The report identifies instruments for measuring citizen education improvement efforts in Delaware, New Jersey, and Pennsylvania. The document is presented in three sections. The first section outlines evaluation criteria and reviews literature related to testing and citizenship assessment. Materials reviewed are reports of citizenship assessment programs; "Social Studies: Tests and Reviews," by Oscar K. Buros; "CSE-RBS Test Evaluations: Tests of Higher-Order Cognitive, Affective, and Interpersonal Skills," by Ralph Hoepfner and others; "Measures of Political Attitudes," by John Robinson and others; "Measures of Social Psychological Attitudes," by John Robinson and others; and "Tests and Measurement in Child Development," by Orval G. Johnson and others. The second section identifies objectives for citizen education in 12 areas and suggests types of tests to measure each objective. The areas are: (1) knowledge of institutions and systems; (2) knowledge about social issues; (3) knowledge about predictions of social problems; (4) inquiry skills; (5) interpersonal skills; (6) action skills; (7) respect for others; (8) commitment to equality; (9) commitment to rationality; (10) commitment to personal freedom; (11) identification with participatory citizen groups on all levels; and (12) commitment to action and participation. The third section discusses limitations of the search for testing instruments and suggests additional sources. An annotated bibliography concludes the document.

(Author/DB)
THE SEARCH FOR CITIZEN EDUCATION MEASURES:

FINAL REPORT

Submitted to
National Institute of Education

by

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May 31, 1978
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Search Procedures</td>
<td>1</td>
</tr>
<tr>
<td>The Citizen Education Measures</td>
<td>3</td>
</tr>
<tr>
<td>Knowledge of the Dynamic Institutions and Systems That Exert Influence in Our Society</td>
<td>5</td>
</tr>
<tr>
<td>Knowledge of the Historical and Contemporary Context of Recurring Social Issues Related to the Above Institutions</td>
<td>11</td>
</tr>
<tr>
<td>Knowledge of the Major Issues and Problems Forecast for the Above Areas and Others That May Emerge</td>
<td>14</td>
</tr>
<tr>
<td>Inquiry Skills</td>
<td>15</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>17</td>
</tr>
<tr>
<td>Action Skills</td>
<td>19</td>
</tr>
<tr>
<td>Respect and Caring for Others</td>
<td>20</td>
</tr>
<tr>
<td>Commitment to Equality of All Persons</td>
<td>23</td>
</tr>
<tr>
<td>Commitment to Rationality</td>
<td>24</td>
</tr>
<tr>
<td>Commitment to Personal Freedom</td>
<td>25</td>
</tr>
<tr>
<td>Identification with Positive Primary Groups and Local, National and World Communities</td>
<td>27</td>
</tr>
<tr>
<td>Commitment to Action and Participation</td>
<td>28</td>
</tr>
<tr>
<td>Discussion</td>
<td>30</td>
</tr>
<tr>
<td>Annotated Bibliography</td>
<td>33</td>
</tr>
</tbody>
</table>
THE SEARCH FOR CITIZEN EDUCATION MEASURES:

FINAL REPORT

The purpose of the search described in this report is to identify measures that could be related to, and be of assistance in, the Research for Better Schools' (RBS) citizen education improvement efforts in the schools of the tri-state region (Delaware, New Jersey, and Pennsylvania). These efforts are based on a working definition of citizen education that includes desired outcomes. Therefore, those outcomes, listed in Table 1 on the next page, have been used to define the principal components of citizen education to which the measures should relate.

This report contains a description of the procedures used in the search for such measures and a discussion of the measures available for each of the desired outcomes outlined in the RBS working definition of citizen education. These sections are followed by an overall discussion of the state of the art in measurement of these outcomes. The references in the text of this report are listed in an annotated bibliography attached to the report.

The Search Procedures

Before the search for citizen education measures was begun, a set of criteria was developed. The four criteria by which any measure was judged are:

1. The characteristics being measured must be relatable to at least one of the citizen education outcomes listed in the RBS working definition.
The goal of Citizen Education is to prepare students for current and future responsibilities in their interpersonal, community, and political lives by fostering the acquisition of the following knowledge, skills, and dispositions leading to personal satisfaction and the realization of democratic principles:

### Knowledge
- Knowledge of the dynamic institutions and systems that exert influence in our society -- law, economics, politics, religion, international relations, ethics, and technology
- Knowledge of the historical and contemporary context of recurring social issues related to the above institutions
- Knowledge of the major issues and problems forecast for the above areas and others that may emerge

### Skills
- Inquiry skills -- which enable learners to select, organize, evaluate, and use information, with special, but not exclusive, reference to problem solving and decision making
- Interpersonal skills -- which enable learners to engage in communication, act cooperatively, exercise leadership, and take part in arbitration
- Action skills -- which enable learners to formulate problems, generate alternatives, set goals, plan strategies, consider consequences, and evaluate courses of action

### Dispositions
- Respect and caring for others
- Commitment to equality of all persons
- Commitment to rationality
- Commitment to personal freedom limited only by the above commitments
- Identification with positive primary groups, and local, national, and world communities
- Commitment to action and participation
2. The measure must be appropriate for students in at least one of the grades K through 12.

3. There must be indication through the public report of some type of findings that the measure has been used with students in the designated grade.

4. Finally, in the event that a number of very similar measures exist for the same objectives and grade levels, only the two judged to be most adequate in terms of measurement characteristics were to be presented.

The sources for the search are of six types. The first type consists of reports of citizenship assessment programs. This category includes the National Assessment of Education Progress (e.g., 1975), the Pennsylvania Educational Quality Assessment (e.g., Russell, 1975), the Delaware Educational Accountability System (e.g., Delaware Department of Public Instruction, 1975), and the International Association for the Evaluation of Educational Achievement (e.g., Torney, Oppenheim, & Farnen, 1975).

The second source is Burks' *Social Studies: Tests and Review* (1975). This source was considered especially useful for locating tests of knowledge and skills relevant to the RBS citizen education outcomes, in that citizen education is often considered the special province of the social studies. Categories within the Burks volume that were considered appropriate were contemporary affairs, economics, general social studies, political science, sociology, and U.S. history; omitted were geography and history other than U.S. history.
The third source is the CSE-RBS Test Evaluations: Tests of Higher-Order Cognitive, Affective, and Interpersonal Skills (Hoepfner, Hemenway, DeMuth, Tenopyr, Granville, Petrosko, Krakower, Silberstein, & Nodeau, 1972). This source was considered especially relevant because the RBS citizen education outcomes were developed out of a background that is manifest in this work. Categories used in the CSE-RBS volume that were selected for the present search included all those under the general heading of "Interpersonal Skills," the "Socialization," "Responsibility," "Internal-External Control," "Social Values," and "Political Values" subcategories under the general heading of "Affective Skills;" and all subcategories under the general heading of "Higher-Order Cognitive Skills" that had to do with selecting, organizing, or evaluating information, with communicating or with generating goals or alternative actions, or with planning for actions.

