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Measuring Civic Readiness: A Review of Survey Scales

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Measuring Civic Readiness: A Review of Survey Scales

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This resource supports state and local education agencies in identifying, comparing, and contrasting survey scales that measure a variety of civic readiness categories. It describes the format and structure of survey scales, details the civic readiness categories measured by the scales, and summarizes the reliability and validity evidence associated with the scales.

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What is this resource?

This resource provides guidance for state and local education agency staff and others who want to identify and assess civic readiness survey scales to support civic education initiatives. The resource describes 183 survey scales measuring civic readiness. It includes a worksheet that guides you through selecting and evaluating potential survey scales. It also includes an appendix with additional details about each survey scale and links to documents that contain the survey items for each scale.

The resource development team conducted a comprehensive search and review and identified 33 documents that describe 22 survey instruments and cover 183 survey scales (see box 1 for an overview of the methods and appendix A for details). Most survey instruments comprise multiple survey scales, defined as a grouping of survey items intended to measure a specific common topic. For example, a survey instrument might contain one survey scale that measures civic knowledge and another that measures intention to vote. Although this resource includes some single-item measures of civic readiness, it refers to all the measures as survey scales. Survey scales are intended to stand alone, although you can adopt scales from multiple survey instruments. All scales reviewed in this resource use a student self-report format (survey) that can be widely administered.

Box 1. Methods

To identify the survey instruments and scales reviewed in this resource, the resource development team at the Regional Educational Laboratory Central engaged in a four-phase process (see appendix A for more details about the methodology):

1. Keyword search and preliminary screening.
2. Full-text screening.
3. Document summary.
4. Instrument summary.

The team retained only documents and survey instruments that met all screening criteria (see appendix A). A document was retained if a direct link could be made between an instrument's reported evidence of reliability and the specific items used in the instrument. Although a document might report on the use of an instrument, the document was excluded if the information on the reliability, validity, or survey items in the document could not be linked to the instrument's survey items. This resource, therefore, does not represent a comprehensive review of all documents that report on the survey instruments and their associated scales.

The How to use this resource section provides a worksheet that you can use in conjunction with the full document to identify and select survey scales of interest.

To help you more easily review and identify scales of interest in this resource, the How is civic readiness measured? section organizes the 183 survey scales into six broad categories according to the aspects of civic readiness that they measure: civic attitude, civic behavior, civic/political knowledge, civic-related skills and character traits, political attitude, and

political behavior (table 1). When possible, each category is further divided into subcategories to provide additional support in identifying survey scales of interest. (See appendix A for further details about the classification process.)

The What information is available for each survey scale? section includes details about each survey scale. These details include the number of survey items per survey scale, examples of survey items, evidence of reliability and validity (when available), and the education stage (upper elementary school, middle school, high school) at which each survey scale was administered to students (see box 2 for definitions of key terms). A summary of each survey instrument, including detailed information for its survey scales and citations for documentation about the instrument, is in appendix B.

Table 1. Categories of civic readiness and their definitions

Category	Definition	Examples of content measured
Civic attitude	A student's disposition toward or opinions about diversity, the environment, community, community involvement, and the importance of helping others.	• Attitudes about service to one's country. • Level of social trust. • Sense of responsibility to the community.
Civic behavior	Community-focused actions a student has taken, intends to take, or has expressed interest in taking.	• Helping the community. • Encouraging others to volunteer. • Expressing interest in joining a community organization. • Caring about the well-being of others.
Civic/political knowledge	A student's content knowledge about the policies, processes, and historical events of the nation.	Knowledge of: • The powers of the president of the United States. • The lawmaking process. • Historical events of significance (for example, July 4, 1776). • The political parties. • The constitutional amendments.
Civic-related skills and character traits	A student's skills, personality disposition, and competencies related to civic readiness.	• Conflict resolution. • Leadership. • Personal responsibility. • Gratitude. • Humility. • Perseverance. • Efficacy to perform relevant behaviors.
Political attitude	A student's sense of responsibility to engage in the political process; opinions on what constitutes a good citizen; attitudes toward media; and disposition toward or opinions about the government and its policies, processes, institutions, and leadership.	• Attitudes about the appropriate level of government responsiveness. • Attitudes about the fairness of the democratic process. • Level of trust in leadership (politicians). • Sense of responsibility to engage in the political process. • Attributes that constitute a good citizen. • Level of trust and disposition toward the news media.
Political behavior	Politically focused actions a student has taken, intends to take, or has expressed interest in taking.	• Communicating ideas of a political nature (for example, a blog post or a discussion of politics). • Intending to vote. • Participating in a boycott. • Contacting or endorsing a representative. • Signing a petition. • Seeking information about politics and current events on social media, television, or radio, or in printed media.

Source: Authors' analysis of instrument summary data.

Box 2. Key terms

Civic readiness. Possessing the knowledge, skills, and disposition needed to be an informed and active member of one's community after high school graduation (Brennan & Railey, 2017).

Confirmatory factor analysis. A statistical technique used to determine how well the items in an instrument or scale align with a researcher's expectations of how the items or scales should relate to one another.

Cronbach's alpha (α). A reliability statistic that indicates the degree to which items in an instrument or scale that uses multiple response options are internally consistent.

Dichotomous scale. A rating scale with two possible response options that are usually opposite (for example, true/false, yes/no).

Education stage. The subdivisions of formal education. In this resource the education stages are upper elementary school, middle school, and high school.

Exploratory factor analysis. A statistical technique used to determine whether the items in a scale measure one or multiple concepts.

Kuder–Richardson Formula 20 (KR-20). A reliability statistic that indicates the degree to which items in an instrument or scale that uses dichotomous response options are internally consistent.

Likert scale. A rating scale that measures a respondent's attitude toward the content of an item. For example, an item that uses a Likert scale might prompt a respondent to indicate the degree to which the respondent agrees or disagrees with a statement.

Multiple choice. A response option that allows a respondent to choose a correct answer among several options.

Ranking. A response option that allows a respondent to compare items to one another and rank them according to preference.

Reliability. A statistical value that represents the degree to which items of an instrument are internally consistent. Internal consistency is a measure of the relationship, or the correlation, of the items to one another. Two common reliability statistics used in this report are Cronbach's alpha (α) and Kuder–Richardson Formula 20 (KR-20).

Validity. The degree to which an instrument measures what it is intended to measure. Two common sources of validity evidence used in this report are exploratory factor analysis and confirmatory factor analysis.

Why this resource?

In 2015 the Every Student Succeeds Act (ESSA) led to renewed efforts to transform education systems. These efforts included broadening the definition of college and career readiness so that schools could better prepare students for college, careers, and postsecondary civic engagement (Baumann et al., 2014; Brennan, 2017; Patrick et al., 2017). Under ESSA, state education agencies are redesigning school and district accountability systems to include factors beyond academic achievement (Achieve & Advance CTE, 2016). Many agencies have incorporated indicators of postsecondary readiness, including civic readiness, into their accountability systems (Achieve & Advance CTE, 2016; National Forum on Education Statistics, 2015). For example, the Nebraska Department of Education developed the Accountability for a Quality Education System, Today and Tomorrow (https://aquestt.com/), which includes "Postsecondary, Career, and Civic Readiness" as one of its six key tenets. Other state education agencies that are focused on redesigning their accountability systems might also be seeking ways to incorporate measures of civic readiness into their own accountability systems.

Data trends in civic knowledge and participation over the past few decades help explain the increase in civic education initiatives and the need for instruments that measure civic readiness. Since 1998, civics assessment scores on the National Assessment of Educational Progress have been consistently low, with just a quarter of students scoring proficient or above (Baumann et al., 2014; National Center for Education Statistics, n.d.). Furthermore, previous National Assessment of Educational Progress civics assessments suggest that the vast majority of students who score at the highest level are from higher-income households, spotlighting what has been coined the "civic empowerment gap" or "civic achievement gap" (Baumann et al., 2014; Levinson, 2007). Trends over the past few decades also suggest lower civic participation, such as voter turnout, among some subgroups of adults, including racial/ethnic minority voters, younger voters, and voters of lower socioeconomic status (Coley & Sum, 2012; Root & Kennedy, 2018). Research has also shown opportunity gaps in civic education in K–12 settings—for example, gaps in participation in service learning, classroom debate, and student government, particularly for students from low-income households and racial/ethnic minority groups (Kahne & Middaugh, 2008; Kawashima-Ginsberg, 2013).

In light of evidence correlating the skills developed in civic education with civic participation and postsecondary outcomes, these trends are concerning to educators and policymakers across the nation. For example, political participation and 21st century skills such as communication, critical thinking, and information literacy have been associated with postsecondary outcomes such as degree attainment and employment status (Baumann et al., 2014; Comber, 2005; Kahne & Sporte, 2008; Levinson, 2007; Syvertsen et al., 2011; Winthrop, 2020).

While there is increased interest in the need to support the development and measurement of civic readiness, information about instruments that measure civic readiness is not easily accessible. Without information about high-quality measures, state education agencies might turn to less suitable alternatives. Often information is scattered across databases and organization websites, requiring considerable time and effort to review. For example, most

states that now require their student assessment systems to incorporate a measure of civic readiness have adopted the United States Citizenship and Immigration Services (USCIS) test (Brennan & Railey, 2017). Yet the USCIS test was not designed for K–12 education accountability (Winke, 2011). Although the test measures civic knowledge, it does not address other aspects of civic readiness, such as civic-oriented attitudes and behaviors, which are likely to be of interest to educators and policymakers (Brennan & Railey, 2017).

This resource summarizes information available on accessible civic readiness survey instruments and scales. State and local education agencies can use the resource to identify, compare, and contrast multiple civic readiness survey scales and thus help them make informed decisions about which survey scales they might want to incorporate into their accountability systems. This resource may also be relevant to school or district staff who want to evaluate the impact of their civic education initiatives. For example, schools or districts that have launched civic education initiatives might need survey scales to measure the impact of those initiatives. Data collected using these survey scales could help improve programs and, in turn, increase students' college, career, and civic readiness.

