to believe that they will vote than are early adolescents. When compared to the younger group, late adolescent students are less trusting of government and less positive about their nations. Charting differences in a cross-sectional study such as this cannot replace longitudinal studies, especially in looking at whether the intent to participate translates into actual participation. However, it is a useful guiding step to further research. Understanding developmental processes requires more than charting age differences. Socio-cultural theory is a fruitful direction (and was the framing theoretical position for the IEA Civic Education Study). The between-country differences that already exist at age 14 (replicating many of those found in adults) and the differences between 14 and 17–18 year olds also suggest that middle childhood and adolescence are important age-periods for research (Torney-Purta, 2004).

Figure 3: IRT Scale Means on Citizenship Norms For Early and Late Adolescents by Country

Importance of Conventional Citizenship
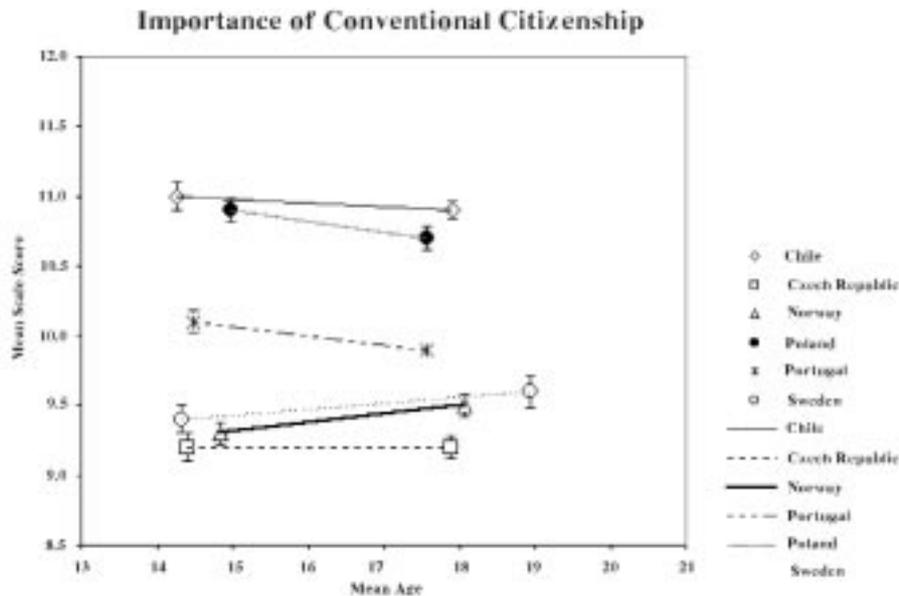
Predictors of Different Types of Engagement at Age 14 in Four Countries

This analysis was initiated to explore a question of considerable interest to educational policy makers–whether different types of civic and political participation are fostered by different experiences in early adolescence. [In the primary analysis only voting had been included as an example of participation.] This issue was of special interest in the United States, but the picture was clarified by also examining three other long-standing democracies: Australia, England, and Norway. Regression analyses were conducted with predictors of three types of anticipated participation (Torney-Purta and Richardson, 2004). There were differences in patterns of predictors for the different types of participation or involvement. In the United States three out of four of the strongest predictors of voting are associated with what happens at school – the students' level of civic knowledge, the confidence they have gained in the efficacy of participating at school, and the extent to which they report learning about elections and voting in their classes. Discussion with parents is also important (Torney-Purta and Richardson, 2004; Richardson, 2003). It is of interest to note that participation in a religious organization is related to the likelihood of voting in the United States but not in the other countries.

Moving to a second type of participation, the likelihood of joining a political party is influenced neither by school-related predictors nor by community activities but

instead by the student's interest in politics and to some extent by the extent to which parents discuss politics.

In contrast to the analysis of predictors of expected voting (above), civic knowledge is not a predictor of the likelihood of future volunteering in the United States and is a small negative predictor in some countries. The strongest predictor of future volunteering is current membership in a voluntary organization benefiting the community. Other predictors are learning about community problems in school classes, positive experiences that build confidence in school participation, and discussion with parents. In the United States, political interest is not associated with volunteering in the community. Further, current volunteering is not associated with the likelihood of future voting, suggesting that volunteering is not a political activity for American youth. This distinction between what is required to foster more conventional political activity (voting) and to foster community-based activity (volunteering) is important for a differentiated view of participation and for understanding potential program effects.