Measures of Political Attitudes (Robinson, Rusk & Head, 1968) is another source that was used in the search. This source was considered especially related to the dispositional citizen education outcomes. Although the categories and content of measures in this source would be of value in planning measure development, all measures included were designed for adults and none claimed to be appropriate for use even with senior high school students.

Another source used in the search is Robinson and Shaver's Measures of Social Psychological Attitudes (1973). The chapter categories judged to be relevant to the RBS citizen education outcomes are "Internal-External Locus of Control," "Alienation and Anomie," "Values," and "General Attitudes Toward People."
Finally, both handbooks of the *Tests and Measurements in Child Development* (Johnson, 1976, and Johnson & Bommarito, 1971) served as an additional source for the search. In these works, the specific sections searched were: "Cognitive Processes" and "Miscellaneous" subcategories of the "Cognition" category; the "Personality-Variable" subcategory under the "Personality and Emotional Characteristics" category; the "Perceptions of Environment" category; the "Miscellaneous Attitudes and Interests" category; the "Social Behavior" category; and the "Unclassified" category.

The Citizen Education Measures

The discussion of specific measures in this section is organized with reference to the 12 general outcomes in the RBS working definition of citizen education, as outlined in Table 1. Within each of the following 12 outcome subsections there is an interpretation of the outcome statement as presented in Table 1 for purposes of introducing the type or types of measures that would be relevant to assessing that outcome. Within that general context, the particular measures obtained by the search are described and their adequacies as measures are discussed. Finally, any aspects of the listed outcomes that are not represented among the particular measures are discussed.

Knowledge of the Dynamic Institutions and Systems That Exert Influence in Our Society

Knowledge of institutions in our society would be measured by tests requiring factual information about those institutions. Which factual information should be required is a major issue in determining the
appropriateness of any particular test. The content of most measures developed for assessing knowledge of information is referenced to the content of courses that present such information and/or is certified by educational experts in the domain, i.e., those who usually develop the courses. In other words, course content is the primary determinant of the factual information called for by the tests reviewed in this section. Thus, the "knowledge of institutions" outcome is necessarily interpreted to refer to that knowledge which has been conveyed through courses taught recently and on a rather large scale.

One consequence of the above is that the search revealed no tests or parts of tests on technological, religious, or ethical institutions or systems, while there were a number of tests or parts of tests on economics, politics, law, and international relations.

Another consequence is that a number of well-developed tests with item content relevant to this citizen education outcome also have other topics, such as geography, that are represented in a large number of items (Cooperative Tests and Services, 1969; Kelley, Madden, Gardner & Rudman, 1964; Naslund, Thorpe & Lefever, 1972; and Preston & Duffey, 1967). This is true because the commonly offered social studies courses are broader in content than the domains mentioned in the outcome description interpreted here.

Finally, where school curricula do not generally include related subject matter for a given grade level, there are usually no related tests for that grade level.
The main exception to the course-related nature of available tests seems to be the area of economics. Perhaps this exception arises from the efforts of the Joint Council on Economic Education, which has supported the development and/or distribution of four grade levels of economics tests. They are the test by Davison and Kilgore (1971) for the second and third grades; the test by the Economics Enrichment Program of the West Springfield, Massachusetts, Public Schools (1971) for the fourth, fifth, and sixth grades; the test by the Committee for the Development of a Junior High School Test of Economics (1971) for the seventh through ninth grades; and the test by the Joint Council on Economic Education (1971) itself for the ninth through 12th grades. With the exception of the last test, all the Joint Council tests are designed to measure basic economic concepts. The last test measures application of economic analyses to personal decisions. Reliability estimates are presented for all these tests except the fourth-through-sixth-grades level. All such estimates are based on single-administration, internal consistency procedures, and range from the high .60's to the low .80's, which in the lower values especially is considered to be of border-line acceptability.

In addition to the Joint Council tests, there is a test of basic economics concepts for high school and beyond (Bach, Jones & Meyer, 1964) and the economics subportions of the International Association for the Evaluation of Educational Achievement (IEA) civic tests (Torney, Oppenheim, & Farnum, 1975) for 10-year olds, 14-year olds, and students in their final grade before university studies. The Bach, Jones and Meyer test has
reliability coefficients in the lower .80's, estimated by a single-administration, internal consistency procedures. No reliability estimates are presented for the IEA economics subtest.

Finally, the National Assessment of Educational Progress (1975, pp. 282-339) in its social studies assessment includes exercises on the basic characteristics of economic systems "that are common to all industrialized societies." As with other exercises in this program, a score on one exercise is not summed with other exercise scores to obtain a total score; each exercise stands alone. While there is normative information available for each exercise, there is no information presented on the reliability of scores. Use of these exercises for the appropriate ages -- which are nine, 13, or 17 -- is valuable mainly for the opportunity to compare local performances with the well-developed norms that are provided.

In summary, there are measures of knowledge of the economic system in our society. They cover grades two through 12. Norms are usually presented, as well as reliability estimates, which range from borderline acceptability to acceptable.

Politics, law, and international relations. Because these institutions and systems are generally included together in the same course in school, items referring to them are grouped together for inclusion on the same test.

A very good set of tests for these areas is the Cooperative Social Studies Tests: Civics for eighth and ninth grades and the Cooperative Social Studies Tests which include American Government for students in the 10th
through 12th grades (both Cooperative Tests and Services, 1964). Reliability was estimated by both internal consistency and alternative forms methods, and the coefficients were in the lower .90's for the former and .88 for the latter; these values are considered acceptable levels of reliability. Both the tests have received good evaluations in critical reviews in Buros (1975).

Another test that covers similar ground, with the exception of international relations items, is the Principles of Democracy Test (Gage, Garvey, Hagan, & Payette, 1961). It also is designed for high school grades. Internal consistency estimates of reliability are in the upper .80's, which would be considered adequate.