How to use this resource

This resource provides guidance to help you identify and assess civic readiness survey scales that you might adopt for your own uses. The Guide for selecting civic readiness survey scales worksheet is the first step in this process. The following paragraphs describe the steps for using the worksheet. Additional details for each step are included in the worksheet, and the accompanying Microsoft Excel spreadsheet (available at https://ies.ed.gov/use-work/resource-library/resource/fact-sheetinfographicfaq/measuring-civic-readiness-review-survey-scales) contains all the survey scales and additional information. The spreadsheet tools may make it easier to navigate all 183 survey scales during the following activities.[1]

Step 1: Clarify the purpose and audience for your civic readiness survey instrument. In part I of the worksheet respond to prompts 1–5 to clarify the purpose and audience for your survey instrument. For example, are you interested in a survey instrument to measure the civic readiness of high school students? Will the results of your survey be used for low-stakes or high-stakes decisions? Is there a specific initiative in your state, district, or school that you wish to evaluate?

Step 2: Prioritize the categories and subcategories of civic readiness that best fit your needs. Start by reading the How is civic readiness measured? section, which follows the worksheet. That section classifies the 183 survey scales into six general categories: civic attitude, civic behavior, civic/political knowledge, civic-related skills and character traits, political attitude, and political behavior. Three of these categories include subcategories to further support your identification of survey scales of interest. This process can help you narrow the number of survey scales you will need to review. For example, if you are interested in only the political attitude category and the attitudes toward the media and political efficacy subcategories, you can review only the relevant survey scales.

After you review the How is civic readiness measured? section, proceed with part II of the worksheet. Reflect on your responses to prompts 1 and 2 in part I to prioritize the civic readiness categories and subcategories you want to measure.

Step 3: Identify and select the survey scales that best fit your needs. Read the What information is available for each survey scale? section to begin identifying survey scales of interest. Use your responses to the prompts in part I and the categories and subcategories you prioritize in part II to identify the civic readiness survey scales that best fit your needs. The survey scales in this section are listed alphabetically by category. Where applicable, the survey scales are presented in subcategories. Each survey scale includes the number of survey items, an example survey item, evidence of reliability and validity, and the education stage (upper elementary school, middle school, or high school) at which each survey scale was administered to students. Additionally, the section includes citations for the sources you can access to retrieve the full list of survey items for each survey scale you choose.

1. The Excel spreadsheet has 185 records for scales because two scales were placed into two categories: the political and volunteer motivation scale (Malin et al., 2017) was placed in both the civic attitude and the political attitude categories, and the caring for community scale (Chi et al., 2006) was placed in both the civic attitude and the civic behavior categories.

After you review the What information is available for each survey scale? section, proceed to part III of the worksheet. Once you have identified survey scale candidates, the worksheet provides further guidance on using appendix B to access the full list of survey items for each survey scale you select.

Considerations for using identified survey scales

There are several considerations to keep in mind as you use this resource.

First, you can use each survey scale as a standalone survey instrument, or you can combine multiple survey scales into a single survey instrument. However, to ensure the quality of your scales—their psychometric properties, such as reliability and validity—you must use each survey scale in its entirety, and you must use the items in the survey scales in their original order and with the exact wording and structure to preserve the psychometric properties reported for each survey scale. Additionally, once you select survey scales, you must invest additional time to turn the list of survey scales into a survey instrument. For example, you will need to organize and format the survey. See Harlacher (2016) for additional support.

Once you have developed a civic readiness survey instrument, you will need to keep several considerations in mind while determining the logistics of administering the survey and the reliability and validity implications for your student population:

- You will need to determine how and when the survey will be administered, as this could affect the number of responses you receive. For example, you will need to decide whether the survey will be administered in person or online and whether to set aside time during the school day for students to complete the survey.

- If you will use the survey results as a measure of the civic readiness of students in a school or district, you will need at least an 85 percent response rate to ensure that the results reflect the civic readiness of all students in the school or district. If the response rate is below 85 percent, you should examine why. You should also compare the background characteristics of the students who responded to the survey with the overall background characteristics of the school or district population to see whether the data are representative of the population. For more information on examining low response rates, see National Center for Education Evaluation and Regional Assistance (2012) and Pazzaglia et al. (2016a, 2016b).

- The evidence of a survey scale's reliability and validity was established with a specific student sample and with the scale as part of a larger survey instrument. It will be important to determine whether the survey that you develop from the various scales is reliable and valid for your student population, especially if the results will be used to make high-stakes decisions.

Worksheet: Guide for selecting civic readiness survey scales

This guide is designed to support you in revising or developing a civic readiness survey instrument for use in your state, district, or school.

- In part I you will clarify the purpose and audience for your civic readiness survey instrument.
- In part II you will review and prioritize the civic readiness categories and subcategories.
- In part III you will select the survey scales that address your civic readiness needs.

You might find the accompanying Microsoft Excel spreadsheet (available at https://ies.ed.gov/use-work/resource-library/resource/fact-sheetinfographicfaq/measuring-civic-readiness-review-survey-scales) useful when completing parts II and III, although using it is not required. Text marked with the computer icon provides additional information for those using the Excel spreadsheet to complete the following activities.

Part I. Clarify the purpose and audience

Thinking through answers to the following questions can help you decide which scales to include in your survey instrument. Consider completing this step with the team responsible for making decisions about the development and use of the civic readiness survey instrument.

1. Why are you interested in measuring civic readiness?
2. What do you want to learn about the students you will assess with the survey instrument?
3. Which education stage (upper elementary school, middle school, or high school) will you assess with the survey instrument?
4. Who will use the results of the survey instrument?
5. How will they use the results?

Who will use the results?	How will they use the results?

Part II. Prioritize categories and subcategories

The first step is to review the civic readiness categories and subcategories in the How is civic readiness measured? section, which follows the worksheet. Reflect on your responses to prompts 1 and 2 in part I to prioritize the categories and subcategories you want to measure. Then use the following table to indicate whether it will be "very important," "somewhat important," or "not important" to address each category or subcategory in your civic readiness survey instrument. This process can narrow the number of survey scales you will need to review. For example, if you are interested in only the civic attitude category and the civic efficacy and personal responsibility subcategories, you can review only those survey scales.

You may prefer to use the Prioritization Tool tab in the accompanying Microsoft Excel spreadsheet (available at https://ies.ed.gov/use-work/resource-library/resource/fact-sheet-infographicfaq/measuring-civic-readiness-review-survey-scales) to prioritize the civic readiness categories and subcategories.

Prioritization tool for civic readiness categories and subcategories

Category	Subcategory	Very important	Somewhat important	Not important
Civic attitude	Appreciation for diversity			
	Civic efficacy			
	Personal responsibility			
	Social trust			
	Other			
Civic behavior	None			
Civic/political knowledge	None			
Civic-related skills and character traits	None			
Political attitude	Attitudes toward citizenship			
	Attitudes toward the media			
	Attitudes toward the nation and its leadership			
	Political efficacy			
	Other			
Political behavior	Information gathering			
	Political activities and contributions			
	Political discourse			
	Voting			
	Other			

Part III. Prioritize survey scales

Use your responses to the prompts in part I and the categories and subcategories you prioritized in part II to identify the civic readiness survey scales that best fit your needs. The following five steps and the Selection tool for survey scales table at the end of this section can guide you through this process. For each step in the instructions, see the example entries at the top of the table.

1. List the civic readiness categories and subcategories that you prioritized in part II in the first column of the Selection tool for survey scales table at the end of this section.

   In the Excel spreadsheet use the filter feature to show only the categories and subcategories that are most important to you.

2. Use tables 3–20 in the What information is available for each survey scale? section to identify survey scales that address the categories and subcategories you listed in the first column; meet your reliability threshold (low, medium, high); and were administered at the education stage relevant to your purpose. List the scale names and their authors in the columns under the "Survey scale candidates" heading.

   On the Survey Scales tab of the Excel spreadsheet, you can isolate the survey scales that meet your inclusion criteria by using the spreadsheet's features to sort and filter through all 183 scales. You can sort and filter based on category, subcategory (when applicable), reliability evidence, validity evidence, and education stage.

   During this process, consider the following questions:

   a. Will your civic readiness survey instrument be used for a high-stakes purpose, such as in summative evaluation or in an accountability framework? If "yes," consider prioritizing survey scales with evidence of high reliability—that is, the scales that are flagged as "high" (.80 or higher) in the "Reliability" column in tables 3–20.

      On the Survey Scales tab of the Excel spreadsheet, you can isolate survey scales with "high" reliability evidence by using the spreadsheet's features to filter the "Reliability" column.

   b. Is it important that survey scales were administered to student samples that are demographically similar to the student population in your state, district, or school? If "yes," use the education stage data in tables 3–20 and the student sample data in the summaries in appendix B to prioritize survey scales administered to a similar population of students.

      On the Survey Scales tab in the Excel spreadsheet, you can isolate scales administered to student samples with a similar education stage to that of your student population by using the spreadsheet's features to sort or filter the "Education stage" column. You can also look for survey scales that were administered to students with similar

demographic characteristics to those of your student population by referring to the Student Sample tab in the Excel spreadsheet.

3. Use the instrument summaries in appendix B to evaluate the appropriateness of each survey scale you listed in the "Survey scale candidates" column or flagged in the Excel spreadsheet.

   a. First, for each survey scale, locate the source—organized by author—in appendix B.

   b. Then, review the sample items, scale size, demographic data, and information on reliability and validity for that scale to determine whether it is an appropriate scale for your purposes.

   c. In the Selection tool for survey scales table at the end of this section, cross out (use strikethrough if you are working in Microsoft Word) survey scales that do not meet the inclusion criteria for your survey instrument. Highlight the scales that meet your inclusion criteria.

      To isolate the survey scales that meet your inclusion criteria in the Excel spreadsheet, place an "X" in the "Keep" column and use the spreadsheet's features to filter out the survey scales without an "X" to reveal the scales that met your inclusion criteria.

