

Experience in Civic Education Classrooms Associated with Students' Achievement and Engagement in Three Post-Communist Countries

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Abstract

The association between experience in traditional and in interactive classrooms and several civic education outcomes was examined in Estonia, Latvia and the Russian Federation using IEA CIVED data. This builds on an analysis conducted recently in the United States and allows us to extend the argument that experience in expressing one's opinion and learning to respect the opinions of others is a positive feature of civic education in countries with different histories of democracy and educational practices.

Key words: CIVED, post-Communist countries, classroom climate, traditional teaching, 21st century competencies

Secondary Analysis using CIVED Data

Many countries are becoming aware of the extent to which schools can contribute to the competencies that young people require to practice active citizenship, and the release of the data from ICCS will enhance opportunities to contribute to this dialogue. Reviewing the secondary analysis completed during the nearly ten years since the IEA CIVED study, there is a wide range of opportunities for different kinds of analysis using this dataset. Some of this analysis has been done in a one country or region. Kennedy, Hahn, and Lee, (2008) compared results from Australia, Hong Kong and the United States. Torney-Purta, Barber and Wilkenfeld (2007) analyzed Latino students' knowledge and political attitudes in the United States, and Amna and Zetterberg (2010), looked at participatory trends in Scandinavia. In a second approach, Torney-Purta (2009) examined political and social attitude outcomes in five Western European and five Eastern European countries using cluster-analysis, and paid special attention to how to make such research findings more easily grasped by policy audiences.

A third group has looked at the CIVED data from 20 or more countries. For example, Torney-Purta, Wilkenfeld & Barber (2008), using HLM analysis, examined knowledge and support for human rights across 27 countries and showed that government policy concerning human rights (measured through ratings of mentions of human rights in documents submitted to the IBE) are associated with what adolescents know and believe about this important topic; Barber & Torney-Purta (2009,) also using HLM, showed the extent to which across countries having an open classroom climate for discussion is effective in promoting adolescent boys' support for women's rights. Hart and Gullan (2010) looked at youth protest activity in relation to trust in government and youth saturation of the society (i.e., an age pyramid with heavy concentrations at ages under 20). All of these pieces of secondary analysis are framed in terms of the explicitly civic dimensions of the data.

The analysis in this paper has taken a broader approach. In addition to the explicit civics and citizenship dimensions of the CIVED instrument we have examined outcomes that can also be viewed as part of young people's preparation to enter the workforce. Further, in the analysis presented here special emphasis is placed on communicating results of this secondary analysis of civic and workplace readiness to those who might have opportunities to disseminate policy-related information. Although statistical tests for group differences were conducted they were not presented in detail; rather the data were presented in the form of graphs.

Background for the Current Interest in Workplace Competencies

Over the last two decades there have been initiatives raising concerns about the preparation of young people to perform well in the world of work that have run parallel to concerns about citizenship. The

1983 report to the U.S. Secretary of Education entitled *A Nation at Risk: The Imperative for Educational Reform* lamented the education system's failures in preparing the next generation of workers with the competencies and values necessary to retain a competitive position for the U.S. Results from various IEA studies (including the first civic education study from the mid-1970s) have been used when these concerns have surfaced (Torney-Purta & Schwille, 1986, Torney-Purta, Amadeo & Schwille, 2010).

The term “21st Century Skills” is one way of referring to these workplace competencies and was proposed by the *Partnership for 21st Century Skills* in 2006. It has been addressed by several groups using definitions that differ in some respects from each other. The common core includes:

- Skills in interpreting information (sometimes called critical thinking or problem solving), including literacy in understanding information and opinions presented in the media,
- Knowledge of the economic system,
- Global awareness,
- Support for the activities associated with good citizenship (including responsibilities such as obeying the law and voting),
- Skills in working with others (such as the readiness and ability to clearly express opinions, collaborative group skills, and the ability to work in culturally diverse teams),
- The ability to be productive (including a sense of personal responsibility to work hard, efficaciously, and ethically), (Kay, 2009; Partnership for 21st Century Skills documents retrieved from www.21stcenturyskills.org dated 2006 through 2009).

In 2009, an independent initiative at the University of Melbourne in Australia entitled the *Assessment and Teaching of 21st Century Skills* was announced. Among its aims are to specify in measurable terms high-priority skills and understanding needed by productive and creative workers and citizens of the 21st Century, mobilize support to make the transformation of educational assessment and instructional practice a global priority and then develop and pilot new assessment methodologies (Assessment and Teaching of 21st Century Skills documents retrieved from www.atc21s.org). This has primarily involved Australia, the U.S. and Western European countries.

The Initiation of a Plan for Secondary Analysis of Workplace Competencies in the United States

In the early fall of 2008 a coalition of more than 50 organizations committed to improving the quality and quantity of civic learning in American schools (*Campaign for the Civic Mission of Schools*), began to debate the contribution of civic-related education to a range of outcomes going beyond voting and soon settled on 21st Century or workplace skills and competencies: media literacy, economic as well as civic knowledge, sense of civic or social responsibility, experience in cooperating with diverse groups, and global awareness.

In late 2008 a search conducted in electronic publication indexes for “21st Century skills” and “workplace skills” revealed that no empirical study had analyzed measures of a range of these competencies from a single sample of young people. A secondary analysis of an existing data set could begin to fill this gap in research on students. An examination of the outcomes that had been tested in the 1999 IEA Civic Education Study (CIVED) on a nationally representative sample of about 2,800 ninth graders in the United States showed that this data set had rigorously developed measures of many of the outcomes included in the enumerations of 21st Century skills and competencies (Torney-Purta, Lehmann, Oswald, & Schulz, 2001). In fact, the only workplace competencies that appeared on the lists that had not been included in the CIVED test or survey were math skills, ICT literacy, and creativity/innovation. Civic outcomes were, of course, well represented.