The younger student is tested in both the National Assessment of Educational Progress (NAEP) and the International Association for Evaluation of Educational Achievement program (IEA). IEA has three subtests that focus on national and local political and legal institutions and processes and one subtest that focuses on international topics (Torney, et al., 1975). No reliability estimates for the subscale are presented. These IEA subtests are of special interest because the items are essentially the same in all 10 countries in the study. The IEA civics assessment was conducted with 10-year olds, 14-year olds, and students in the year of schooling immediately prior to usual university entry.

The NAEP exercises are administered to people at ages nine, 13, and 17. The exercises of both the Social Studies (NAEP, 1975, pp. 592-667) and the Citizenship (e.g., NAEP, 1978) assessments refer to national and local political and legal institutions; the Citizenship assessment also includes
exercises on international relations. As mentioned earlier, scores are
not summed across exercises, and no reliability estimates are provided.
An important aspect of the use of these exercises is the opportunity to
compare local results with the elaborate norms provided by the NAEP.

In summary, there is a variety of tests of political, legal, and
international institutions and systems available. The secondary school
grades are covered much more adequately than the elementary grades, for
which the exercises and subtests lack reliability estimates. However,
measures in this domain allow for normative comparisons from about grade
four through grade 12.

Combined economic and political institution tests. There are at least
two tests that intermix economic, political, legal, and international
institutions and systems. One is the new citizenship knowledge test in-
cluded in the Educational Quality Assessment, the statewide assessment
program in Pennsylvania. No empirical information is, at this writing,
available on this test. The levels of the test are designed to be admin-
istered to students in fifth, eighth, and 11th grades.

The other measure is the Co-operative Social Studies Tests: Problems
of Democracy (Cooperative Tests and Services, 1964) for grades 10 through
12. Reliability is estimated to be .90 by an internal consistency procedure
and .86 by an alternative forms procedure. These values indicate sufficient
reliability. Also, the test received a generally favorable review in
Buros (1975, pp. 179-180), although the reviewer called attention to the
time-bound nature of some items.
Summary. The content of the tests for this RBS general outcome seems to be strongly influenced by the subject matter in courses offered in the schools. There were no tests found for measuring knowledge of technological, religious, or ethical institutions of the society. The tests available to assess knowledge of politics, law, and international relations are designed for secondary school students, with only pieces of tests available for older elementary students and nothing found for use before fourth grade. Perhaps through the efforts of the Joint Council on Economic Education, tests of economic concepts and systems are available for a wider age range, reaching down to second graders. Although there are several well-developed, broad age-range tests that cover the political, economic, legal, and international aspects of the society, they do not provide scores for knowledge of those topics independent of knowledge of other subject matters, such as geography and specific historical information.

The overwhelming majority of the tests that were mentioned in the previous pages are objective tests. Most present norms and have acceptable reliability. The only major reservation one might have in using them is the congruence of the item content with the specific factual information the users have in mind.

Knowledge of the Historical and Contemporary Context of Recurring Social Issues Related to the Above Institutions

Knowledge of the past and present context of social issues that are related to the political, economic, religious, and other institutions of the society would seem to be measured, as with the previous outcome, by tests requiring particular factual information. Here also there is the
issue of what information shall be included. Furthermore as with the first outcome, the choice of information to be required on tests follows closely the information included in courses in school.

The courses most directly related to this outcome are the United States history classes, although the more general social studies courses, especially in the elementary grades, also are relevant. Thus, the general social studies tests mentioned in the previous section (Cooperative Tests and Services, 1969; Kelley, et al., 1964; Naslund, et al., 1972; and Preston & Duffey, 1967) are also appropriately mentioned here. The grade range covered by this set of tests is from first through 12th, and the measurement characteristics are good. However, these tests include other aspects of social studies not directly relevant to this outcome; topics of geography, for example, account for 20 to 45 percent of items.

U.S. history tests. Tests for U.S. history courses are more directly related. For example, Crary (1965) provides a test of the political, economic, scientific, cultural, and international aspects of U.S. history. The test is designed for students in grades 10 through 13. Internal consistency estimates of reliability indicate adequate reliability, with coefficients in the upper .80's and lower .90's.

A similar measure is the Cooperative Social Studies Tests: American History (Cooperative Tests and Services, 1964). This test has two levels, one for seventh and eighth graders and one for students in grades 10 through 12. Both forms have acceptable reliabilities; the internal consistency estimates are in the lower .90's.
Cooperative Tests and Services (1963) also provides tests of greater factual detail in U.S. history. These are eight tests, called Topical Tests in American History, designed for grades 10 through 12. The eight are divided by periods of time in U.S. history, and not by topic, as suggested by the title.

All the above, with the exception of the lower level of the Cooperative Social Studies Tests: American History, are designed for the senior high school grades. The present search revealed no other U.S. history tests of recent vintage for students at lower grade levels. Even when tests with a definite, dated approach and format were considered, only two other tests were revealed.

One of these tests is the American History Test (Speer & Smith, 1956), designed for seventh and eighth graders. One interesting aspect of this measure is its variation of item format. No reliability information is given for the 1956 edition of the test, though reviews in Buros (1975) indicate that this edition is very similar to the version of the late 1930's, which had reliability estimates in the higher .80's.

The other test, the Hollingsworth-Sanders Intermediate History Test (Hollingsworth & Sanders, 1964), was designed for fifth and sixth graders. Although the title does not specify U.S. history content, practically all the items relate directly to U.S. history. The reliability of this test is acceptable, with internal consistency estimates being about .90.

Finally, the National Assessment of Educational Progress (1975), pp. 415-593 does include history "exercises" in their testing of nine, 13, and 17 year olds. Although these exercises are not combined to form a test in the usual sense of the word, they might be used individually, in order to compare local results with the norms that are presented.
Summary. The PBS citizen education outcome of "knowledge of the historical and contemporary context of recurring social issues related to the above institutions" was of necessity related to current social studies and U.S. history courses in the search for appropriate measures. The social studies tests, though well-developed for students from first through 12th grades, were too broad in content.

The U.S. history tests, though seemingly more appropriate in content, were also more limited in grade range. A variety of adequate tests are available for senior high school grades. There was less adequate measurement of this outcome in the junior high school grades. For elementary grades, only one test was located, and it covered only grades five and six.

It also should be noted, however, that even at the grades at which there are tests with acceptable reliabilities and well-developed norms, the content of the items must be compared for agreement with the specific type of information that is required by potential users.