4. To begin assembling your survey instrument, access the full list of survey items by following the links provided in the summaries in appendix B.

   a. For example, if you want to include the survey scale in table 5 ("Civic accountability"), in the row of that scale you will find "Flanagan et al., 2007" in the "Resource author(s)" column. Use that citation to find the links to the relevant sources in the "Flanagan et al., 2007" summary in appendix B.

Finally, revisit the Considerations for using identified survey scales section on using the survey scales in this resource in your school, district, or state. That section offers several considerations and additional resources about the logistics of administering the survey and reliability and validity implications for a specific student population.

Selection tool for survey scales

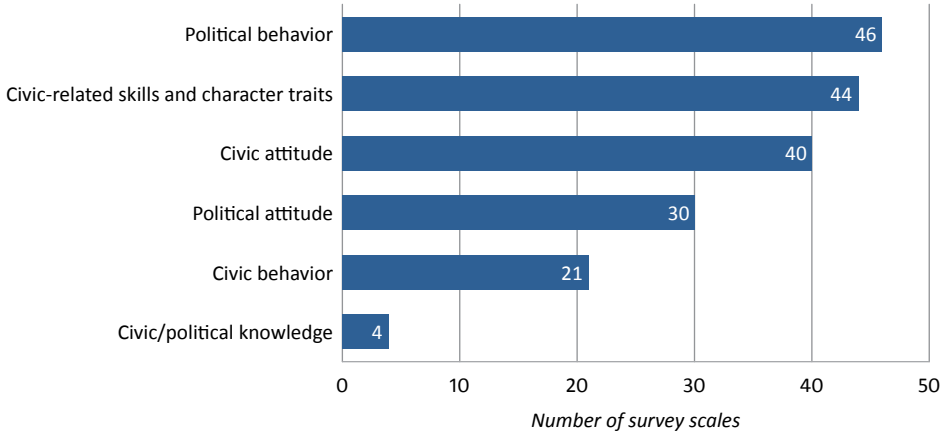
Category or subcategory	Survey scale candidate				
	Scale and author	Scale and author	Scale and author	Scale and author	Scale and author
Civic behavior	Caring for community—Chi et al., 2006	Civic leadership—Krasny et al., 2015	Community service—McIntosh & Muñoz, 2009	Environmental stewardship—Chi et al., 2006	Future service—Metz et al., 2003

How is civic readiness measured?

The resource development team reviewed and organized 183 scales into the following six broad civic readiness content categories: civic attitude, civic behavior, civic/political knowledge, civic-related skills and character traits, political attitude, and political behavior (see table 1 for definitions). Of the 183 survey scales, the political behavior category contains the most (46), and the civic/political knowledge category contains the fewest (4; figure 1).

The team reviewed all survey scales in each category and, when possible, grouped scales with a similar focus into subcategories. This process resulted in five subcategories each for the civic attitude, political attitude, and political behavior categories (table 2). The civic behavior, civic/political knowledge, and civic-related skills and character traits categories were not further divided into subcategories because of the nature of those survey scales (see appendix A for more details about the methodology).

Figure 1. The number of survey scales by category



Note: Scales sum to 185 because two scales were placed into two categories: the political and volunteer motivation scale (Malin et al., 2017) was placed in both the civic attitude and the political attitude categories, and the caring for community scale (Chi et al., 2006) was placed in both the civic attitude and the civic behavior categories.

Source: Authors' analysis of instrument summary data.

Table 2. Three categories of civic readiness that include subcategories and their definitions

Category	Subcategory	Definition	Number of survey scales
Civic attitude	Appreciation for diversity	A student's attitude about the importance of working with others of different backgrounds, racial/ethnic identities, and experiences.	2
	Civic efficacy	A student's belief in his or her competence and ability to affect the community.	5
	Personal responsibility	A student's attitude about his or her responsibility and the responsibility of others to the community.	21
	Social trust	A student's general attitude toward others in society.	2
	Other	Survey scales that measure topics across multiple subcategories or topics that do not fit into the above subcategories.	10
Political attitude	Attitudes toward citizenship	A student's opinion about what it means to be a citizen.	5
	Attitudes toward the media	A student's opinion about news media outlets or sources.	3
	Attitudes toward the nation and its leadership	A student's opinion about the nation, its institutions, and its leadership.	12
	Political efficacy	A student's belief in his or her competence and ability to participate in politics.	2
	Other	Survey scales that measure topics across multiple subcategories or topics that do not fit into the subcategories above.	8
Political behavior	Information gathering	A student's means or methods of gathering information about politics and current events.	9
	Political activities and contributions	A student's attendance at or planned participation in political events such as protests, campaign fundraisers, and expressive events (for example, a poetry slam) and contributions to a political party or membership in an advocacy group or organization (for example, Greenpeace).	12
	Political discourse	A student's communication and discussion of politics and news with family, friends, or classmates.	11
	Voting	A student's intention to vote.	7
	Other	Survey scales that measure topics across multiple subcategories or topics that do not fit into the subcategories above.	7

Source: Authors' analysis of instrument summary data.

What information is available for each survey scale?

This section presents survey scales in tables organized alphabetically by civic readiness category and, when applicable, subcategory. Subcategories designated as "other" include survey scales that measure across multiple subcategories or that measure concepts or areas not covered by any of the other subcategories in a group. In some instances you will see survey scales that appear to be duplicates. This is the case for survey scales from Furco et al. (1998a, 1998b) and Syversten et al. (2015). These survey scales were not collapsed into one because the authors generated different survey instruments for each education stage. Although some survey items are the same across education stages, reliability evidence might vary. So the survey scales are reported separately in this resource.

In each table survey scales are organized alphabetically by name. For each survey scale the table displays the number of survey items, an example survey item, information about the reliability and validity of the scale, the education stage of the students that the survey scale was administered to, and a citation of the resource in which the full list of items can be found (see box 3 for definitions).

Box 3. Definitions of terms in table headings

Survey scale name. The title of a survey scale.

Number of survey items. The number of questions or prompts in a survey scale.

Example survey item. A sample question or prompt in a survey scale.

Reliability. The level of reliability associated with each survey scale. Each level indicates a range of values for Cronbach's alpha (α): low (.60–.69), medium (.70–.79), or high (.80 and higher). A survey scale was not included if its reported reliability was below .60. If reliability was not reported for a survey scale, "na" (not applicable) is reported in the reliability column of the table.

Validity. Either yes or no, indicating whether validity associated with the survey scale has been reported.

Education stage. The education level of the group of students for whom the survey scale was designed or to whom the survey scale was administered. In this resource the education stages are upper elementary school (UES), middle school (MS), and high school (HS). Some survey scales were designed for multiple education stages.

Document citation. A citation that identifies which source you can access to retrieve all items in a survey scale. Complete citations are in the References section.

See appendix B for more details and full summaries of the survey scales.

Civic attitude

The resource development team classified 40 survey scales into the civic attitude category. The scales measure a student's disposition toward or opinions about diversity, the environment, community, community involvement, and the importance of helping others. The civic attitude category is divided into five subcategories: appreciation for diversity, civic efficacy, personal responsibility, social trust, and other.

Appreciation for diversity

The appreciation for diversity subcategory includes two survey scales. These scales measure a student's attitude about the importance of working with others of different backgrounds, racial/ethnic identities, and experiences.

Table 3. Survey scales that measure the appreciation for diversity subcategory of civic attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Diversity appreciation	5	*I enjoy being around people from different backgrounds than my own.*	High	No	HS	Ballard et al., 2015
Interest in diverse perspectives	3	*I can learn a lot from people with backgrounds and experiences that are different from mine.*	High	No	HS	Kahne et al., 2013

Source: Authors' analysis of instrument summary data.

Civic efficacy

The civic efficacy subcategory includes five survey scales. These scales address a student's belief in his or her competence and ability to affect the community.

Table 4. Survey scales that measure the civic efficacy subcategory of civic attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Civic efficacy	3	*I know what I can do to help make the community a better place.*	Medium	No	MS	Furco et al., 1998a
Civic efficacy	3	*I can change my world for the better by getting involved in my community.*	High	No	HS	Ballard et al., 2015
Civic efficacy	3	*I can make a positive difference in my community.*	High	No	HS	Syversten et al., 2015
Personal efficacy	1	*I have the ability to make a difference in my local community.*	na	No	HS	McIntosh & Muñoz, 2009
Political efficacy	2	*I believe I can make a difference in my community.*	na	No	MS, HS	Flanagan et al., 2007

na indicates that reliability was not reported for the survey scale.

Source: Authors' analysis of instrument summary data.

Personal responsibility

The personal responsibility subcategory includes 21 survey scales. These scales address a student's attitude about his or her responsibility and the responsibility of others to the community.

Table 5. Survey scales that measure the personal responsibility subcategory of civic attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Anger about social injustice	3	*It makes me angry when I think about the conditions some people have to live in.*	High	No	MS, HS	Flanagan et al., 2007
Aspirations for community contributions	7	*How important is it to you to donate time or money to charity?*	High	No	HS	Ballard et al., 2015
Caring for community[a]	4	*I believe that I can make a difference in my community.*	Medium	No	UES	Chi et al., 2006
Civic accountability	4	*Being concerned about state and local issues is an important responsibility for everybody.*	Medium	Yes	MS, HS	Flanagan et al., 2007
Civic awareness	3	*Doing something that helps others is important to me.*	Medium	No	MS	Furco et al., 1998a
Civic duty	12	*I often think about doing things so that people in the future can have things better.*	High	Yes	UES, MS, HS[b]	Zaff et al., 2010
Commitment to civic participation	5	*Being actively involved in community issues is my responsibility.*	Medium	No	HS	Kahne & Sporte, 2008
Concern for social issues	3	*How concerned are you about poverty?*	High	No	HS	Metz et al., 2003
Future civic intentions	5	*Thinking about your future, how meaningful are the following goals in your life? Becoming a leader in my community.*	High	No	HS	Malin et al., 2017
Helping others	2	*It is important for me to help those who are less fortunate.*	na	No	MS, HS	Flanagan et al., 2007
Participatory citizen	4	*Being actively involved in state and local issues is my responsibility.*	High	No	HS	Kahne et al., 2013
Personal commitment to community	6	*How important to you is participating in community events?*	High	Yes	HS	Ballard et al., 2015
Personal commitment to humanity	6	*How important to you is equality for all?*	High	Yes	HS	Ballard et al., 2015
Personally responsible citizen	6	*I think people should assist those in their lives who are in need of help.*	High	No	MS, HS	Flanagan et al., 2007
Protecting the environment	3	*It is important to me to do something to stop pollution.*	Medium	No	MS, HS	Flanagan et al., 2007
Serving the county	1	*It is important to me to serve my country in the military.*	na	No	MS, HS	Flanagan et al., 2007
Social responsibility (personal beliefs)	4	*I have a responsibility to improve my community.*	High	Yes	MS	Syversten et al., 2015
Social responsibility (personal beliefs)	4	*I have a responsibility to improve my community.*	High	Yes	HS	Syversten et al., 2015
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	Low	Yes	UES	Syversten et al., 2015

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	High	Yes	MS	Syversten et al., 2015
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	High	Yes	HS	Syversten et al., 2015

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

a. The "caring for community" survey scale appears in both the civic attitude and civic behavior categories because it comprises an equal number of survey items measuring behavior and attitude.

b. The Zaff et al. (2010) sample included students in grades 8–10. However, the sample was drawn from a larger study that included students in grades 5–12.