In addition to measures of these competencies, the IEA CIVED data also included measures pertaining to the type of education these students had received, especially focused on the classrooms where civic-related education took place (including classes in civics, history, and social studies). In particular the CIVED instrument included a reliable scale measuring student perceptions of a focus on lectures or

factual material in their classes and the memorization of facts and dates. (This scale was called “traditional teaching.”) A separate scale had been included measuring perceptions of a focus on respectful discussion of issues, including controversial issues, in class. (This scale was called “open class climate for discussion.”) Both approaches were seen as relatively independent modes of civic-related education and both had been separately identified as promising practices in *The Civic Mission of Schools* report.

This existing high quality data set from the IEA Civic Education Study provided an opportunity to build the foundations for research on educational approaches to foster 21st Century workplace competencies without the lead time necessary to develop and validate a set of instruments, draw a sample, administer the instruments and then conduct an analysis.

Further, the CIVED data set presents the opportunity to broaden the range of countries in which the relation of civic or social studies education to civic and workplace competencies can be examined to include countries in transition to democratic political systems. Jonathan Wilkenfeld (2005), among other political scientists, argues that the transition period between autocratic and democratic leadership is fragile, and thus an especially important time for civic education (Stevick and Levinson, 2008). The CIVED report of 2001 suggested that the *strong performance* of countries such as the Czech Republic and Poland resulted from grafting democratic theory and civic content onto strong existing educational programs. However, the less adequate performance of some of the other post-Communist countries has received relatively little attention beyond general discussions (Malak, 2007, being an exception). The analysis presented here therefore looks at several outcomes that reflect the civic and workplace dimensions, examines the relationship of these outcomes to different types of civic education, and does this in three post-Communist countries.

A Description of the IEA Civic Education Study and Its Data

The Civic Education Study was conducted in 1999 by the International Association for the Evaluation of Educational Achievement (IEA), a consortium of governmental agencies and research institutions founded in 1959 for the purpose of conducting comparative education studies. CIVED is a cross-national study of approximately 90,000 adolescents (14 years of age) conducted in 28 countries; 2,811 students were tested in the United States. Summary data for the 14-year-olds were reported in Torney-Purta, Lehmann, Oswald, & Schulz (2001), and a similar study conducted with 17-year-olds was reported in Amadeo et al. (2002). Two instruments were utilized in the study: a test and a survey. The test assessed students’ knowledge of fundamental democratic principles (applied to national and international contexts) and skills in applying such knowledge (in response to prompts such as mock newspaper articles and editorial cartoons). The survey inquired about students’ attitudes toward civic issues and responsibilities, conceptions of democracy and citizenship, experience with and understanding of issues related to diversity. In our analysis an IRT scale based on the test, an IRT scale based on the survey, a simple composite score based on two survey items not previously examined, and four single survey items are included.

The administration of the assessment and survey to nationally representative samples of 14-year-olds took place in 28 countries in 1999. In the United States the data were collected from ninth graders in October, 1999. Students were given two hours during class to complete the assessment and survey. School administrators and teachers also answered surveys to provide supplemental information about teaching and schools. The sampling was conducted according to a procedure similar to that used in other IEA studies such as the Trends in International Mathematics and Science Study (TIMSS) and the Progress in International Reading Literacy Study (PIRLS). Subsequent scale construction and data analysis techniques (e.g., confirmatory factor analysis [CFA] and item response theory [IRT]) are also comparable to methods used in these studies. CIVED is different from TIMSS and PIRLS, however, in having a large number of scales for attitudinal outcomes in addition to the knowledge outcomes.

A Description of the Initial Analysis in the United States and of the Dependent Variables Used in this Analysis

The sample of approximately 2,800 ninth-graders from the IEA Civic Education Study was analyzed to examine the relation between civic education experience and workplace or civic competencies. Individual items and scales from CIVED were used to operationalize these competencies. Measures from both the test of student knowledge and the survey of student attitudes were utilized. For this analysis all items, scales and IRT scales were set to have a mean of 10 and a standard deviation of 5 within the country to facilitate comparisons. No inferences can be drawn about the relative level of skill or attitudes in the country from these graphs, but this type of analysis is relatively easy to explain to policy-related and other general audiences within a given country.

Knowledge-based Competencies from the CIVED Test

The measure reported here that relevant to workplace and civic competencies comes from the 38-item assessment measuring aspects of students' knowledge.

Media Literacy Skills: This scale was the IRT scale called Civic Skills in the original CIVED report and is comprised of 13 test items asking students, for example, to draw inferences from a newspaper article, to interpret editorial cartoons, and to distinguish between statements of fact and opinion. No questions were asked about the Internet as a source of news. In 1998, when the questions were formulated to be suitable in 28 countries, most adolescents did not have consistent access to this news source. The type of articles and editorial cartoons that appear in news sources on the Internet are quite similar to those in this test, however. Mean scores on this scale are reported, based on the IRT scale scores adjusted within country with a mean of 10 and an SD of 5.