Knowledge of the Major Issues and Problems Forecast for the Above Areas and Others That May Emerge

Knowledge of issues and problems forecast for the economic, political, technological, religious, etc., institutions and systems of the society may be measured, as with the preceding outcomes, with measures of information. However, in this case the information does not have a convincing factual basis, but is instead more opinion-based. Perhaps for this reason, there are no standard courses that have covered these forecasts. And, as has been pointed out previously for knowledge-type objectives, where the information is not presented in a course commonly offered in schools, there tend to be no public reports of tests of that knowledge. The present search
Inquiry Skills

Described in the RBS citizen education outcomes as skills "which enable learners to select, organize, evaluate, and use information, with special, but not exclusive, reference to problem solving and decision making," inquiry skills cover a domain as broad as intelligence itself. Thus, it would seem that intelligence measures are the appropriate means for assessment. For purposes of this review, however, the domain has been limited to skills of inquiry related specifically to social information.

Two measures that directly relate to this outcome are the Elementary Social Causality Test (Ojemann, 1955) and the Watson-Glaser Critical Thinking Appraisal (Watson & Glaser, 1964). Ojemann's test involves the selection and evaluation of information about human problems. The scores on this test have correlated with scores in a measure of general intelligence in a statistically significant, though moderate, positive manner. This moderate positive relationship of the skills measured by the test and intelligence is congruent with the view that social inquiry skills are related to, but not solely accounted for by general intelligence. However, the test's reliability seems to be of only borderline acceptability; the estimate, which was of internal consistency, was .77. The reliability and relation to intelligence was studied for children in the fourth through sixth grades.
The other test, the Watson-Glaser Critical Thinking Appraisal, has been used with students in the ninth through 12th grades. Its content seems to call almost solely for social information evaluation skills. The correlations with measures of intelligence range from .50 to .75, which indicate a definite relation to general intelligence, and yet not a complete equivalence to it. However, the reliability of the five scores produced by use of the Appraisal is, on the average, too low for assessment of individuals; the internal consistency estimates range from .40 to .74, with the median being .58.

Some of the social studies exercises of the National Assessment of Educational Progress (NAEP, pp. 17-280, 1975) are also related to the social inquiry skills outcomes. Some of these have to do with obtaining information: (1) raising questions and seeking information; (2) identifying sources most suitable to solve a particular problem or to find particular information; and (3) using standard reference sources and aids. The other skill items have to do with interpreting information: (1) using basic problem-solving techniques of the social sciences to interpret information; (2) interpreting graphs and maps; and (3) using nontraditional sources of information. Use of the NAEP exercises is valuable primarily because of the opportunity to compare local results of nine-, 13-, and 17-year olds with the elaborate norms available for the individual exercises. The performances of an individual on the exercises are not added together to provide a total skill score for that person. Thus, no reliability nor empirical validity estimates are available.
Although the above assessment procedures were the only direct assessments of social inquiry skills, many of the recent standard social studies tests include such items. The performance on these items is added to the performance on other more factual knowledge items to provide a total social studies score. Well-developed tests of this nature are included in such fourth or fifth to ninth or 12th grade test batteries as the Sequential Tests of Educational Progress (Cooperative Tests and Services, 1969), the Stanford Achievement Test (Kelley, et al., 1964), and the SRA Achievement Series (Naslund, et al., 1972). State assessment programs may also be including social inquiry skill items as part of their general social studies or citizenship assessments (e.g., Delaware Department of Public Instruction, 1975).

In summary, the inquiry skills outcome as presented in Table 1 is as broad as intelligence in general. The review here, however, focused on social inquiry skills. Only two directly related measures were found, and those two had only borderline reliabilities. In addition to these two measures, there are relevant exercises from the NAEP social studies assessments and related items on the social studies parts of recent standard achievement test batteries. The format and general content of these exercises and items could be a foundation for measure development in the social inquiry skills domain.

Interpersonal Skills

The interpersonal skill outcomes presented in Table 1 are described as those "which enable learners to engage in communication, act cooperatively, exercise leadership, and take part in arbitration."
It is true that the interpersonal events cited might be facilitated by general vocabulary development or by specific area knowledge and skills in such subjects of interpersonal interchange as music theory, plumbing or Spanish. It was felt, however, that an attempt to set an intermediate focus was preferable. The search, therefore, was structured to identify measures of characteristics having to do directly with interpersonal interactions, which at the same time would be generalizable across many different settings.

Using this reformulated focus to define the outcome, the sources used in this search revealed only one directly related measure. The Leadership Ability Evaluation (Cassell & Stancik, 1961) is a test that requires choice among four different leadership style options in response to each of a set of problem situations. The scoring is based upon selection of choices that distinguish between persons judged to be outstanding leaders and others. The test has been used with high school students; the internal consistency estimates indicate a borderline acceptability of the reliability, .79 to .83.

Indirectly related to this outcome are some subscales of personality inventories that require self-description of perceived skills. For example, the much-tested California Psychological Inventory (Gough, 1957) contains subscale groups of poise, ascendency, and self-assurance and of socialization, maturity, and social responsibility. Data for high school students are available. With the exception of a few subscales, the test-retest estimates of reliabilities over one- to three-week periods are in the .80's, indicating at least borderline acceptability.
Another such self-description inventory is the Children's Social Attitudes and Values Scales (Solomon, Kendall, and Oberlander, 1972). These scales include one of cooperation versus competition as self-perceived orientations. This measure has been studied with fourth graders, for whom internal consistency estimates of reliability for the cooperation subscale were from .38 to .46, far below the level acceptable for other than research purposes.

In summary, the original statement of this outcome allowed both very general measures -- such as vocabulary tests -- and very specific knowledge measures -- such as tests of music theory (if that were the subject of interpersonal interchange) -- to be considered appropriate. The review here was more limited; measures directly relating to the interpersonal aspects of situations in general were sought. Only one directly related measure was found. Also, two measures that involved self-description of interpersonal characteristics were described, though one's reliability was definitely inadequate. Thus, the outcome domain as redefined seems almost devoid of available measures.

**Action Skills**

Action skills as referred to in Table 1 are those "which enable the learner to formulate problems, generate alternatives, set goals, plan strategies, consider consequences, and evaluate courses of action." This outcome was interpreted as not including action in the broad sense, which also includes inquiry and interpersonal skill outcomes as forms of action. The interpretation focused on social problems requiring action and/or those actions with salient social consequences.
Although these aspects of redefinition were considered appropriate to eliminate the action skill measures that would either belong in other skill categories or belong outside citizen education altogether, no measures were revealed by the search; i.e., none seemed appropriate and were rejected on the bases cited above. This is an outcome domain in need of measure development.