Source: Authors' analysis of instrument summary data.

Social trust

The social trust subcategory includes two survey scales. These scales address a student's general attitude toward others in society.

Table 6. Survey scales that measure the social trust subcategory of civic attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Social trust	2	*Most people can be trusted.*	na	No	MS, HS	Flanagan et al., 2007
Social trust	5	*I trust people I go to school with.*	Low	No	HS	Krasny et al., 2015

na indicates that reliability was not reported for the survey scale.

Source: Authors' analysis of instrument summary data.

Other

The 10 survey scales identified as "other" measure topics across multiple subcategories in the civic attitude category or topics that do not fit into any of those subcategories.

Table 7. Survey scales that measure other subcategories of civic attitude

Survey scale name	Number of survey items	Example survey items	Reliability	Validity	Education stage	Document citation
Civic awareness	10	*Helping other people is something that I am personally responsible for.*	High	No	HS	Furco et al., 1998b
Civic efficacy	10	*I feel I have the power to make a difference in the community.*	High	No	HS	Furco et al., 1998b
Civic self-efficacy	5	*I can make a difference, on my own, in my community.*	Low	Yes	MS, HS	Littenberg-Tobias & Cohen, 2016
Connection to community	4	*I benefit emotionally from contributing to the community, even if it is hard and challenging work.*	Low	No	HS	Furco et al., 1998b
Connection to community	4	*I feel like I am a part of the community.*	Low	No	MS	Furco et al., 1998a
Neighborhood social connection	6	*In my town or city, I feel like I matter to people.*	High	Yes	UES, MS, HS[a]	Zaff et al., 2010
Participatory citizen	6	*Being actively involved in community issues is my responsibility.*	High	No	MS, HS	Flanagan et al., 2007
Political and volunteer motivation	12	*Think about the political/volunteer activities you have been involved in since you have been in high school. Please rank THE 3 MOST IMPORTANT REASONS.*	na	No	HS	Malin et al., 2017
Secure employment	2	*It is important for me to get a job where I won't get laid off.*	na	No	MS, HS	Flanagan et al., 2007
Value of group work	3	*I like working with other people on group projects.*	Low	No	UES	Chi et al., 2006

na indicates that reliability was not reported for the survey scale.

a. The Zaff et al. (2010) sample included students in grades 8–10. However, the sample was drawn from a larger study that included students in grades 5–12.

Source: Authors' analysis of instrument summary data.

Civic behavior

The resource development team classified 21 survey scales into the civic behavior category. The scales measure community-focused actions a student has taken, intends to take, or has expressed interest in taking. Because these survey scales are similar to one another, they are not further divided into subcategories.

Table 8. Survey scales that measure civic behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Caring for community[a]	4	*I have done things to help people in my community.*	Medium	No	UES	Chi et al., 2006
Civic engagement	5	*Worked on solving a problem in my community.*	High	Yes	MS, HS	Wicks et al., 2014
Civic engagement	10	*Have you participated in a student council/student government?*	Low	No	HS	Gainous & Martens, 2011
Civic leadership	5	*Check all that apply to you: I am on student council or student government.*	na	No	HS	Krasny et al., 2015
Civic participation	8	*How often do you help make your city or town a better place for people to live?*	Medium	Yes	UES, MS, HS[b]	Zaff et al., 2010
Civic participation	3	*Raised money for a charitable cause.*	High	Yes	MS, HS	Lee et al., 2012
Community service	1	*Asks students if they are currently performing, or have in the past performed, service to people or other work "to make my community a better place."*	na	No	HS	McIntosh & Muñoz, 2009
Concern for others	5	*I try to help when I see people in need.*	Medium	No	UES	Chi et al., 2006
Environmental (personal) conservation	2	*I routinely reuse and recycle everything that I can.*	Medium	No	HS	McIntosh & Muñoz, 2009
Environmental stewardship	4	*I try to get my friends to recycle bottles and cans.*	Medium	No	UES	Chi et al., 2006
Expectations for engagement in community issues	3	*When you think about life after high school, how likely is it that you would do volunteer work to help needy people?*	High	No	MS, HS	Flanagan et al., 2007
Future service	1	*How likely is it that you will perform voluntary service after high school?*	na	No	HS	Metz et al., 2003
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Medium	Yes	UES	Syversten et al., 2015
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Medium	Yes	MS	Syversten et al., 2015
Informal helping	6	*I help my friends and neighbors without being paid.*	Low	Yes	MS, HS	Wray-Lake & Sloper, 2016
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Medium	Yes	HS	Syversten et al., 2015
Voluntary activity	2	*I have volunteered in my community (e.g., by tutoring, mentoring, doing environmental work, working with the elderly).*	Medium	No	HS	Kahne et al., 2013
Volunteering	2	*Participate in unpaid volunteer work or community service.*	na	No	MS, HS	Wray-Lake & Sloper, 2016

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	na	No	UES	Syversten et al., 2015
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	na	No	MS	Syversten et al., 2015
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	na	No	HS	Syversten et al., 2015

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

a. The "caring for community" survey scale appears in both the civic attitude and civic behavior categories because it comprises an equal number of survey items measuring behavior and attitude.

b. The Zaff et al. (2010) sample included students in grades 8–10. However, the sample was drawn from a larger study that included students in grades 5–12.

Source: Authors' analysis of instrument summary data.

Civic/political knowledge

The resource development team classified four survey scales into the civic/political knowledge category. The scales measure a student's content knowledge about the policies, processes, and historical events of the nation. Because the survey scales all measure topics related to content knowledge, they are not further divided into subcategories.

Table 9. Survey scales that measure civic/political knowledge

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Civic knowledge	5	*July 4 is a national holiday that celebrates the day when…*	na	No	UES	Chi et al., 2006
Civic knowledge	6	*To override a presidential veto, how much of a majority is required in the US Senate and House of Representatives?*	na	No	MS, HS	Flanagan et al., 2007
Civic knowledge	38	*What is the major purpose of the United Nations?*	na	No	MS, HS	Schulz & Sibberns, 2004
Political knowledge	8	*Which of the following documents describes the powers of the president of the United States?*	na	No	HS	Gainous & Martens, 2011

na indicates that reliability was not reported for the survey scale.

Source: Authors' analysis of instrument summary data.

Civic-related skills and character traits

The resource development team classified 44 survey scales into the civic-related skills and character traits category. The scales measure a student's skills, personality disposition, and competencies related to civic readiness. Because the survey scales are similar to one another—specifically in their straightforward names—and focus on skills and character traits, they are not further divided into subcategories.

Table 10. Survey scales that measure civic-related skills and character traits

Survey scale name	Number of survey items	Example survey items	Reliability	Validity	Education stage	Document citation
Civic participation skills	10	*I try to think before I say something.*	Medium	No	UES	Chi et al., 2006
Civic skills	6	*To what extent can you write an opinion letter to a local newspaper?*	High	Yes	UES, MS, HS[a]	Zaff et al., 2010
Competence for civic action	9	*How well do you think you would be able to do each of the following? Create a plan to address the problem.*	High	Yes	MS, HS	Flanagan et al., 2007
Conflict resolution skills	3	*I'm good at finding fair solutions to problems.*	Medium	No	HS	McIntosh & Muñoz, 2009
Critical consumer of political information	3	*When I hear news about politics, I try to figure out what is REALLY going on.*	High	No	MS, HS	Flanagan et al., 2007
Critical information analysis	3	*When I see or read a news story about an issue, I try to figure out if they're just telling one side of the story.*	Medium	No	MS	Syversten et al., 2015
Critical information analysis	3	*When I see or read a news story about an issue, I try to figure out if they're just telling one side of the story.*	High	No	HS	Syversten et al., 2015
Future-mindedness	3	*I am hopeful about my future.*	Medium	No	UES	Syversten et al., 2015
Future-mindedness	3	*I am hopeful about my future.*	Medium	No	MS	Syversten et al., 2015
Future-mindedness	3	*I am hopeful about my future.*	Medium	No	HS	Syversten et al., 2015
Gratitude	3	*I feel thankful for everyday things.*	Medium	No	UES	Syversten et al., 2015
Gratitude	3	*I feel thankful for everyday things.*	Medium	No	MS	Syversten et al., 2015
Gratitude	3	*I feel thankful for everyday things.*	Medium	No	HS	Syversten et al., 2015
Humility	2	*I try not to draw attention to myself when I do something well.*	na	No	MS	Syversten et al., 2015
Humility	2	*I try not to draw attention to myself when I do something well.*	na	No	HS	Syversten et al., 2015
Leadership	3	*I am good at leading others to reach a goal.*	Medium	No	UES	Syversten et al., 2015
Leadership	3	*I am good at leading others to reach a goal.*	High	No	MS	Syversten et al., 2015
Leadership	3	*I am good at leading others to reach a goal.*	Medium	No	HS	Syversten et al., 2015
Leadership efficacy	6	*I am pretty good at organizing a team of kids to do a project.*	Low	No	UES	Chi et al., 2006
Participation skills	6	*Rate how well you can do each skill: Create a plan to address a problem.*	Medium	Yes	UES	Syversten et al., 2015
Participation skills	6	*Rate how well you can do each skill: Create a plan to address a problem.*	High	Yes	MS	Syversten et al., 2015