Those organizing civic education programs with active participation as an aim should consider which type of future involvement they hope to promote and then design curricula and activities to explicitly address these behaviors, rather than expecting that fostering either knowledge or volunteer activities will promote all types of involvement.

An Analysis in the Latin American Region, Portugal, and the United States

The third analysis was initiated by a request from professional staff at the Organization of American States' responding to a mandate to study the role of civic education in strengthening democracy and democratic institutions in the Latin America. Two researchers who were part of coordinating the IEA study were asked to focus on mining the data collected from the three OAS members who participated (Chile, Colombia, and the United States). A fourth country that shared the Iberian cultural heritage (Portugal) was added for comparison purposes.

Although a full range of items and scales in the IEA instrument was covered in the OAS report (Torney-Purta and Amadeo, 2004), this paper will concentrate on results from the test of knowledge and skills. Because of the focus on four countries, the researchers were able to look in depth at individual item responses on the test of civic knowledge. Looking at the overall test scores (where the two Latin American countries scored very poorly) obscured similarities as well as differences found when patterns of answers were compared by item. The topics emphasized or omitted in the stated curriculum and the teaching were also examined within the countries (Cox, 2003). To give one example, teaching in both Chile and Colombia appears to deal more with idealized views of democracy and less with potential anti-democratic conditions (corruption, nepotism, or media control). Students' patterns of knowledge differ accordingly; they grasp the abstract definitions of democratic institutions but cannot apply them to everyday issues and threats to democracy. Further, in Colombia, the poverty in which many young people live leads them to

examine democracy through the lens of economic well-being. Analysis of student responses to individual questions and uncovering patterns across sets of questions points out gaps between rhetoric and the everyday reality experienced by these young people. Further, Chilean and Colombian students appeared to have much less chance to deal with material from news media such as newspapers in their classes. Coupled with the fact that few students in these countries come from homes where newspapers are received on a daily basis, this absence of resources appears to hamper their abilities to interpret political messages.

It was clear from the collaborative data analyses and the regional collaboration of researchers and policy-makers that civic education benefits from an interactive exchange about research between and among countries. No one approach to civic education will be appropriate to address each country's unique situation, and much can be learned from regional dialogue and cooperative research.

Choosing Modes of Analysis and Countries

The three analyses summarized share some common characteristics, such as concentrating on relatively descriptive analysis (in the case of the developmental or the Latin American analysis) or on a relatively simple regression analysis (in the case of the prediction of different types of participation). The IEA team is working on the assumption that getting a sense of various parts of the data set is an essential first step in secondary analysis. The ability to address issues in a way that could be presented to non-specialists was one of the deciding factors. Some more complex modeling has been explored, but is not reported here. All three of the analyses presented look at a small group of countries, each chosen for specific reasons (for sample characteristics in the developmental analysis, for similarity to a country of interest in the predictor analysis, and for regional/cultural membership in the case of the OAS report). Others who embark on secondary analysis may have different aims in mind and choose countries or analysis modes accordingly.

REFLECTIONS ABOUT SECONDARY ANALYSIS AND DISSEMINATION OF INTERNATIONAL RESULTS IN THE UNITED STATES

In the year following the release of the volume on 14-year-olds the CivEd team in the United States was eventually successful in challenging some prevailing views about the potential value of civic education in schools. IEA has educational research institutions in more than 50 countries as its members, and within networks of educators IEA-sponsored research is trusted. Because the organization's previous studies have been concentrated in fields such as mathematics and science, however, when journalists see research undertaken by IEA they expect to see knowledge tests scores and statements about the ineffectiveness of schools. They focus their reporting on those findings. Those associated with the study in the United States made a decision to challenge some negative messages about the civic preparation of youth and the role of schools. The late 1990s saw a number of discouraging reports on achievement in civic education, especially the NAEP Civic Education Report Card.