Respect and Caring for Others

Some aspects of respect and caring for others are implied in other dispositional outcomes that are discussed in following sections of this report. A positive attitude toward the importance of involving all relevant persons in decisions affecting those persons implies a respect for the contributions of others to the general well-being, but discussion of that topic has been placed under the rubric "commitment to the equality of all persons." In a related vein, indications of support for freedom of opinion also imply a respect for others, though measures focusing on that topic are discussed in the section entitled "commitment to personal freedom." Thus, some measures of this outcome as it is labeled may be found in other sections of this report.

A major consideration of this and other dispositional outcomes examined in the present review resulted in exclusion of a large number of measures. The present focus is on the positive orientations toward others; measures that focus on prejudice or negative attitudes toward others were omitted. The reason for such an omission is that while one might assume that a high prejudice score on such a measure should imply a lack of respect and caring, one would not be able to assume that a low prejudice score would indicate
a positive respect or caring for the others referred to. Of course, empirical studies might demonstrate the latter, but for the purposes of this review a primarily content orientation to validity was assumed to be more relevant to educational assessment than an empirical orientation that might depart markedly from the content of the measure. Measures of negative attitudes about others that were designed for use with children are presented in the "Miscellaneous Attitudes and Interests" section of Johnson and Bommarito (1971) and Johnson (1976).

Also excluded were measures that attempted to assess one's attitudes toward particular, familiar individuals, e.g., one's mother, father, or teacher. The major reason for omitting this type of measure is similar to that presented above; i.e., the difficulty of inferring a positive orientation to others in general from a positive orientation to these familiar individuals.

What is left after such omissions are measures with items or observations relating to sensitivity to the needs of others in general and actions indicating acceptance of or respect for those of different racial, ethnic, or social groups. These describe the focus of the Coal II, Tolerance Toward Others, measure in the Pennsylvania Educational Quality Assessment (Russell, 1975). Levels of this measure were designed to be used in Pennsylvania's assessment program with students in grades five, eight, and 11. However, because of their use in the assessment process, the measures are not generally available.
A measure of this type that is generally available is the Children's Social Attitude and Values Scales measure of "Concern for Others" (Solomon et al., 1972). It is proposed as appropriate for children from age eight through 15. However, the internal consistency estimates of reliability with fourth graders, from .47 to .58, suggests that the scale has insufficient reliability for any but research purposes.

The only other source of measures for this outcome revealed in the present search is the National Assessment of Educational Progress (NAEP). The NAEP citizenship assessment (e.g., 1978) involved exercises to measure acceptance of persons of other races, and the social studies assessment (1975) contained exercises that were directed at sensitivity to the needs and feelings of others. However, as mentioned previously in this report, the NAEP exercises are not combined to form measures of individual status; rather, they are valuable in comparing results of local groupings with the elaborate norms provided for the exercises.

In summary, the disposition of respect and caring for others was seen as overlapping the outcome dispositions referring to equality and to freedom, so that some respect and caring measures are reviewed under those outcome sections. Also, measures of disrespect for others, such as racial prejudice measures, and measures of attitudes toward specific familiar others, such as attitudes toward one's father, were excluded from this and other sections of the report, due to the positive orientation toward others and the general meaning of "others," respectively, that are implied in the statement of the RBS dispositional outcomes. The state of the art in measurement of this outcome, as defined, is relatively poor. In Pennsylvania, the statewide assessment
includes such a measure for the fifth through 11th grades, but it is not generally available. On the other hand, relevant NAEP exercises are available, but at present are valuable only for local group comparisons with NAEP norms.

Commitment to Equality of All Persons

As presented in the previous section, this equality commitment outcome is interpreted to include the belief in the importance that everyone affected by a decision should have an opportunity to influence that decision. Of course, the interpretation includes any expression of support for equality of opportunity or for equality of distribution of resources.

The measure revealed in the present search that is most directly related to this outcome is the IEA civic attitude item combination called "Support for Equality for All Social Groups" (Torney, et al., 1975). Internal consistency estimates of reliability of this scale with the 10-year-old, 14-year-old, and pre-university grade samples ranged from about .64 to .86, with variation also from country to country. The median reliability estimates are in the upper .70's, which are of only borderline acceptability in the assessment of individual students. The "Support for Women's Rights Attitude Scale" of the IEA is also relevant to the topic of equality. However, this scale involved only four items, and internal consistency estimates of reliability do not support its use for individual assessment, ranging as they did between about .46 and .75, with median values in the upper .60's.

Although it overlaps several of the outcome areas in this review, the Allen Scale of Beliefs (Allen, 1972) fits most appropriately in this
equality commitment category. It was designed as a measure covering beliefs about relations among citizens of the United States and about social and political aspects of the society. An internal consistency estimate of reliability of .83 was obtained on a sample of students from eighth through 12th grades; this coefficient is acceptable for individual assessment, though the evaluation may be poorer if reliability decreases when considering students within each grade level.

Finally, both the citizenship and the social studies assessments of the NAEP (1975; 1978) include individual exercises related to commitment to equality of persons. As mentioned in previous sections, the NAEP exercises are not grouped to form a measure appropriate for individual assessment, but are valuable for the opportunity their use provides in comparing local norms with those provided by NAEP.

In summary, one directly related measure with acceptable reliability for age 10 and up was located. Also, as with other outcomes, individual NAEP exercises are available with norms for nine-, 13-, and 17-year-olds.

Commitment to Rationality

"Commitment to rationality" was interpreted to be a conviction that systematic, reasonable, and logical approaches to dealing with problems concerning individuals, institutions, and/or societies are superior to other orientations (e.g., authoritarianism, intuition, and other predispositions).

The present search for measures revealed no direct measures of this outcome, although such an orientation probably would contribute to performance on skill measures requiring judgments on logical as opposed
to other bases. Such measures are described in a previous section entitled "Inquiry Skills." Especially relevant are the Elementary Social Causality Test (Ojemann, 1955) and the Watson-Glaser Critical Thinking Test (Watson & Glaser, 1964), both of which are discussed in the inquiry skills section.

Commitment to Personal Freedom

The full phrasing of this outcome in Table 1 indicates that the commitment to freedom is limited only by the commitments to equality of persons and rationality, and by respect and caring for others. These limitations were not used in the search for measures on the assumptions that (1) if such a measure existed, it would be so structurally complex as to be unreliable, and (2) in actual use assessments of commitment to freedom would be used — along with measures of those other dispositions.