Survey scale name	Number of survey items	Example survey items	Reliability	Validity	Education stage	Document citation
Participation skills	6	*Rate how well you can do each skill: Create a plan to address a problem.*	High	Yes	HS	Syversten et al., 2015
Perseverance	3	*I am a hard worker.*	Medium	No	UES	Syversten et al., 2015
Perseverance	3	*I am a hard worker.*	Low	No	MS	Syversten et al., 2015
Perseverance	3	*I am a hard worker.*	Low	No	HS	Syversten et al., 2015
Personal responsibility	7	*I always try to do my best work.*	Low	No	UES	Chi et al., 2006
Personal responsibility	3	*When I say I'm going to do something, I do it.*	Low	No	UES	Syversten et al., 2015
Personal responsibility	3	*When I say I'm going to do something, I do it.*	Medium	No	MS	Syversten et al., 2015
Personal responsibility	3	*When I say I'm going to do something, I do it.*	Medium	No	HS	Syversten et al., 2015
Positive character	3	*I always try to tell the truth.*	Medium	No	HS	McIntosh & Muñoz, 2019
Religion	2	*It is important to me to be active in my religion.*	na	No	MS, HS	Flanagan et al., 2007
Respect	3	*I treat others with respect.*	Medium	No	UES	Syversten et al., 2015
Respect	3	*I treat others with respect.*	High	No	MS	Syversten et al., 2015
Respect	3	*I treat others with respect.*	High	No	HS	Syversten et al., 2015
Self-interest values	4	*It is important to me to have many expensive possessions.*	Low	Yes	HS	Syversten et al., 2015
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	na	No	UES	Syversten et al., 2015
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	na	No	MS	Syversten et al., 2015
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	na	No	HS	Syversten et al., 2015
Teamwork	3	*When I work with others, I think about what is best for my team.*	Medium	No	UES	Syversten et al., 2015
Teamwork	3	*When I work with others, I think about what is best for my team.*	Medium	No	MS	Syversten et al., 2015
Teamwork	3	*When I work with others, I think about what is best for my team.*	Medium	No	HS	Syversten et al., 2015
Thrift	3	*Reusing an item you already have is better than buying something new.*	Low	No	UES	Syversten et al., 2015
Thrift	3	*Reusing an item you already have is better than buying something new.*	Low	No	MS	Syversten et al., 2015
Thrift	3	*Reusing an item you already have is better than buying something new.*	Medium	No	HS	Syversten et al., 2015

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

a. The Zaff et al. (2010) sample included students in grades 8–10. However, the sample was drawn from a larger study that included students in grades 5–12.

Source: Authors' analysis of instrument summary data.

Political attitude

The resource development team classified 30 survey scales into the political attitude category. The scales measure a student's sense of responsibility to engage in the political process; opinions on what constitutes a good citizen; attitudes toward media; and disposition toward or opinions about the government and its institutions, policies, processes, and leadership. The political attitude category is divided into five subcategories: attitudes toward citizenship, attitudes toward the media, attitudes toward the nation and its leadership, political efficacy, and other.

Attitudes toward citizenship

The attitudes toward citizenship subcategory includes five survey scales. These scales measure a student's opinion about what it means to be a citizen.

Table 11. Survey scales that measure the attitudes toward citizenship subcategory of political attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Attitudes toward citizenship	4	*Being a good citizen requires that you volunteer in your community.*	High	Yes	MS, HS	Wicks et al., 2014
Importance of conventional citizenship	6	*An adult who is a good citizen votes in every election.*	Medium	No	MS, HS	Schulz & Sibberns, 2004
Importance of social-movement citizenship	4	*An adult who is a good citizen takes part in activities promoting human rights.*	Medium	Yes	MS, HS	Schulz & Sibberns, 2004
Justice-oriented citizen	4	*After high school, I will work with others to change unjust laws.*	High	Yes	MS, HS	Flanagan et al., 2007
Participating in politics	1	*It is important to me to be active in politics.*	na	No	MS, HS	Flanagan et al., 2007

na indicates that reliability was not reported for the survey scale.

Source: Authors' analysis of instrument summary data.

Attitudes toward the media

The attitudes toward the media subcategory includes three survey scales. These scales measure a student's opinion about news media outlets or sources.

Table 12. Survey scales that measure the attitudes toward the media subcategory of political attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Trustworthiness of media	6	*How trustworthy is the local television in helping you learn about news, current events, and political candidates?*	High	No	MS, HS	Flanagan et al., 2007
Usefulness of mainstream media outlets	4	*How useful is the local television in helping you learn about news, current events, and political candidates?*	Medium	Yes	MS, HS	Flanagan et al., 2007
Usefulness of popular media outlets	4	*How useful is the radio in helping you learn about news, current events, and political candidates?*	Medium	Yes	MS, HS	Flanagan et al., 2007

Source: Authors' analysis of instrument summary data.

Attitudes toward the nation and its leadership

The attitudes toward the nation and its leadership subcategory includes 12 survey scales. These scales measure a student's opinion about the nation, its institutions, and its leadership.

Table 13. Survey scales that measure the attitudes toward the nation and its leadership subcategory of political attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Concept of economy-related government responsibilities	5	*What responsibilities should the government have? (e.g., to guarantee a job for everyone who wants one)*	Low	Yes	MS, HS	Schulz & Sibberns, 2004
Concept of society-related government responsibilities	7	*What responsibilities should the government have? (e.g., to control pollution of the environment)*	Medium	Yes	MS, HS	Schulz & Sibberns, 2004
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	Low	No	UES	Syvertsen et al., 2015
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	Medium	No	MS	Syvertsen et al., 2015
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	High	No	HS	Syvertsen et al., 2015
External efficacy	6	*People in the government care a lot about what all of us think about new laws.*	Low	No	HS	Gainous & Martens, 2011
Government responsiveness to "the people"	3	*The government doesn't care about us ordinary people.*	Medium	No	MS, HS	Flanagan et al., 2007
Positive attitudes toward one's nation	4	*I have great love for the United States.*	Low	Yes	MS, HS	Schulz & Sibberns, 2004
Trust in the American promise	3	*Basically, people get fair treatment in America, no matter who they are.*	High	No	MS, HS	Flanagan et al., 2007
Trust in government-related institutions	5	*How much of the time can you trust each of the following institutions? (e.g., courts)*	High	Yes	MS, HS	Schulz & Sibberns, 2004
Trustworthiness of elected officials	5	*In general, elected officials cannot be trusted.*	Medium	Yes	MS, HS	Flanagan et al., 2007
Unconditional support for government policies	3	*Newspapers should not criticize the government.*	Medium	No	MS, HS	Flanagan et al., 2007

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Political efficacy

The political efficacy subcategory includes two survey scales. These scales measure a student's belief in his or her competence and ability to participate in politics.

Table 14. Survey scales that measure the political efficacy subcategory of political attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Internal efficacy	3	*I know more about politics than most people my age.*	Low	No	HS	Gainous & Martens, 2011
Political efficacy	3	*I consider myself well-qualified to participate in politics.*	High	No	HS	Vercellotti & Matto, 2010

Source: Authors' analysis of instrument summary data.

Other

The eight survey scales identified as "other" measure topics across multiple subcategories in the political attitude category or topics that do not fit into any of those subcategories.

Table 15. Survey scales that measure other subcategories of political attitude

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Concern about the future	5	*When I think about the future, I worry that there will not be enough jobs to go around.*	High	Yes	MS, HS	Flanagan et al., 2007
Improving race relations	2	*How important is it to work to stop prejudice?*	na	No	MS, HS	Flanagan et al., 2007
Interest in politics	1	*I am interested in political issues.*	na	No	HS	Kahne et al., 2013
Personal political aspirations	1	*I am interested in a career in politics and government.*	na	No	MS, HS	Flanagan et al., 2007
Political and volunteer motivation	12	*Think about the political/volunteer activities you have been involved in since you have been in high school. Please rank THE 3 MOST IMPORTANT REASONS.*	na	No	HS	Malin et al., 2017
Political interest	1	*I enjoy talking about politics and political issues.*	na	No	MS, HS	Flanagan et al., 2007
Positive attitudes toward immigrants	5	*Immigrants should have all the same rights that everyone else in a country has.*	High	Yes	MS, HS	Schulz & Sibberns, 2004
Positive attitudes toward women's political and economic rights	6	*Women should have the same rights as men in every way.*	High	Yes	MS, HS	Schulz & Sibberns, 2004

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Political behavior

The resource development team classified 46 survey scales into the political behavior category. The scales measure the politically focused actions a student has taken, intends to take, or has expressed interest in taking. The political behavior category is divided into five subcategories: information gathering, political activities and contributions, political discourse, voting, and other.

Information gathering

The information gathering subcategory includes nine survey scales. These scales measure a student's means or methods of gathering information about politics and current events.