Behaviorally-based Competencies from the CIVED Survey

Five sets of items relevant to workplace and civic competencies come from the approximately 150 items measuring attitudes and behaviors in the student survey and were used in the U.S. analysis. In addition to Following the News, these included assessment of experience in class such as cooperating in groups (not reported here). All the original items asked students to report their agreement with statements (strongly disagree to strongly agree) or the frequency with which they participated in a particular behavior (never to often) on a 4-point scale. Individual items as well as scales have been adjusted to have a mean of 10 and standard deviation of 5.

Following the News: The CIVED instrument includes two items asking students how often they read national news and international news in the newspaper. This is reported as a composite average of student responses to these two items adjusted to have a mean of 10 and standard deviation of 5.

Attitudinally-based Competencies from the CIVED survey

Positive Attitudes Toward the Rights of Ethnic Minorities: These attitudinal items from CIVED ask students about their attitudes toward equal educational and job opportunities for all ethnic groups and about whether students should learn to respect people of diverse ethnicities. Mean scores on this 4-item scale are reported (adjusted to a mean of 10 and SD of 5).

Norms of Social and Civic Responsibility: The CIVED instrument includes items asking students whether they believe that the good adult citizen should vote, and pay attention to issues covered the media. These were analyzed in the same way but will be more briefly reported.

Independent Variables and the Analysis

Two CIVED scales examined the kind of civic education students had experienced.

Openness of classroom climate is the measure of a discourse-based or interactive education. This 6-item scale assesses the degree to which students have been encouraged to express their own opinions and to understand the opinions of others, in their civics, history, or social studies classroom. The items include:

Teachers respect our opinions and encourage us to express them during class.

Teachers encourage us to discuss political or social issues about which people have different opinions.

Students were split into high and low groups at the median.

The other scale used to examine the type of civic education experienced was a 5-item scale of *traditional teaching* experienced in the civics, history, or social studies classroom. The items include:

Teachers lecture and the students take notes.

Teachers place great importance on learning facts or dates when presenting history or political events.

Again the median scale score was used to split students into high and low groups.

These two types of civic education were examined individually and in combination to identify four educational groups described in the 2 by 2 table.

Educational groups based on the type of civic education experienced:

		<u>Open Class Climate Scale</u>	
		Low	High
<u>Traditional Teaching Scale</u>	Low	<i>Neither</i>	<i>Interactive</i>
	High	<i>Lecture</i>	<i>Both</i>

We utilized analysis of variance (ANOVA), which tests for significant differences between the group means for these four groups (in conjunction with partitioning the observed variance and contrasts). We also conducted analyses of covariance (ANCOVAs) controlling for student SES and the results were essentially the same. Because of lack of space under the graphs (and the wish to make the graphs easily interpreted by non-specialists including policy audiences), we have summarized details about the analysis in a page that precedes the figures themselves. In the ANOVAs reported in the figures the overall differences between means were significant in all three countries focused on in this paper.

The analysis was conducted first in the United States and showed that on all three types of outcomes (knowledge, behavioral intentions and attitudes) students who had Both types of educational experience or Interactive alone were superior to those who had neither type of experience. The Lecture only group, with the most traditional experience, was never superior to these two groups (though it was sometimes equal). On all the outcome variables the Neither group was the lowest, and significantly so.

When the report of these results in Torney-Purta and Wilkenfeld (2009) was presented to U.S. policy specialists in the CMS group, some members who had experience in developing democratic education programs in collaboration with individuals in post-Communist countries asked whether these findings from the U.S. could be generalized. Often faced with recommendations that their programs should focus on traditional lectures and textbooks, these educators wanted to know whether interactive discourse-based classes has the same potential value across countries. The purpose of the analysis

presented in this paper is to analyze the CIVED data set and to investigate how interactive education and traditional education relate to civic achievement and engagement in three post-Communist countries. In addition we wanted to broaden the scope of some of the findings to show that not only explicit civic aims could be fostered by these types of education, but that some of the outcomes would also have relevance to work-place competencies.

Results of the Analysis in the Three Post-Communist Countries and Interpretation

The distributions of students who fell into the four categories differed somewhat between countries (see Figures 1 through 3). The combination of Both traditional and Interactive pedagogy was the most frequent experience in all three countries. Neither was the group with the second highest frequency in Estonia. Neither and Lecture were quite similar in size in Latvia and the Russian Federation. Interactive only was relatively low in frequency in Latvia and the Russian Federation. It is clear from these figures that traditional instruction and interactive pedagogy are two distinct approaches and not two ends of a single continuum. Students can be characterized as having experienced both types of pedagogy, one or the other, or neither.

[Figures 1 through 3 here]

Now we move to the relation between these four types of educational experience and the dependent variables of interest. In Estonia, Latvia and the Russian Federation Figures 4 through 6 show that that the cognitive skills measure from the test (showing ability to correctly interpret media material with political content) was highest for students who received Interactive or discussion based education in their classrooms but was also high for those who received Both types of education. The groups receiving Neither type of education had the lowest achievement level in all three countries (a significant difference in all three countries). In addition, in Estonia Interactive was higher than Both and Lecture; in Latvia and the Russian Federation Interactive and Both were higher than Lecture. In summary, respectful discussion and the opportunity to consider social and political issues in the classroom seem essential to developing skills in analyzing civic media material.

The basic CIVED report had shown that in Estonia, Latvia and the Russian Federation the civic skills averages were significantly below the international mean (Torney-Purta, et al., 2001). Knowing that the interactive pedagogy either by itself or in combination with traditional teaching is effective in these three countries (shown in the current analysis) is an important finding to bring to the attention of policy makers, curriculum developers and those who train teachers.