Another aspect of the orientation used in the search is that commitment to freedom means commitment to others' freedom, such as those indicated in the Bill of Rights, as well as one's own freedom. Finally, measures that focused directly on rejection of parents' views were excluded.

No measures were located that stressed commitment solely to one's own freedom. However, there are several measures related to the freedom commitment when it is the freedom of everyone that is concerned. The nine items of the Tolerance and Support for Civil Liberties - Attitude Scale of the IEA (Torney, et al., 1975) refer to various aspects of freedom. Unfortunately, at every age level sampled, the internal consistency estimates of reliability indicate that the scale is not sufficiently reliable for individual assessment; coefficients ranged from .45 to .65, with a median in the mid-fifties.
The "Value of Decision-making Autonomy" scale of the Children's Attitude and Value Scales (Solomon, et al., 1972), being more restricted in content, was more internally consistent. The estimated reliability among the fourth graders studied was in the upper .70's, which indicates reliability of borderline acceptability for individual assessment.

In addition to these measures, both the NAEP citizenship assessment (e.g., 1978) and the NAEP social studies assessment (1975) have individual exercises referring to the Constitutionally-guaranteed rights of freedom of speech, assembly, press, religion, and petition for redress of grievance.

Finally, other measures (Allen, 1972, and the Citizenship goal measure in Russell, 1975) contain items referring to views of freedom, though results from these items are combined with results from items covering other views to produce total scores.

In summary, there are measures of commitment to freedom, referring to commitment to freedom for all persons. The only one with as much as borderline acceptable reliability is more restricted in content than, for example, the variety of freedoms presented in the First Amendment to the U.S. Constitution. Perhaps further measure development efforts will provide several scales to cover the heterogeneous domain apparently included under the rubric of "commitment to freedom."
Identification with Positive Primary Groups and Local, National, and World Communities

This outcome statement was interpreted to involve positive views of and possession of values common to, others in one's family, neighborhood, town or city, state, nation, and world. It includes also positive views of the various formal structures, governmental and other, that maintain the particular organization of those groups and communities. Interpreted as such, this outcome is very broad and multifaceted. For each grouping and each organizational framework there are potentially different degrees of identification. However, the relevant measures revealed by the present search were, in effect, combinations of items of all except the world community identification into one scale that could be referred to as a socialization scale.

In the California Psychological Inventory (Gough, 1957) there is actually a scale called "Socialization." It and another related scale, "Responsibility," are both considered indicators of beliefs and actions being in concert with almost any type of social order. The Inventory has been used with high school students. Reliabilities estimated by test-retest method over a three-week interval are .85 and .80 for the Responsibility and Socialization scales, respectively; these estimates indicate at least borderline acceptability. However, more important than the reliabilities for decision about any specific use of these scales is the variety of other validity data provided in the manual.

A somewhat similar scale, that is more appropriate for children and requires much less time for administration, is the Social Attitudes Scale.
The SAS was designed to measure reliable, accountable, loyal, and effective behavior from ten years of age through high school. However, reliability, estimated as being in the 60's by a retest procedure over a four-month period, does not seem to be adequate for individual assessment.

Finally, the Pennsylvania EQA (Russell, 1975) includes a scale of "Respect for Law and Authority," which seems to be related to this outcome. This scale is one of three constituting the Goal V-Citizenship measure. There are forms for fifth, eighth, and 11th graders. The internal consistency estimate of reliability is .86, which indicates adequate reliability for individual assessment. However, because it is part of the state-wide assessment, availability of this measure is restricted.

In summary, though the primary group and communities identification outcome was defined broadly as both positive attitudes toward those social entities and/or possession of values common to any of those entities, the present search revealed only general socialization and respect for law type measures. Only one of the three measures reviewed had adequate reliability and covered a broad age range of school children, though its use is restricted. Therefore, this outcome domain is in need of further measure development.

Commitment to Action and Participation

Any manifestations of participation in political activities or activities of the community that were not primarily some other type of activity (e.g., not recreation or sport) should be included here. Furthermore, indications of intent to participate and beliefs that one's own actions can effect desired results were also included in the interpretation of this outcome.
statement. Actually, most of the measures located were of the intent or belief-in-efficacy type.

The IEA (Torney, et al., 1975) did include two scales with items asking about the students' participation in political discussions and in civic activities. The nine political discussion items formed a scale that had borderline internal consistency reliability for each of the age groups tested: 10-year-old, 14-year-old, and pre-university grade groups. However, the Participation in Civic Activities scale had very low internal consistency estimates of reliability for all three age groups. The IEA also included a belief-in-self-efficacy type measure, the Sense of Political Efficacy Attitude Scale. This scale had low internal consistency reliability estimates for all groups except the pre-university grade group, for which the coefficients were in the mid and upper .70's, which are borderline in acceptability.

Two commonly-used measures of sense of self-efficacy that are broader in domain than just political efficacy are the Children's Locus of Control Scale (Bialer, 1960) and the Locus-of-Control Scale for Children (Norwicki & Strickland, 1973). Internal consistency estimates of reliability for both scales range from borderline acceptability with the lower ages -- second and third graders, to whom the scales are sometimes read aloud -- to acceptable reliabilities in the mid and upper .80's for high schoolers. For the younger elementary school children it may be appealing to utilize an interview such as the Locus-of-Control Interview (Malasky, 1971). However, no estimates of reliability were located for that Interview.
The interest of students in participation in adult civic activities
survey by Trenfield (1965) is an intent-type measure of participation.
With a high school sample, the internal consistency estimate of reliability was .90, which is adequate for individual assessment.

Also, for this age group and younger children, the NAEP social studies and citizenship exercises (1975; 1978) include ones related to a belief that people should be involved in making decisions that affect their lives and ones indicating a willingness to participate in the political process. Of course, as noted before, these are individual exercises and are appropriate to comparison of local norms with NAEP norms, not individual assessment.

In summary, there is a variety of measures for most of the K-12 grade range with adequate reliability for assessing the participation outcome. Of course, this set of measures may not include a particular concern for a particular type of participation that might be entailed in a particular citizen education program.

Discussion

This search for measures was limited by specified criteria and to particular sources. Therefore, the results are not the results of an exhaustive search for any measure ever related by anyone to citizen education. Most notably, the search was restricted by following the particular statements of outcomes presented in Table 1. A number of measures were also not included because no public report of any type of findings with children in at least one of the grades K through 12 was located. Finally, only particularly related assessment programs and standard references on measures were used as sources. The following summary of the results of this citizen
education measures search, therefore, should be read with these restrictions in mind.