Table 16. Survey scales that measure the information gathering subcategory of political behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Conventional online news	3	*Use of the following as information sources: National newspaper websites (nytimes.com, usatoday.com).*	Low	Yes	MS, HS	Lee et al., 2012
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	na	No	UES	Syversten et al., 2015
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	na	No	MS	Syversten et al., 2015
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	na	No	HS	Syversten et al., 2015
Newspaper	1	*How many days you use media in that way in a typical week?*	na	Yes	MS, HS	Lee et al., 2012
Nonconventional online political information	3	*Use of the following as information sources: Conservative political blogs, liberal political blogs, political candidate websites.*	Medium	Yes	MS, HS	Lee et al., 2012
Overall media consumption	5	*How often do you watch the local news on TV for information on politics and current events?*	High	Yes	MS, HS	Flanagan et al., 2007
Sources of information for students	9	*Out of the last seven days, how many days have you _____ for information about government or politics? (e.g., read a local newspaper)*	High	No	HS	Vercellotti & Matto, 2010
TV news	2	*How many days you watch that kind of programming in a typical week?*	Medium	Yes	MS, HS	Lee et al., 2012

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Political activties and contributions

The political activities and contributions subcategory includes 12 survey scales. These scales measure a student's attendance at or planned participation in political events such as protests, campaign fundraisers, and expressive events (for example, a poetry slam) and contributions to a political party or membership in an advocacy group or organization (for example, Greenpeace).

Table 17. Survey scales that measure the political activities and contributions subcategory of political behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Alternative ways of expressing political voice	4	*Would you consider trying to talk to people and explain why they should vote for or against one of the parties or candidates during an election?*	na	No	MS, HS	Flanagan et al., 2007
Conventional political behaviors	8	*Participate in a rally or protest for a cause.*	High	Yes	MS, HS	Wray-Lake & Sloper, 2016
Endorsement of special interest groups	7	*Would you consider joining an environmental group (e.g., Greenpeace, Sierra Club)?*	na	No	MS, HS	Flanagan et al., 2007
Expectations for unconventional political engagement	3	*How likely is it that you would participate in a boycott against a company?*	Medium	No	MS, HS	Flanagan et al., 2007
Expected political participation	3	*When you are an adult, what do you expect that you will do? Join a political party.*	Medium	Yes	MS, HS	Schulz & Sibberns, 2004
Expressive and youth-center action	3	*I have participated in a poetry slam, youth forum, musical performance, or other event where young people express their political views.*	Medium	No	HS	Kahne et al., 2013
Future unconventional civic involvement	3	*How likely is it that you will demonstrate for a cause in the future?*	Medium	No	HS	Metz et al., 2003
Political engagement	4	*Participated in a political protest activity.*	High	Yes	MS, HS	Wicks et al., 2014
Political engagement	4	*Have you ever done the following: Volunteer to campaign for a political candidate?*	High	Yes	MS	Syversten et al., 2015
Political engagement	4	*Have you ever done the following: Volunteer to campaign for a political candidate?*	High	Yes	HS	Syversten et al., 2015
Political participation	4	*Contributed money to a political campaign?*	High	Yes	MS, HS	Lee et al., 2012
Take action/ boycott or buycott	2	*Boycotted products or companies that offend my values.*	Medium	Yes	MS, HS	Wicks et al., 2014

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Political discourse

The political discourse subcategory includes 11 survey scales. These scales measure a student's communication and discussion of politics and news with family, friends, or classmates.

Table 18. Survey scales that measure the political discourse subcategory of political behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Communication with classmates about politics	3	*I talk to my classmates about politics.*	High	No	MS, HS	Flanagan et al., 2007
Communication with friends about politics	3	*I talk to my friends about politics.*	High	No	MS, HS	Flanagan et al., 2007
Communication with parents about politics	3	*I talk to my parents/guardians about politics.*	High	No	MS, HS	Flanagan et al., 2007
Discuss news and politics	8	*Talked to my parents about the news?*	High	Yes	MS, HS	Wicks et al., 2014
Face-to-face discussion	1	*Talked about news and current events with friends*	na	Yes	MS, HS	Lee et al., 2012
Political discussion	3	*I often talk about politics or national issues with my friends.*	Medium	No	HS	McIntosh & Muñoz, 2009
Sociopolitical discussion (friends)	3	*My friends and I talk about politics and current events.*	High	No	MS	Syversten et al., 2015
Sociopolitical discussion (friends)	3	*My friends and I talk about politics and current events.*	Medium	No	HS	Syversten et al., 2015
Sociopolitical discussion (parents)	3	*In my family, we talk about politics and current events.*	Low	No	UES	Syversten et al., 2015
Sociopolitical discussion (parents)	3	*In my family, we talk about politics and current events.*	High	No	MS	Syversten et al., 2015
Sociopolitical discussion (parents)	3	*In my family, we talk about politics and current events.*	High	No	HS	Syversten et al., 2015

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Voting

The voting subcategory includes seven survey scales. These scales measure a student's intention to vote.

Table 19. Survey scales that measure the voting subcategory of political behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Future voting	1	*What is the likelihood you will vote when you reach 18?*	na	No	HS	Metz et al., 2003
Intention to vote	1	*Once I am 18, I expect I will vote regularly.*	na	No	HS	Kahne et al., 2013
Intention to vote	1	*When I am 18, I am planning to vote in a public election.*	na	No	HS	McIntosh & Muñoz, 2009
Intent to vote	1	*When you are an adult, what do you expect that you will do? Vote in national elections.*	na	No	HS	Gainous & Martens, 2011
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	na	No	UES	Syversten et al., 2015
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	na	No	MS	Syversten et al., 2015
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	na	No	HS	Syversten et al., 2015

na indicates that reliability was not reported for the survey scale.

Note: Survey scales were not collapsed when the authors identified different surveys for specific education stages.

Source: Authors' analysis of instrument summary data.

Other

The seven scales identified as "other" measure topics across multiple subcategories in the political behavior category or topics that do not fit into any of those subcategories.

Table 20. Survey scales that measure other subcategories of political behavior

Survey scale name	Number of survey items	Example survey item	Reliability	Validity	Education stage	Document citation
Expectations for engagement in electoral politics	3	*How likely is it that you would vote on a regular basis?*	Medium	No	MS, HS	Flanagan et al., 2007
Expressive activities	4	*How often have you have participated in each of the following activities since the time you started high school? Contacted a political representative.*	Medium	Yes	HS	Malin et al., 2017
Future civic engagement	4	*When you think about life after high school, do you think you will vote in every election?*	Low	Yes	MS, HS	Littenberg-Tobias & Cohen, 2016
Online political behavior	8	*Get political information from a social networking website.*	High	Yes	MS, HS	Wray-Lake & Sloper, 2016
Online political messaging	5	*Use of online political messaging for the following: Exchanged political emails with friends and family.*	High	Yes	MS, HS	Lee et al., 2012
Political voice	3	*How likely is it that you would contact or visit someone in government who represents your community?*	Medium	Yes	MS, HS	Flanagan et al., 2007
Willingness to contact official	1	*I would contact a public official about an issue of concern.*	na	No	HS	McIntosh & Muñoz, 2009

na indicates that reliability was not reported for the survey scale.

Source: Authors' analysis of instrument summary data.

Appendix A. Methodology

This appendix describes the methods that the resource development team used to identify and summarize civic readiness survey instruments.

Keyword search and instrument summary

The resource development team conducted a comprehensive search to identify relevant documents. The search and screening process proceeded in four phases:

1. Keyword search and preliminary screening.

2. Full-text screening.

3. Document summary.

4. Instrument summary.

Phase 1: Keyword search and preliminary screening

The first step in identifying civic readiness–related documents was a keyword search of research databases, state education agency websites, and publications of the Institute of Education Sciences. The resource development team generated three groups of keywords in consultation with members of the Regional Educational Laboratory Central's Technical Working Group and College and Career Readiness Research Alliance. Nine keywords were related to civics/citizenship, 12 to readiness/engagement, and nine to instruments/assessments (table A1).

Table A1. Final keywords, by group

Civics/citizenship	Readiness/engagement	Instruments/assessments
Action civics	Attitude	Assessment
American government	Character	Exam
Citizenship	Competence	Instrument
Civic	Competency	Matrices
Leadership	Disposition	Matrix
Political science	Education	Measure
Service learning	Engagement	Survey
Social studies	Knowledge	Test
U.S. history	Literacy	Tool
	Preparation	
	Preparedness	
	Readiness	

Source: Authors' compilation.

Next, the resource development team reviewed a common set of documents to calibrate screening decisions. Some of the documents included language about civic readiness but were studies conducted outside the United States. Others included language about the importance of civic readiness but did not provide any information about instruments.

After calibrating screening decisions, the resource development team used the keywords in table A1 to search ERIC, PsycINFO, and Academic Search Premier databases and the websites of all 50 state education agencies. The team used all combinations of the keywords in the civics/citizenship, readiness/engagement, and instruments/assessments groups in the search, which was conducted between October and December 2019. If the title or abstract did not clearly show that a document met all the preliminary screening criteria (table A2), the team retained the document for closer review in phase 2. The initial keyword search identified 1,066 potentially relevant documents.

Table A2. Preliminary screening criteria for documents

Criterion	Definition
Domain relevance	The document addresses a domain of civic readiness, defined as possessing the knowledge, skills, and dispositions necessary to be an informed and active member of one's community after high school graduation (Brennan & Railey, 2017). The domains of civic readiness that a document might address include but are not limited to the following: • Civic education. • Civic engagement. • Civic knowledge. • Civic literacy. • Civic preparedness. • Civic readiness.
Timeframe relevance	The document was published in 1999 or later.
Sample relevance	The document describes a survey instrument that used a sample with students from the United States, or it describes a survey instrument that was intended for use with students in the United States.
Accessibility	The document is publicly accessible. This includes freely available documents as well as documents that require access to a subscription database (a collection of digital research literature).
Language	The document is in English.

Phase 2: Full-text screening

For phase 2 the resource development team reviewed the full text of each document to verify that it met the preliminary screening criteria (see table A2). Documents were retained if they met all the criteria and provided information about a survey instrument available to measure civic readiness.

As in phase 1, the resource development team first reviewed a common set of documents to calibrate screening decisions. During the full-text screening phase the team met regularly to discuss documents for which screening decisions were not straightforward and to determine whether to include them. If team members differed on screening decisions, they discussed the rationale for their decisions until they reached consensus.

During this phase the resource development team recorded the names of survey instruments and civic-oriented organizations identified in the documents. The team then conducted secondary searches using the instrument names. The team also searched websites of identified organizations to locate additional resources. These organizations included the Center for Civic Education, the Education Commission of the States, and the Center for Information and Research on Civic Learning and Engagement. After the second round of screening, 174 documents were retained.