[Figures 4 through 6 here]

Across these three countries Figures 7 through 9 show that the behavioral outcome of following national and international news in the newspaper was the highest in the group that received Both types of education – interactive and more traditional lecture or textbook based instruction. This type of behavior may be encouraged by teachers who are basing their instruction on textbooks but attempting to enliven the class by bringing current issues into the discussion.. In Estonia Interactive and Both have significantly higher means than Neither and Lecture, and Both is greater than Interactive alone. In Latvia Lecture, Interactive and Both are all greater than Neither. Both is greater than Interactive and Lecture. In the Russian Federation, Lecture, Interactive and Both are all greater than Neither. The particular pattern differs slightly, but again Neither is the lowest, and in some countries Lecture alone is not especially effective either in stimulating attention to the news.

[Figures 7 through 9 here]

Across these three countries Figures 10 through 12 show that the attitudinal outcome of positive attitudes toward ethnic minorities is the highest in the group that received Both types of education –

interactive and more traditional lecture or textbook based instruction. In Estonia Both and Interactive alone are significantly greater than Neither. In Latvia and the Russian Federation Lecture, Interactive and Both are all greater than Neither. In Estonia and the Russian Federation Both is greater than Lecture.

[Figures 10 through 12 here]

We also examined (but have not graphed) the attitudinal outcomes of belief in the norm that adult citizens should vote and should keep up with issues in the media. These were single items drawn from the Conventional Citizenship Participation scale. A pattern in relation to education group that was similar to that above appears for voting. Overall group mean differences for the importance of citizens paying attention to issues in the media were not statistically significant in Estonia, and this item has not been included for that reason.

Providing students with opportunities for respectful discussion in their classrooms seems to have a positive impact in these three post-Communist countries. In fostering interpretive civic/media skills it seems important to include an interactive experience in the classroom. In fostering the behavior of paying attention to news, having both traditional lecture/textbook education and interactive experience combined is most valuable. However, Lecture-based education by itself was never superior to a combination of this approach with Interactive education. The picture on the attitudinal variables is a little less clear. The figures show the major finding being low scores for the Neither group. In these attitudinal outcomes Lecture, Interactive and Both types of education were often similar to each other.

Summary

Estonia, Latvia and the Russian Federation did not perform very well when compared to other countries on the original Civic Education Test. Our analysis suggests that programs that move toward enhancing interactive classroom discussion, either by itself or in combination with more traditional teaching, have a positive role to play in preparing the young person for competence as a citizen and in the workplace. Previously we had clear evidence of this primarily for long-standing democracies. Here we show that it is the case also for three post-Communist countries.

Previous analysis has also paid little attention to traditional teaching, either by itself or in combination with interactive approaches. In some cases the assumption has been made that traditional teaching and interactive methods were opposite ends of a continuum; these data show it is possible have both or neither present in the classroom. In some ways the Neither group is the most interesting for further study. Especially in countries where civic education is being established, they may be found in the schools where no classes yet exist in this area. Or civic topics may be infused in classes on other subjects. The students may not recognize the content when they are asked about classes where civic or social studies topics are taught.

The analysis in this paper and its graphic presentation represent another approach to secondary analysis with particular potential relevance to policy makers. Some interested in policy may also be attracted to the argument that workplace competencies are sufficiently similar to civic competencies to look at pedagogies that enhance them both.

In summary, our most important finding is that experience in expressing one's opinion and learning to respect the opinions of others is a positive feature of civic education in countries with different histories of democracy and educational practices. This has been a message from IEA Civic Education studies since the 1970s. It is time for the policy community to consider what would be needed in teacher training or other reforms to make classrooms where open and respectful discussion is encouraged a reality in all countries.

References

- Amadeo, J., Torney-Purta, J., Lehmann, R., Husfeldt, V., & Nikolova, R. (2002). *Civic knowledge and engagement among upper secondary students in sixteen countries*. Amsterdam: IEA.
- Amna, R. & Zetterberg, P. (2010). A political science perspective on socialization research: Young Nordic citizens in a comparative light. In L. Sherrod, J. Torney-Purta, & C Flanagan (Eds.). *Handbook of civic engagement in youth*. (pp. 43-66). Hoboken, NJ: John Wiley and Sons.
- Barber, C. & Torney-Purta, J. (2009). Gender differences in political efficacy and attitudes to women's rights influenced by national and school contexts: Analysis for the IEA Civic Education Study. In D. Baker & A. Wiseman, Eds.), *Gender equality and education from international and comparative perspectives*. (pp. 347-394). Bingley, UK: JAI/Emerald Group Publishing.
- Husfeldt, V., Barber, C. & Torney-Purta, J. (2005). New Scales in the Enhanced Database of the IEA Civic Education Study. College Park, MD: CEDARS -Department of Human Development.
- Hart, D. & Gullan, R. (2010). The sources of adolescent activism: Historical and contemporary findings. In L. Sherrod, J. Torney-Purta, & C Flanagan (Eds.). *Handbook of civic engagement in youth*. (pp. 43-66). Hoboken, NJ: John Wiley and Sons.
- Kay, K. (2009). Middle schools preparing young people for 21st century life and work. *Middle School Journal*, 40(5), 41-45.
- Kennedy, K., Hahn, C. & Lee, W. O. (2008). Constructing citizenship: Comparing the views of students in Australia, Hong Kong and the United States. *Comparative Education Review*, 52(1), 53-91.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Malak, B. (2007). Civic education in times of change: The Post-Communist countries. *Citizenship Teaching and Learning*, 3(2).
- Schulz, W. & Sibberns, H. (2004). *IEA Civic Education Study technical report*. Amsterdam: IEA.
- Stevick, D. & Levinson, B. (Eds.). (2008). *Advancing democracy through education? US influence abroad and domestic practices*. Charlotte, NC: Information Age Publishers.
- Torney-Purta, J. (2009). International research that matters for policy and practice. *American Psychologist*, 64(8), 822-837.
- Torney-Purta, J., Amadeo, J. & Schwille, J. (2010). IEA study in civic education. *International encyclopedia of education*, (vol. 4, pp 656-662). Oxford, UK: Elsevier.
- Torney-Purta, J., Barber, C., & Wilkenfeld, B. (2007). Latino adolescents' civic development in the United States: Research results from the IEA Civic Education Study. *Journal of Youth and Adolescence*, 36, 111-125.
- Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. Amsterdam: IEA. Retrieved from <http://www.terpconnect.umd.edu/~iea>.