The results of the search varied considerably by outcome type. At one extreme, no measures were located for the outcomes of (1) knowledge of issues and problems forecast, (2) action skills, and (3) commitment to nationality. For four additional outcomes, though, there were no presently adequate measures; there had been at least one measurement attempt to learn from, or obtain guidance from, related individual exercises or items for which data are available. Those four outcomes are (1) interpersonal skills, (2) respect and caring for others, (3) commitment to freedom, and (4) identification with positive primary groups and local, national, and world communities.

At the next level there are the outcomes of (1) inquiry skills and (2) commitment to equality of all persons, for which there is at least one measure of borderline adequacy covering about one half of the K-12 grade range. Finally, the most adequately covered outcomes are ones for which there are a number of adequate measures that provide a variety of approach for measurement in at least one grade range. These are (1) knowledge of economic, political, and legal institutions, for grades four through 12, (2) knowledge of the history of those institutions; for grades eight through 12, and (3) several aspects of commitment to participation, for grades two through 12. Of course, whether these more widely-used measures shall be appropriate for measurement of the outcome as defined in a particular citizen education program would have to be answered by comparing the content and/or validity information with the local definition.
The implications of the results for measure development are that all outcome areas need more work, even if just to extend the grade range for which there will be adequate measures. Most outcomes have some groundwork laid for the development efforts. However, measures development for several of the outcomes will require even laying the groundwork.

Prior to further development efforts, there are several additional sources to search in order to provide possibly more profitable orientations for development and/or some already developed measures that were missed by the present search. Four types of sources that should be helpful are standard references on observational measures, especially those for contrived social and problem-solving settings; the research literature on political socialization; reports of evaluations of decision-making curriculum materials and programs; and reports on the state of the art of futures forecasting.
ANNOTATED BIBLIOGRAPHY


This article presents the Allen Scale of Beliefs, containing 46 statements of belief about relations among citizens and social and political aspects of the society as seen by judges. Respondents indicate their extent of agreement or disagreement with each statement. The scale is designed for ages 13 to adult.


The test was designed to assess student understanding of the basic economic concepts essential for good citizenship. Two forms of 50 four-choice items each are available. Norms are presented for 12th graders who are students at schools having a minimum of 12 weeks of economics instruction.


The author's Children's Locus of Control Scale is presented in this work. The Scale is designed to assess the degree to which a person believes that what he or she does can make a difference in the outcome of everyday situations. The Scale contains 23 questions to which a person answers "Yes" or "No," indicating whether he or she holds the particular belief in question. It was read aloud in this study of normal children from grades one through eight and with mentally retarded children of comparable ages.


This work presents all information concerning the social studies areas that is presented in each of the seven Mental Measurement Yearbooks, which contain scholarly and practical critiques of commercially distributed tests, and in the *Test in Print*. 

The 50 items of this measure are problem situations in which the respondent is given four choices of action. Each choice represents a different leadership style. The total score is obtained by weighing three of the four leadership style scores in a way that has optimally distinguished between outstanding leaders and typical individuals. This measure has been studied with students in grade nine through 12.


Knowledge, comprehension and application levels of economics objectives are measured in such categories as basic concepts, distribution of income, international trade, and comparison of economies. The test has 40 four-choice items. Norms are presented for seventh, eighth, and ninth graders.


This test is designed in a similar fashion to that of the authors' Cooperative Social Studies Tests: Civics. It also contains similar dimensions of item content and item format is the same, multiple-choice. However, the items are directed at older students, and norms are presented for grades 10 through 12.


The test is a survey type and was designed to measure knowledge and understanding of historical events and issues, application of basic knowledge to the generalization of principles and concepts, analysis of relationships, and interpretation of graphs, maps, charts, and cartoons as communicating historical information.

Designed to measure recall, comprehension, and analysis, the test contains items on national government, political participation, and international relations. The test is a multiple-choice type, requires 40 to 50 minutes to administer, and comes in two forms. Norms are presented for eighth and ninth graders.


The Problems of Democracy test is designed to assess memory, understanding, and analysis levels of outcomes related to international, political, social and economic problems. The test is multiple-choice in format, has two forms, and requires 40 to 50 minutes to administer. Norms are presented for grades 10 through 12.


The social studies test in this battery of tests is designed to measure abilities to read and interpret such material as maps and graphs, to perceive relationships among various concepts and trends, and to analyze such material critically. Problems are drawn from all areas of social studies. There are four levels of the test: grades four through six, grades seven through nine, grades 10 through 12, and grades 13 and 14. At each level there are two forms of the tests. The forms for the two younger age groups require 45 minutes for administration, while the forms for the two older levels require 60 minutes.


There are eight "topical tests," each covering knowledge of events and relationships of a specific time period in American history from "Exploration, Colonization, and Independence: 1450-1783" to "The Second World War and After." Each test contains 60 multiple-choice items, and requires 40 to 50 minutes to administer. The tests were designed for courses in 10th, 11th, and 12th grades.
This test is designed to measure knowledge and understanding of poli-
ticonational, socioeconomic, scientific-cultural, foreign relations,
and study skills content in the study of American history. It is
available in two forms, with 76 multiple-choice items each. Norms
are presented for high school students enrolled in American history
courses.

This test is a test of concepts, understandings, and skills in basic-
economics. It is made up of 64 one- or two-line statements, which
are administered both visually and aurally. The test-takers indicate
by circling a Yes or No whether they believe the statement is true or
false. Norms are available for third-grade students.

The objectives involve knowledge and appreciation of decision-making
skills, the rights of the individual, justice and order, economic
and political systems, personal responsibility to the society,
inquiry skills, and other social studies understandings. They are
presented in two groups: one for grades two through four, and the
other for grades five through eight. Four forms of related tests
are used at each of the fourth- and the eighth-grade levels.

Knowledge, comprehension, and application levels of basic economic
concepts are measured. There are 40 four-choice questions on the
test. Norms for the sixth graders participating in the enrichment
program are presented.

The Principles of Democracy Test measures knowledge of information in such domains as basic U.S. law, elections, branches of government, and national, state, and local governmental structure. It is a 65-item, multiple-choice test, requiring 40 to 45 minutes to administer. There are norms for grades nine through 12.