Phase 3: Document summary

For phase 3 the resource development team again reviewed the full text of the documents retained from phase 2 and summarized the information for each document. Information collected included the following:

- Resource type (for example, a research article or document from a state education agency website).
- Citation or link for the document.
- Instrument name (when relevant).
- Definition of civic readiness and categories measured by instrument.
- Source of the instrument if it was cited or adapted.
- Format and structure of the instrument.
- Sample survey items.
- Student sample.
- Reliability and validity information.

Some documents contained information for multiple survey instruments or scales, some instruments or scales were discussed in multiple documents, and many documents did not include all the information relevant to this resource. Because of this the resource development team summarized all documents separately. In phase 4 the team organized the information by instrument.

Phase 4: Instrument summary

The resource development team cross-referenced information from all the document summaries to create summaries for the identified civic readiness survey instruments. The team summarized an instrument only if, across all documents relevant to that instrument, the full list of survey items was available and psychometric data (reliability or validity information) were provided. However, some survey scales were included in this resource despite

not having reliability information. To limit the scope of the resource, the team summarized only instruments that used a K–12 student sample and could be widely administered (for example, self-report surveys). Survey instruments intended for postsecondary students and adults were omitted.

If a document cited another source as the origin of the survey instrument or if a document adapted survey items from another source, the resource development team obtained those sources and included information from them in the instrument summary. If two documents had different versions of a survey instrument for students at different education stages, the team developed separate summaries for each version. This process resulted in summaries for 22 civic readiness survey instruments, with information gathered from 33 documents (see appendix B for the complete summaries).

The survey instrument summaries are organized by authors' names and publication dates of the original sources. Each summary includes the full citation for the original source, other citations relevant to the instrument, and a description of the intended student sample. It also includes the survey scale or scales, the number of survey items, a sample survey item, and the response scale for each survey scale in the instrument. Survey scales from some survey instruments were omitted from this resource if they did not measure an aspect of civic readiness or if the items were specific to a particular region or time period (for example, they referred to activities or people associated with a specific presidential election).

The survey instrument summaries provide available reliability and validity data for each survey scale. A survey scale was excluded if it had a reported reliability value (Cronbach's alpha [α]) of less than .60. This is below the common threshold of .70 for acceptable reliability (Nunnally, 1978). While reliability of .60–.70 is considered undesirable, reliability below .60 is considered unacceptable (Pedhazur & Pedhazur Schmelkin, 1991). Using the lower threshold of .60 allowed the resource development team to retain 24 survey scales. In the tables in this resource, evidence of reliability has been categorized as "na" (not applicable), low (.60–.69), medium (.70–.79), or high (.80 and higher).

The resource development team retained some survey scales that did not have reliability information. This was the case for survey scales in the civic/political knowledge category because reliability is not relevant when scales are designed to assess content knowledge of multiple topics. The team also retained survey scales that consisted of only one or two items and for which reliability evidence was not provided. Although a survey scale is traditionally defined as having more than two items, the team used the term to refer to survey constructs addressed by only one or two items to simplify the discussion. The team also retained survey scales that used a ranking response option or summed responses to dichotomous items (such as yes/no), despite those scales not having available reliability evidence.

Validity information was available only for a subset of the survey scales examined. This resource focuses specifically on validity evidence provided through confirmatory factor analyses (CFAs) and exploratory factor analyses (EFAs, including principal component analyses). Where available, results of EFAs are described, and fit indices from CFAs are provided

(see box A1 for conventional criteria for CFA). The resource development team considered a survey scale to have supporting CFA validity evidence if all available fit indices met these criteria and to have moderate supporting CFA validity evidence if at least one fit index met the criteria. Additionally, the team determined that a survey scale had supporting data if CFA results supported a one-factor solution. When a CFA was conducted using data from multiple scales, and the data were shown to be an adequate fit to the factor structure, each relevant survey scale was coded as having supporting validity information. Results of chi-square goodness of fit tests are also reported for CFAs, where a $p > .05$ suggests that the data fit the structure of the survey scale. However, because the results of chi-square tests are sensitive to sample sizes, other fit indices should be reviewed.

Box A1. Fit indices for confirmatory factor analysis

AGFI: Adjusted goodness of fit index (> .95)

CFI: Comparative fit index (> .95)

GFI: Goodness of fit index (> .95)

NNFI: Non-normed fit index (> .95)

RMSEA: Root mean square error of approximation (< .07)

SRMR: Standardized root mean square residual (< .08)

TLI: Tucker-Lewis index (> .95)

Note: Numbers in parentheses indicate cutscores for acceptable data-model fit.
Source: Hooper et al. (2008).

For EFAs, conventional criteria to support the factor structure are for each item in a given survey scale to have a factor loading of .50 or greater on a single factor, with no factor greater than .50 on other factors (Pedhazur & Pedhazur Schmelkin, 1991). The resource development team considered a survey scale to have supporting EFA evidence if all items met these criteria. The team considered a survey scale to have moderate EFA evidence if a majority of items had a factor loading of .50 or greater on a single factor. As with a CFA, when factor loadings from an EFA conducted with data from multiple survey scales suggested that the survey scales addressed independent constructs, each survey scale was coded as having supporting validity information. Finally, when a survey scale author reported that the results of an EFA supported the survey scale structure but did not report the factor loadings, the team considered the survey scales to have supporting evidence and noted the evidence as being author-reported in the survey scale summary in appendix B.

Civic readiness categories

To aid the review of the 183 survey scales, the resource development team organized the scales into the civic readiness categories and qualitatively coded the content of each scale. During the first cycle of coding, the team reviewed the title of each scale to identify themes across the scales. This process resulted in identifying four categories: attitude, behavior, knowledge, and skills.

During the first cycle the resource development team noted that although titles of scales were similar across some instruments, the content of items within those scales frequently differed. The team, therefore, conducted a second cycle of coding, examining the wording of items in each scale and the definition of the construct provided by the instrument authors. This process resulted in separating the initial attitude and behavior categories into civic attitude, civic behavior, political attitude, and political behavior.

The team acknowledges the subjectivity of this process and that users of this resource might not agree with all the decisions. The process, however, was intended to organize the large number of survey scales into categories that could help users identify survey scales that are relevant to their purposes. When a survey scale contained a mixture of items, the team placed the scale into a category that matched the majority of items in the scale. For example, if a survey scale contained seven items, and four of them measured political attitude and three measured political behavior, the team placed the scale in the political attitude category. The team used the same process when survey items were split between civic and political attitude or behavior. If items were split evenly between two categories, they were included in both. For example, when a scale included two items measuring civic attitude and two items measuring civic behavior, the items were included in both categories.

Civic readiness subcategories

To identify and define subcategories in each civic readiness category, the resource development team qualitatively coded the content of each survey scale. During this cycle the team further examined the wording of each item in a scale and the definition of the construct provided by the instrument authors to divide the category into subcategories. However, some survey scales in a category were not divided into subcategories because of the nature of those scales. For example, the civic behavior category includes survey scales that measure formal and informal community-focused volunteer activities, and the civic/political knowledge category includes survey scales that measure content knowledge in a variety of topics. Dividing these survey scales further would not benefit users because it would result in too many subcategories containing too few survey scales. In the case of the civic/political knowledge category, further division would create more confusion than clarity.

When survey scales measured multiple areas across subcategories and when survey scales measured topics that did not fit within any of the subcategories, the resource development team designated the scales as “other.” Doing so avoided creating subcategories that contained only one survey scale, which would not benefit users.

Appendix B. Summaries of civic readiness survey instruments

This appendix summarizes the 22 civic readiness survey instruments and scales included in this resource. The summaries are organized by author names and publication dates (see the references section for complete citations). Each summary consists of four sections:

- Survey scales.
- Student sample.
- Reliability and validity.
- Documentation.

The summaries in this appendix provide additional details about the reliability and validity of survey scales and sample demographics from supporting documentation that are not found in the Excel spreadsheet. The resource development team recommends that the appendix be used in addition to the Excel spreadsheet. Box B1 provides a key to the contents of the instrument summaries.

Box B1. A key to the contents of the instrument summaries

Survey scales. This section describes the survey scales for each instrument. The scales are listed alphabetically, and the table includes the following information:

- **Survey scale name:** The name of the survey scale of interest.
- **Number of survey items:** The number of survey items (the number of questions or prompts) associated with each survey scale.
- **Example survey item:** To help explain each survey scale, a sample item is included for the scale. Sample survey items are helpful because survey scale names can sometimes be vague or complicated or can be used differently across authors.
- **Response scale:** The response options available to survey respondents for each survey item. The four response options identified in this resource include dichotomous scale, Likert scale, multiple choice, and ranking (see box 2 in the main text for definitions of key term).
- **Category:** Identifies the survey scale's civic readiness category.
- **Page number:** Identifies where the survey scale and survey items can be found in the cited source.

Student sample. This section indicates the education stage (upper elementary school, middle school, or high school) of the sample of students to which the survey instrument was administered or was intended to be administered. It also includes the characteristics (for example, gender, race/ethnicity) of the sample to whom the survey instrument was administered in each cited study. The naming conventions for student demographics are those used in the cited sources. Because this resource is not a systematic review of all documents or studies related to each survey instrument, it does not provide complete information about

all samples to which each instrument has been administered. Therefore, exercise caution when choosing which scales to use based on reported sample alone.

Reliability and validity. This section contains two subsections:

- **Reliability evidence:** The available reliability evidence for each survey scale. In some cases reliability evidence was provided by multiple sources. If no reliability evidence was available, "na" (not applicable) is indicated for the scale.
- **Validity evidence:** The available validity evidence for each survey scale. In some cases validity evidence was provided by multiple sources. Validity evidence might only have been available for a portion of the scales in an instrument.