Torney-Purta, J. & Wilkenfeld, B. (2009). *Paths to 21st Century competencies through civic education classrooms*. Chicago: American Bar Association Division on Public Education. Available on <http://www.civicyouth.org>.

Torney-Purta, J., Wilkenfeld, & Barber, C. (2008). How adolescents in 27 countries understand, support and practice human rights. *Journal of Social Issues*, 64(4), 857-880.

Wilkenfeld, J., et al. (2005). *Mediating international crises*. London: Routledge.

Zhang, T. & Torney-Purta, J. (2010). Assessing students' cognitive content and process skills in IEA CIVED: A cross-country analysis. Paper accepted for presentation at the IRC, Gothenburg, Sweden.

Information about Figures

Information that could not be included on figures because of space limitations:

N for Estonia = 2730; N for Latvia = 1857; N for Russian Federation = 1837 (listwise deletion of any respondent missing any variables – most serious problem in Latvia). Weights were applied in all three countries.

Median value for splitting classroom climate:

-.12 in Estonia; -.06 in Latvia; -.13 in Russian Federation

Median value for splitting traditional teaching:

-.04 in Estonia; .13 in Latvia; .08 in Russian Federation

Description of dependent variables on the graphs:

Each of the variables was set within country with a mean of 10 and an SD of 5.

Media literacy (Civic Skills in the CIVED Report) is a 13-item IRT scale measuring skills in interpreting media-related and political material. (Schulz & Sibberns, 2004). Skills items were further differentiated from content knowledge items based on a confirmative factor analysis,

Following the news is a 2 item scale assessing the frequency of reading national and international news in the newspaper.

Positive attitudes toward the rights of ethnic minorities is a 4-item IRT scale assessing students' agreement with the following statements: All ethnic groups should have equal chances to get a good education in this country, All ethnic groups should have equal chances to get good jobs in this country, Schools should teach students to respect members of all ethnic groups, and Members of all ethnic groups should be encouraged to run in elections for political office (Husfeldt, Barber & Torney-Purta,, 2005).

Norms of responsibility for adult citizens are assessed with single items measuring the extent of students' agreement that a good adult citizen should vote, and pay attention to issues in the media (among other qualities).

Figure 1. Number of students in the four civic education groups (N=2730) in Latvia

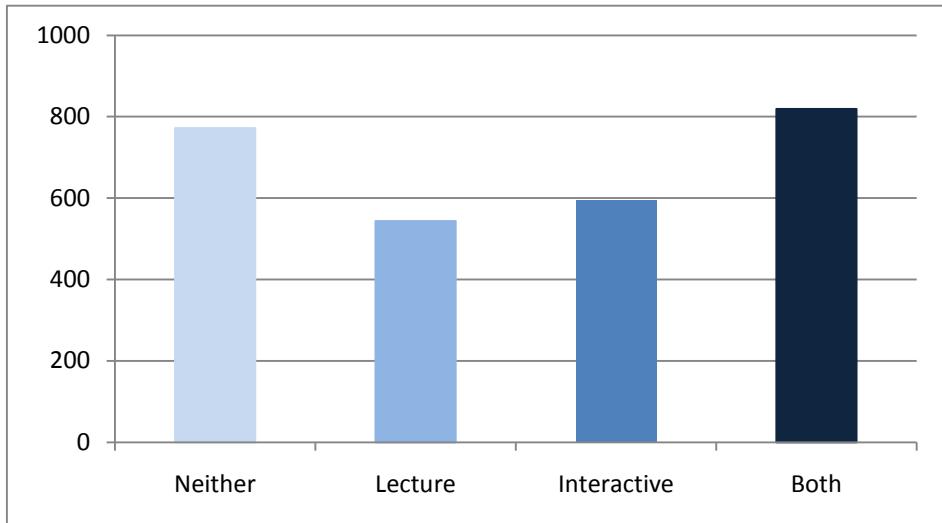


Figure 2. Number of students in the four civic education groups (N=1857) in Latvia