In this Inventory (the CPI) there are 18 scales which are grouped into four classifications: (1) poise, ascendancy, and self-assurance; (2) socialization, maturity, and social responsibility; (3) achievement potential and intellectual efficiency; and (4) personal orientation and attitudes toward life. Responding involves answering whether each of 480 one-line statements are true or false about oneself. CPI answers by high school students have been studied.


This is a report on the Social Attitudes Scale (SAS), which is designed to measure attitudes toward reliable, accountable, legal, and effective behavior. The SAS is made up of 50 agree-disagree items. Norms are provided for 10, 12, 14, and 16 year olds.


The items of this test include knowledge of facts, application of information, and reasoning about content found in textbooks at these grade levels. Practically all of the items relate directly to American history. There are two forms of each of two levels, for each of the two semesters of history instruction. All forms have 55 four-choice items, to be administered in 30 minutes. Norms are presented for both fifth and sixth grades.

This work presents a classification and evaluation of measures in such skill areas as classifying, planning, evaluating, socialization, locus of control, social values, relations with peers, and relations with authorities.


This work contains a set of descriptions of unpublished measures not covered in the previous Handbook by Johnson and Bommarito. The categories of measures included are the same as in the previous Handbook.


This work contains a set of descriptions of unpublished measures. The types of measures include cognition, personality and emotional characteristics, perceptions of the environment, self-concept, and social behavior.


The test is designed to measure the application of economic analysis to personal decisions. It consists of 50, four-choice items. Norms are presented for both ninth graders and 12 graders.

The social studies part of this battery of tests is designed to measure knowledge, skills and understandings commonly accepted as desirable outcomes of social studies programs in grades five through nine. Content of many items is drawn from economics, history, geography, industry, sociology, and civics, while others measure capabilities in reading tables, graphs, and maps. The test is available for two levels, one for grades five and six, the other for grades seven through nine. There are three forms at each level, and items are in four-choice formats. Norms are available for all grades covered.


Designed for use with young children, particularly those with limited verbal ability, this interview explores the child's view of his/her control over the environment. There are 25 individually administered questions involving control beliefs, and for each there is a follow-up question, of a why? or what would you do? type. There are directions for scoring both the belief orientation and the appropriateness of the follow-up question/answer. This interview has been used with first and sixth graders.


The social studies items of the SRA battery are drawn from sociology, anthropology, geography, history and political science, and include interpretation of information presented in pictures, graphs and maps, as well as in verbal text. There are 40 items in the part labeled "Social Studies," but 16 additional items in the "Reading" part of the battery are also used. Three different levels of the battery are available for the grades four through nine, and there are two forms at each level. Norms are available for grades four through nine.

In this work the results of selected citizenship and social studies exercises in the National Assessment are presented for the following topics: knowledge of constitutional rights, respect for others, knowledge of structure and function of government, knowledge of the political processes and willingness to participate, and knowledge of international affairs.


This volume presents all social studies exercises that have been administered in the National Assessment of Progress and that will not be used again. Complete documentation about administration, scoring, and results is also presented.


The Norwicki-Strickland Locus-of-Control Scale for Children contains 40 questions as to beliefs about one's control over events in one's life. The respondent merely marks "Yes" or "No" in answer to each question. Mean scores are available for grades three through 12.


The Elementary Social Causality Test is designed to measure awareness of complexity in human problems, flexibility in thinking, and suspension of judgment in the absence of sufficient information. The test has 30 true-false items posed in relation to a set of problem descriptions. It has been studied with children in grades four through six.

The development of the civic attitudes items for the International Association for the Evaluation of Educational Achievement is described in this book. The final set of 105 attitude and 79 background items are also presented. These measures were designed to be meaningful to children as young as 10 and as old as 18.


The test is designed to sample the usual objectives of primary grade level social studies courses. The item represent four basic disciplines in the approximate percentages, as follows: geography, 45 percent; government, 25 percent; economics, 15 percent; and history, 15 percent. Directions for each of the 70 three-picture choice items are read aloud to the group of students taking the test. Norms are presented for grades one, two, and three.


This is a collection of paper-and-pencil measures and descriptive and critical commentary on those measures. It covers the following 11 domains of political attitudes: public reaction to government policies, liberalism-conservatism, democratic principles, domestic government policies, racial and ethnic attitudes, international affairs, hostility-related national attitudes, community-based political attitudes, political information, political participation, and political processes.


This is a collection of paper-and-pencil type measures, with descriptive and critical commentary on those measures. It covers the following nine domains of social-psychological attitudes: life satisfaction, self-esteem, locus of control, alienation and anomie, authoritarianism and dogmatism, other sociopolitical attitudes, values, general attitudes toward people, and religious attitudes.

This work describes the goals and measurement rationales for each of the ten goals of Pennsylvania education. Among the goal areas are tolerance toward others and citizenship. Also, there is a description of safeguards employed in the state's measurement program and a discussion of the validity of the measures.


There are seven scales, including "democratic values" (16 items), "cooperation vs. competition" (9 items), "value on decision-making, autonomy" (10 items), and "concern for others" (9 items). Respondents mark the extent of their agreement or disagreement with each of the total of 66 items. The scales have been used in studies of fourth graders, but they are also considered appropriate to older students, up to age 15.


The American History Test was designed to measure four characteristics: the ability to interpret major lessons in American history, knowledge of sequences of events, knowledge of historical associations, and recognition of important facts. Items are clustered on the test into labeled groups indicating which characteristic is being measured. Multiple-choice, fill-ins, and true-false item formats are all used. The test requires 40 to 45 minutes to administer. Names are provided for seventh and eighth graders. Two forms of the test are available.


This is a report of the International Association for the Evaluation of Educational Achievement study of citizenship understandings and attitudes in ten countries with democratic forms of government. The development of the cognitive and affective outcome measures is briefly described and results are presented. Samples of 10-year olds, 14-year olds, and pre-university students were involved in the study.

This is a measure that consists of statements of 30 activities of participation in community affairs. Respondents mark on a five-point scale how often they expect to participate in those activities as an adult. Means for high school students on each of the 30 items are available.


The Critical Thinking Appraisal includes five tests, all relating to judgments of the quality of assertions in the citizenship domain. These tests are: (1) Inference, (2) Recognition of Assumptions, (3) Deduction, (4) Interpretation, and (5) Evaluation of Arguments. All five tests are administered in one 50-minute sitting. Two forms of the test are available. Both are multiple-choice format. Norms are presented for grades nine through 12.