Further, prominent media outlets such as the *New York Times* carried several articles dismissing the potential value of civic education in schools (often based on research from the 1970s). One of the main purposes of activities in the first year following the release of the 14-year-old findings was to present messages about the civic preparation of young people that were more up-to-date and that emphasized patterns of strengths as well as weaknesses in students' knowledge and engagement in the United States (Torney-Purta, 2002). [In fact, on the IEA test when students in the United States are compared with those in other countries, their scores, especially on skills in interpreting political information, are quite respectable.] Another purpose was to argue that there is considerable potential for reform in school-based civic education, especially if it can be designed to actively involve students and include youth-focused organizations.

There are other important messages being explored at present. The IEA CivEd Study found that the extent to which young people feel a sense of power and efficacy in their school setting as a whole and the degree to which they are encouraged to discuss social and civic issues in their classrooms are among the most powerful positive influences on civic achievement and engagement. Reforms in classrooms and schools to involve students more actively in their classrooms and schools would require substantial changes in the ways teachers are prepared, both as classroom instructors and as advisors for extracurricular or after-school activities. These findings also suggest important roles for youth-focused, youth-run organizations.

Another finding still to be fully explored is the large gap in performance between students from homes with a strong educational background and students whose homes do not provide much support for civic education or engagement. This gap appears to be made larger by the aggregation of students with limited educational resources in some schools. Gaps between rich and poor in understanding and participating in the political world have previously been found among adults, and the IEA research shows that these discrepancies already exist at the age of fourteen (and are large in the United States).

There are also some reflections about process. Some dissemination can be planned in advance. The production of substantial quantities of a professional quality Executive Summary in booklet format for each of the two volumes of CivEd results was very effective. Also important was the placement of articles in a journal that reaches a large audience of educators (*Educational Leadership*) and in a journal that reaches those in youth-serving organizations (*Journal of Applied Developmental Science*). An article was written for *Prospects*, circulated by UNESCO throughout the world in six languages. It was clearly more effective to build on the dissemination networks of organizations that reach important networks than to produce further free-standing publications which we would have had to distribute ourselves.

In addition, unanticipated events outside the project also enriched the discussion of the findings from the IEA research. Of special importance was a series of meetings of scholars and practitioners leading to publication by CIRCLE and the Carnegie Corporation of New York of a report entitled *The Civic Mission of Schools*. Issued in February 2003, this was a state-of-the-art summary of existing research on civic

education. The IEA reports are extensively represented in the conclusions and references for this document (see web site, www.civicmissionofschools.org). The organization of an international conference on civic education in New Orleans in November 2003 resulted in an invitation to deliver a plenary speech consisting of a synthesis of both primary and secondary analysis of the CivEd study. The conference provided an ideal venue to release the CD-ROMS of international data.

A final reflection: Professional development opportunities for the next generation of researchers can be fostered within the structure of a large project such as this. Attracting several very competent researchers at early stages of their careers at both the University of Maryland and the Humboldt University of Berlin to work on the project (and now for secondary analysis) has made an enormous difference in the success of the project and in building the potential for future research in this area. Some of these researchers will be associated with the continuing development of the data base through CEDARS (Civic Education Data and Researcher Service), the center described in Appendix 2. Researchers, both senior and junior, are invited to join in the exploration of this rich data set of information on young people's civic knowledge, attitudes, and behavior.