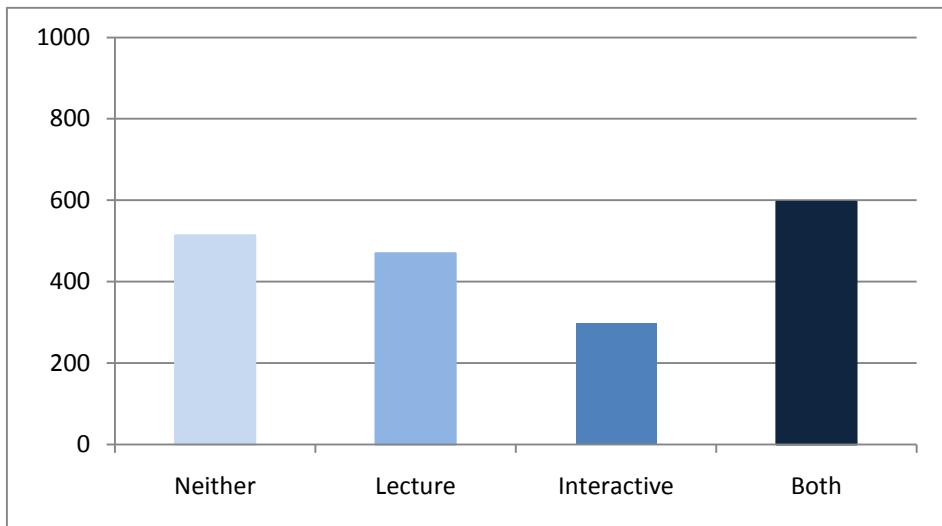


Figure 3. Number of students in the four civic education groups (N=1839) in Russian Federation

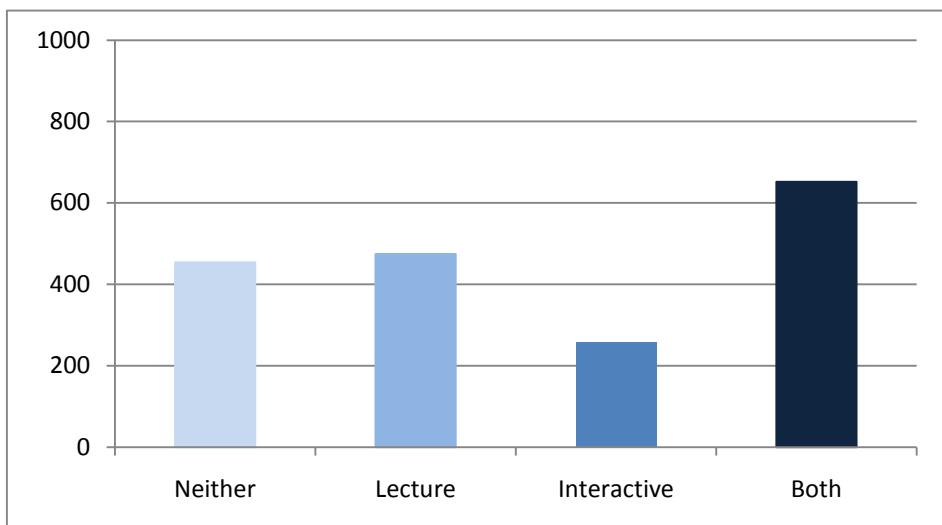


Figure 4. Level of media literacy skills by educational group in Estonia
 Within country mean of 10 and SD of 5

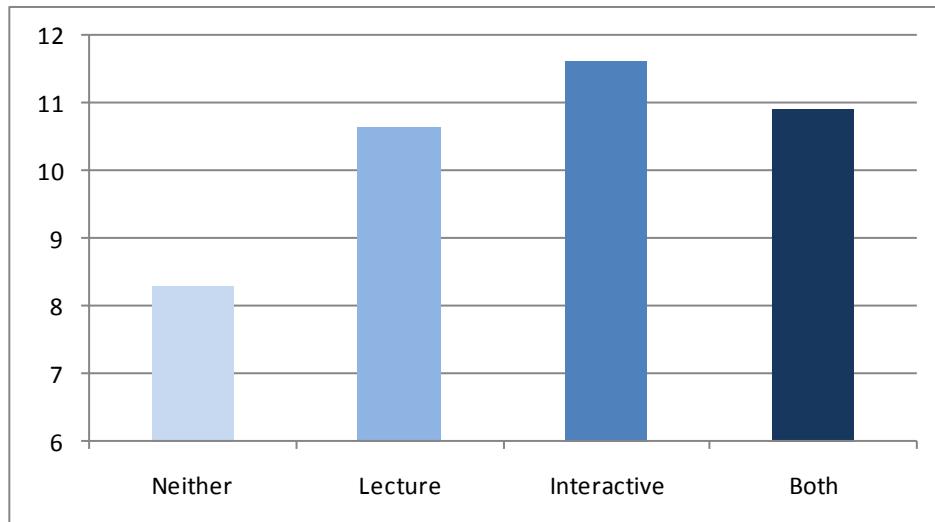


Figure 5. Level of media literacy skills by educational group in Latvia

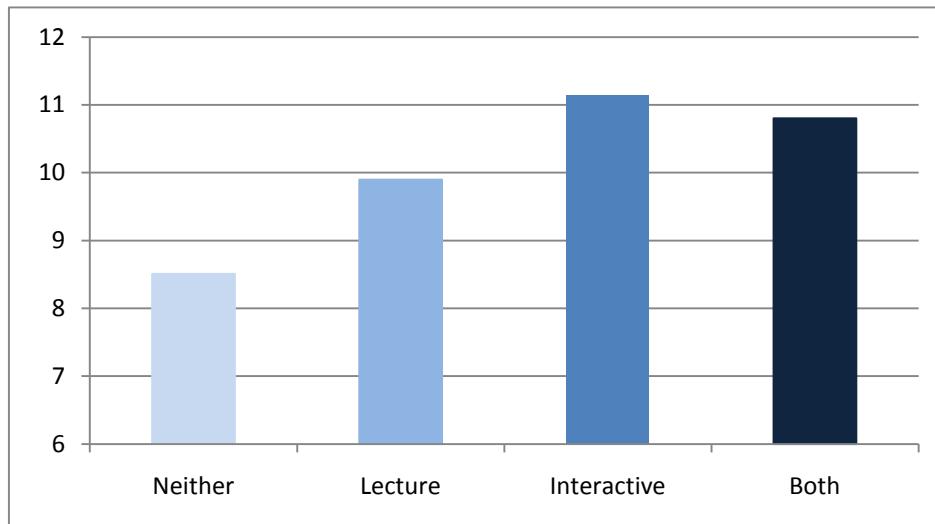


Figure 6. Level of media literacy skills by educational group in Russian Federation