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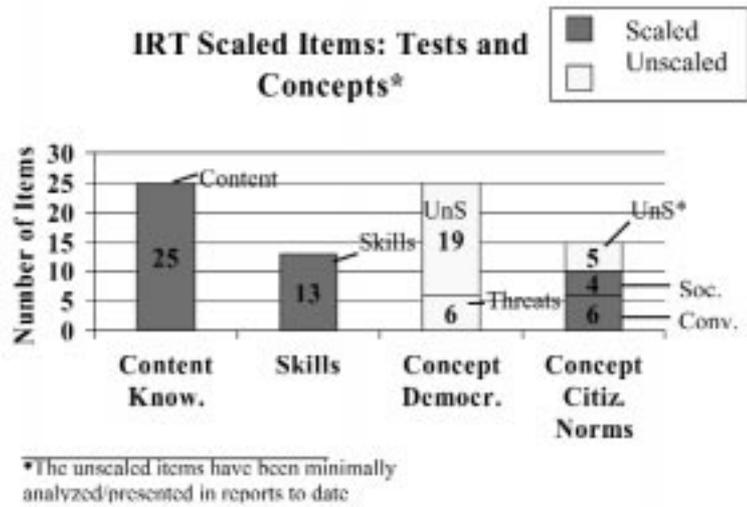
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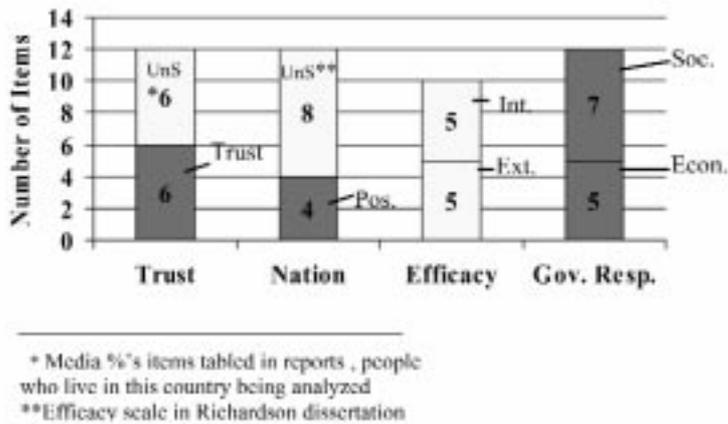
APPENDIX 1

Map of Scaled and Unscaled Items in the IEA Civic Education Instrument[1]

IRT Scaled Items: Tests and Concepts*

Legend: ■ Scaled ☐ Unscaled

Chart (Number of Items):
- Content Know.: 25 (Content, Scaled)
- Skills: 13 (Skills, Scaled)
- Concept Democr.: 19 (UnS, Unscaled); 6 (Threats, Scaled)
- Concept Citiz. Norms: 5 (UnS*, Unscaled); 4 (Soc.); 6 (Conv.)

*The unscaled items have been minimally analyzed/presented in reports to date

The Content Knowledge and Skills items have keyed correct and incorrect answers; the Concept items do not.

IRT Scaled Objects: Attitudes Towards Government and Nation

Chart (Number of Items):
- Trust: *6 (UnS, Unscaled); 6 (Trust, Scaled)
- Nation: 8 (UnS**, Unscaled); 4 (Pos., Scaled)
- Efficacy: 5 (Int.); 5 (Ext.)
- Gov. Resp.: 7 (Soc.); 5 (Econ.)

* Media %'s items tabled in reports, people who live in this country being analyzed
**Efficacy scale in Richardson dissertation

The majority of these items are originally from the political socialization literature or political science research with adults. They have been adapted for 14-year-olds.
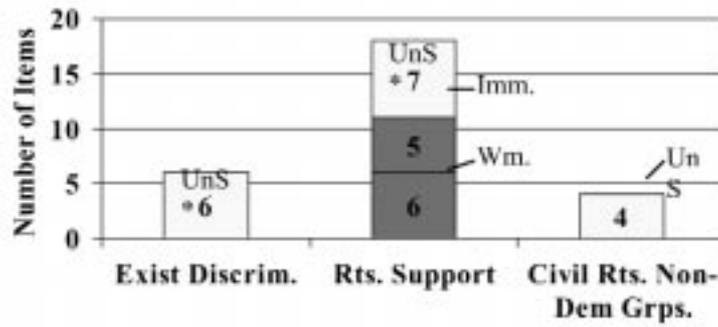
IRT Scaled Items: Activities
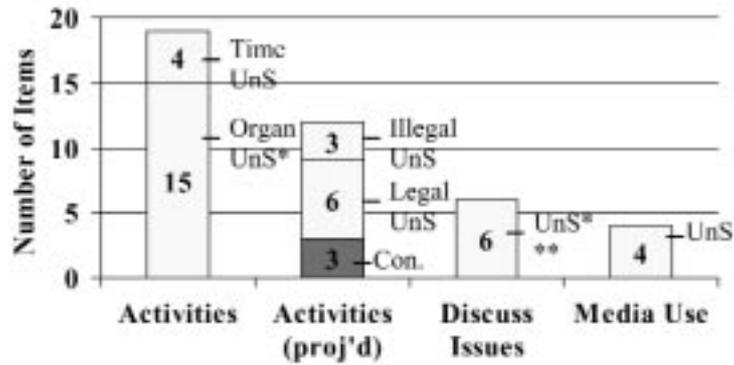
* School council used as individual item, %
other items tabled in reports
** Discussion items in Richardson dissert.

IRC Scaled Items: Schools
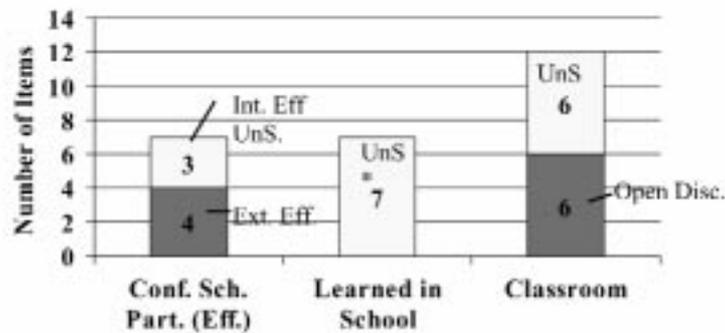
* Learned about voting used as individual
item in reports; % other items tabled in reports

IRT Scaled Items: Attitudes towards Rights

* Scales of items on ethnic minorities, existence
of discrimination in 28 country data-base

NOTE

1. The purpose of these maps is to indicate areas of the instrument where there is maximal potential for secondary analysis.

APPENDIX 2: CEDARS

Dissemination of a well-documented data set from 140,000 respondents has enormous potential for improving the quality of research on civic knowledge and engagement of youth and placing it into an international perspective. The goal of the **CEDARS Project** (*Civic Education Data Archive and Researcher Services*) is to make data from the IEA Civic Education Study useful and readily available to researchers. This small project (funded by CIRCLE from May 2004 through April 2005) will create a modest infrastructure, connected to the Department of Human Development at the University of Maryland that will:

- Enhance portions of the data archive from the IEA Civic Education Study to make it more useful to researchers;

- Prepare short publications and presentations about data availability and use;

- Advise individuals and groups about specific ways of using the data base and methodology (instruments) to support their research efforts.

1. *CEDARS will fill gaps in the Basic International Data Set by preparing an Augmented Data Archive* of international data from 5-6 countries. To give one example:

  - Many potential context and school-level variables could not be included in the Basic International Data Set because they were collected as national options. This includes, for example, hours per week devoted to civic instruction or percent of students in a school who are below the poverty level. To *fill this gap, CEDARS* personnel will contact National Research Coordinators in the 5-6 selected countries to request data and documentation from national instruments (adding these variables to the Augmented Data Archive when they become available).

2. *CEDARS will develop national-level variables in a way that they can be related to student knowledge and engagement.* We have begun to construct a 28-country database including national level statistics from several sources (e.g., some economic and political indicators) and also including the scale mean scores from the 14-year-olds (in 28 countries).

3. *CEDARS will provide technical support to those working on secondary analysis and information about other researchers who are working in similar areas of the Augmented Data Archive for the IEA Civic Education Study*, especially new indicators that are being developed. To give an example from another IEA project, adding new scaled scores to the database and documenting their analysis and psychometric characteristics was one of the main functions served by a TIMSS secondary analysis center at Pennsylvania State University. Experience at that center suggested that one of the major tasks of the CEDARS should be to serve as a clearinghouse for such new scales and scores in the civic education data.

4. CEDARS will provide advice and (as feasible) technical support to other civic education projects and organizations interested in using the IEA instrument to further their own efforts in conducting research on civic education programs. The IEA instrument is a high quality measure of civic knowledge, attitudes and engagement. The knowledge instrument contains 16 publicly released items, and the full survey of approximately 150 items is also available for use. However, the complexity of the instrument sometimes discourages its use by school-level or practitioner-based civic education programs unless they have assistance.