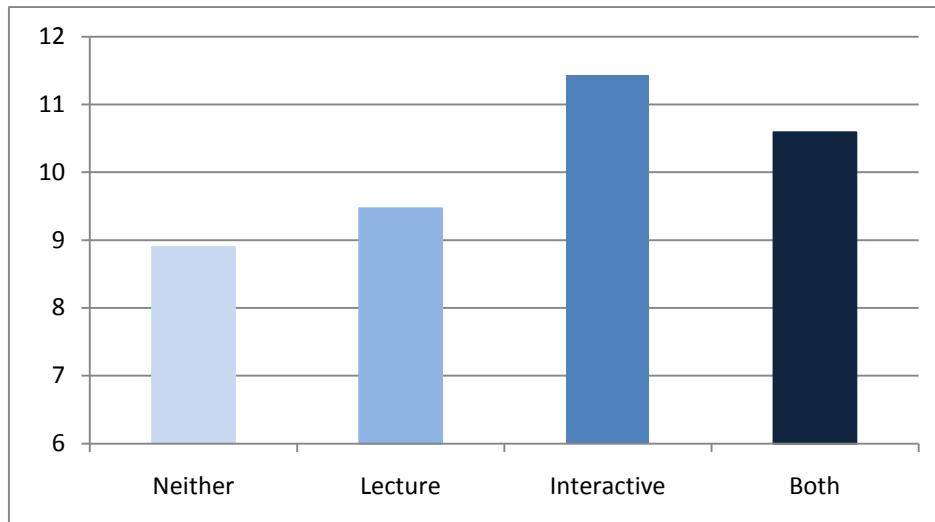


Figure 7. Extent of following the news by educational group in Estonia
Within country mean of 10 and SD of 5

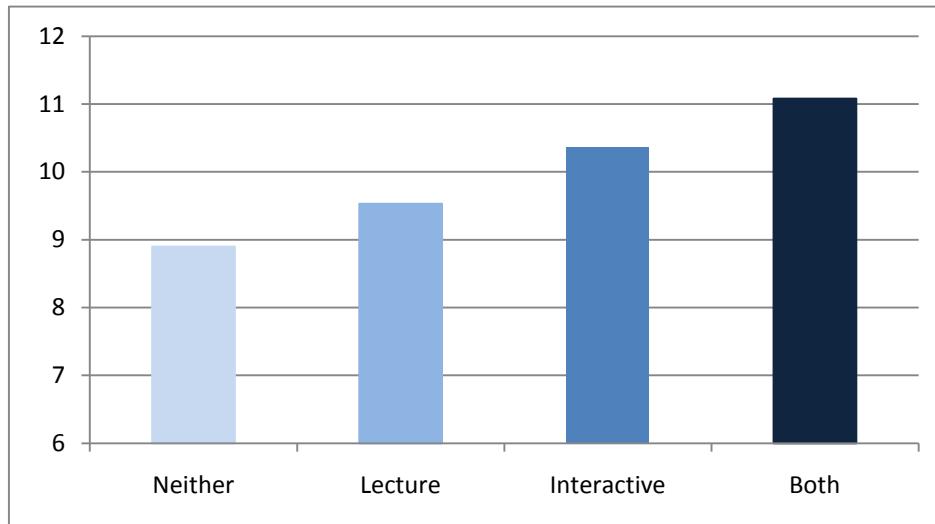


Figure 8. Extent of following the news by educational group in Latvia

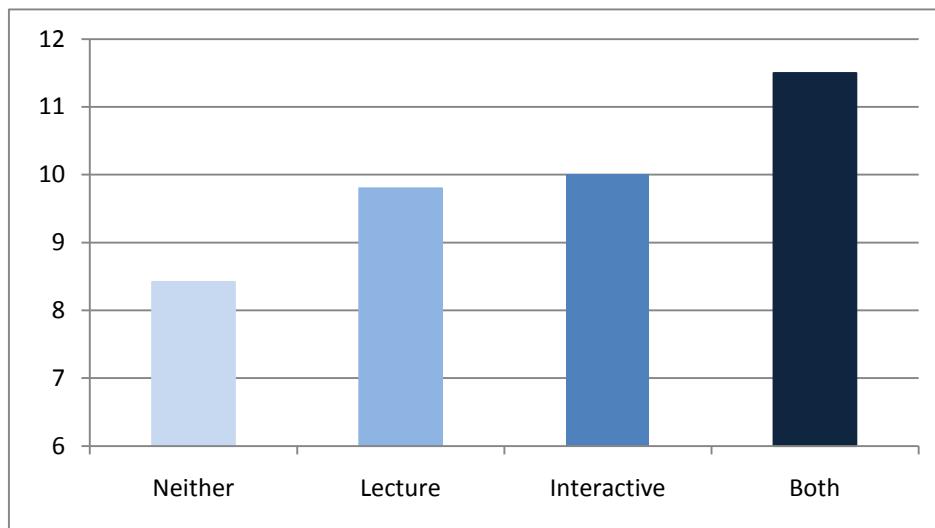


Figure 9. Extent of following the news by educational group in Russian Federation

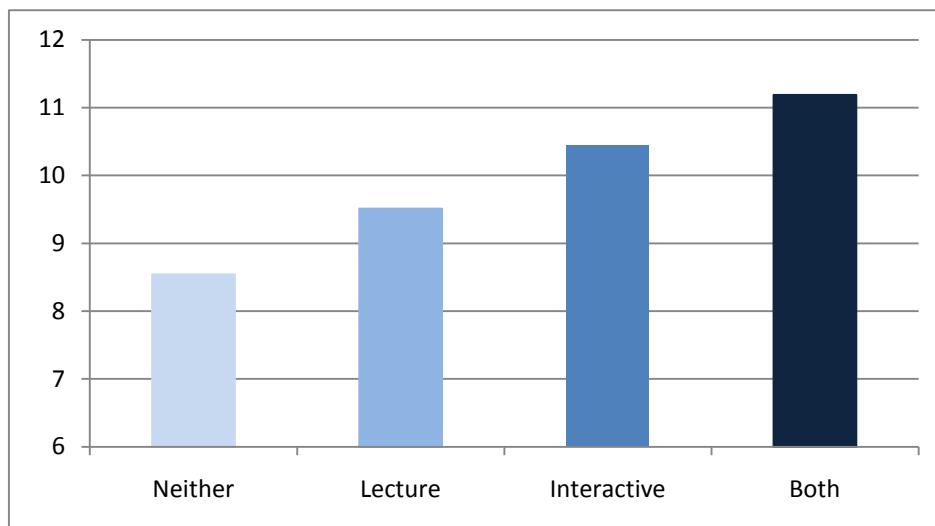


Figure 10. Positive attitudes toward ethnic minorities by educational group in Estonia
Within country mean of 10 and SD of 5

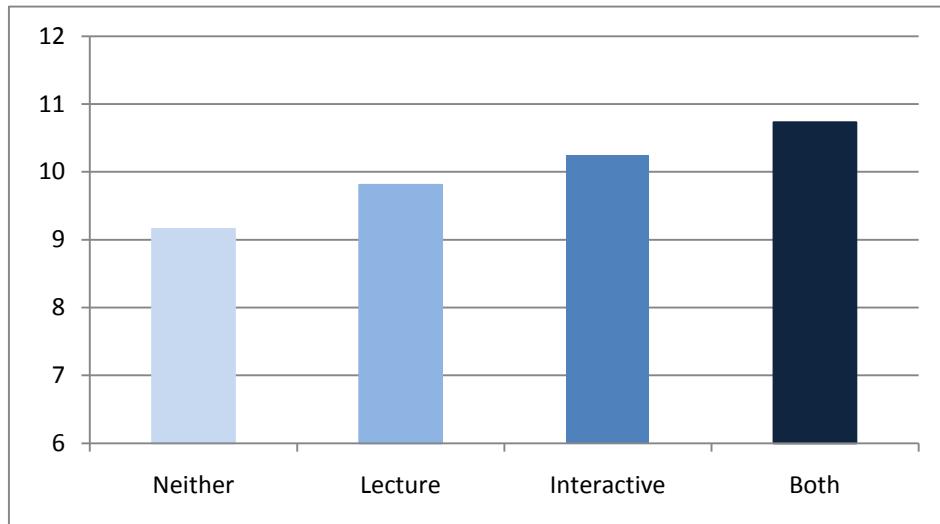


Figure 11. Positive attitudes toward ethnic minorities by educational group in Latvia

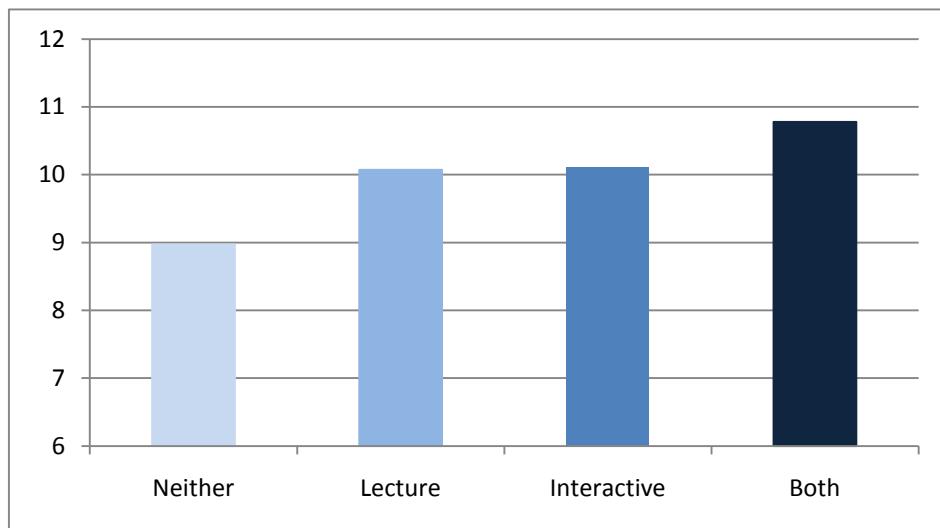


Figure 12. Positive attitudes toward ethnic minorities by educational group in Russia