Documentation. This section includes citations for the author or authors of a survey instrument as well as supporting documents. Unless otherwise noted, the citation refers to the source that contains all survey instrument items. Supporting documents refer to supplemental sources in which the survey instrument was used and analyzed. Not all instruments include supporting documents. (See the References section for complete citations of all documents.)

Ballard et al. (2015)

This source includes the five survey scales listed below (table B1). The source is available at https://doi.org/10.1177/0044118X14538464 or through the citation in the References section.

Survey scales

Table B1 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B1. Survey scales and related information for Ballard et al. (2015)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Aspirations for community contributions[a]	7	*How important is it to you to donate time or money to charity?*	Not at all important–very important	Civic attitude	77
Civic efficacy	3	*I can change my world for the better by getting involved in my community.*	Strongly disagree–strongly agree	Civic attitude	78
Diversity appreciation	5	*I enjoy being around people from different backgrounds than my own.*	Strongly disagree–strongly agree	Civic attitude	77
Personal commitment to community	6	*How important to you is participating in community events?*	Not very important–very important	Civic attitude	78
Personal commitment to humanity	6	*How important to you is equality for all?*	Not very important–very important	Civic attitude	78

a. All scale items can be found in the "community feeling" subscale in Kasser and Ryan (1993).

Source: Ballard et al. (2015) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Ballard et al. (2015):
  - **Education stage:** High school.
  - **Gender:** 47 percent female.
  - **Race/ethnicity:** 88 percent White.
  - **Family education:** 88 percent of both mothers and fathers had a college degree; over 60 percent of fathers had a graduate or professional degree; over 40 percent of mothers had a graduate or professional degree.
  - **Socioeconomic status:** Not reported.

- Kasser and Ryan (1993):
  - **Education stage:** Students in an upper-level psychology course.
  - **Gender:** 66 percent female.
  - **Race/ethnicity:** 77 percent Caucasian, 7 percent African American; 6 percent Asian, 3 percent Hispanic, 2 percent other.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B2 includes evidence of reliability for all relevant survey scales. Table B3 includes evidence of validity for all relevant survey scales. Survey scale names in both tables are listed alphabetically.

Table B2. Reliability evidence for the survey scales in Ballard et al. (2015)

	Reliability (Cronbach's alpha)	
Survey scale name	School site 1	School site 2
Aspirations for community contributions	.86	.87
Civic efficacy	.87	.88
Diversity appreciation	.81	.66
Personal commitment to community	.87	.89
Personal commitment to humanity	.88	.88

Source: Ballard et al. (2015) and authors' analysis of instrument summary data.

Table B3. Validity evidence for the survey scales in Ballard et al. (2015)

Survey scale name	Results
Personal commitment to community	Authors report that principal component analysis supports a two-factor structure.
Personal commitment to humanity	Authors report that principal component analysis supports a two-factor structure.

Source: Ballard et al. (2015) and authors' analysis of instrument summary data.

Documentation

Authors: Ballard et al. (2015).

Adapted from: Survey items were adapted from an extensive list of instruments. See Ballard et al. (2015) for a detailed list.

Supporting document: Kasser and Ryan (1993).

Chi et al. (2006)

This source includes the eight survey scales listed below (table B4). The source is available at https://eric.ed.gov/?id=ED494039 or through the citation in the References section.

Survey scales

Table B4 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B4. Survey scales and related information for Chi et al. (2006)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Caring for community	4	*I have done things to help people in my community. / I believe that I can make a difference in my community.*	Disagree–agree	Civic attitude Civic behavior	15
Civic knowledge	5	*July 4 is a national holiday that celebrates the day when…*	Multiple choice	Civic/political knowledge	17
Civic participation skills	10	*I try to think before I say something.*	Disagree–agree	Civic-related skills and character traits	16
Concern for others	5	*I try to help when I see people in need.*	Disagree–agree	Civic behavior	15
Environmental stewardship	4	*I do my part to help the environment.*	Disagree–agree	Civic behavior	16
Leadership efficacy	6	*I am pretty good at organizing a team of kids to do a project.*	Disagree–agree	Civic-related skills and character traits	16
Personal responsibility	7	*I always try to do my best work.*	Disagree–agree	Civic-related skills and character traits	15
Value of group work	3	*I like working with other people on group projects.*	Disagree–agree	Civic attitude	15

Source: Chi et al. (2006) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Chi et al. (2006):
  - **Education stage:** Upper elementary school.
  - **Gender:** 58 percent female.
  - **Race/ethnicity:** 36 percent White, 22 percent multiracial/other, 20 percent Latino, 9 percent Asian/Pacific Islander, 8 percent African American, 4 percent American Indian, 16 percent did not respond.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

- White and Mistry (2016, 2019):
  - **Education stage:** Upper elementary school.
  - **Gender:** 56 percent female.
  - **Race/ethnicity:** 42 percent White, 27 percent Latino, 15 percent multiracial, 12 percent Asian, 4 percent other.
  - **Family education:** 38 percent high school diploma or less, 29 percent bachelor's degree, 24 percent associate's degree or vocational degree/certificate, 10 percent graduate degree.
  - **Socioeconomic status:** 39 percent high-income household, 33 percent middle-income household, 28 percent low-income household.

Reliability and validity information

Table B5 includes evidence of reliability, when available, for all relevant survey scales. Table B6 includes evidence of validity for all relevant survey scales. Survey scale names in both tables are listed alphabetically.

Table B5. Reliability evidence for the survey scales in Chi et al. (2006)

Survey scale name	Reliability (Cronbach's alpha)
Caring for community	.72
Civic knowledge	na
Civic participation skills	.78
Concern for others	.74
Environmental stewardship	.71
Leadership efficacy	.64
Personal responsibility	.68
Value of group work	.66

na indicates that evidence of reliability is not reported.

Note: Chi et al. (2006) includes additional scales that did not have adequate psychometric properties. The authors report that reliabilities remained consistent across student gender and age groups. They report variation in reliabilities across student racial/ethnic groups but state that findings should be considered exploratory due to the small subgroup sample sizes.

Source: Chi et al. (2006) and authors' analysis of instrument summary data.

Table B6. Validity evidence for the survey scales in Chi et al. (2006)

Survey scale name	Results
Chi et al. (2006)	
na	Correlations between the scales align with the conceptual framework of the instrument. Content validity was supported by expert review of the items.
White and Mistry (2016)	
na	Exploratory factor analysis moderately suggests caring for the community and environmental stewardship group as a single factor, with caring for others as its own factor.

na indicates validity was reported for the overall instrument rather than for individual survey scales.

Source: Chi et al. (2006), White and Mistry (2016), and authors' analysis of instrument summary data.

Documentation

Authors: Chi et al. (2006).

Supporting documents: White and Mistry (2016, 2019).

Flanagan et al. (2007)

This source includes the 37 survey scales listed below (table B7). The source is available at https://eric.ed.gov/?id=ED497602 or through the citation in the References section.

Survey scales

Table B7 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale was placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B7. Survey scales and related information for Flanagan et al. (2007)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Alternative ways of expressing political voice	4	*After high school, would you consider trying to talk to people and explain why they should vote for or against one of the parties or candidates during an election?*	Dichotomous *Yes/no*	Political behavior	12
Anger about social injustice	3	*It makes me angry when I think about the conditions some people have to live in.*	Strongly disagree–strongly agree	Civic attitude	17
Civic accountability	4	*Being concerned about state and local issues is an important responsibility for everybody.*	Strongly disagree–strongly agree	Civic attitude	8
Civic knowledge	6	*To override a presidential veto, how much of a majority is required in the US Senate and House of Representatives?*	Multiple choice	Civic/political knowledge	36
Communication with classmates about politics	3	*I talk to my classmates about politics.*	Strongly disagree–strongly agree	Political behavior	23
Communication with friends about politics	3	*I talk to my friends about politics.*	Strongly disagree–strongly agree	Political behavior	23
Communication with parents about politics	3	*I talk to my parents/guardians about politics.*	Strongly disagree–strongly agree	Political behavior	22
Competence for civic action	9	*How well do you think you would be able to do each of the following? Create a plan to address the problem.*	I definitely can't–I definitely can	Civic-related skills and character traits	5
Concern about the future	5	*When I think about the future, I worry that there will not be enough jobs to go around.*	Strongly disagree–strongly agree	Political attitude	27
Critical consumer of political information	3	*When I hear news about politics, I try to figure out what is REALLY going on.*	Not at all like me–a lot like me	Civic-related skills and character traits	6
Endorsement of special interest groups	7	*When you finish high school, would you consider joining an environmental group (e.g., Greenpeace, Sierra Club)?*	Dichotomous *Yes/no/don't know*	Political behavior	13

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Expectations for engagement in community issues	3	*When you think about life after high school, how likely is it that you would do volunteer work to help needy people?*	Not at all likely–extremely likely	Civic behavior	13
Expectations for engagement in electoral politics	3	*When you think about life after high school, how likely is it that you would vote on a regular basis?*	Not at all likely–extremely likely	Political behavior	11
Expectations for unconventional political engagement	3	*When you think about life after high school, how likely is it that you would participate in a boycott against a company?*	Not at all likely–extremely likely	Civic behavior	12
Government responsiveness to "the people"	3	*The government doesn't care about us ordinary people.*	Strongly disagree–strongly agree	Political attitude	8
Helping others	2	*It is important to me to help those who are less fortunate.*	Not at all important–very important	Civic attitude	24
Improving race relations	2	*It is important to me to stop prejudice.*	Not at all important–very important	Political attitude	24
Justice-oriented citizen	4	*After high school, I will work with others to change unjust laws.*	Strongly disagree–strongly agree	Political attitude	19
Overall media consumption	5	*In a typical week, how often do you watch the local news on TV for information on politics and current events?*	Hardly at all–most of the time	Political behavior	29
Participating in politics	1	*It is important to me to be active in politics.*	Not at all important–very important	Political attitude	25
Participatory citizen	6	*Being actively involved in community issues is my responsibility.*	Strongly disagree–strongly agree / Not at all likely–extremely likely	Civic attitude	20
Personally responsible citizen	6	*I think people should assist those in their lives who are in need of help.*	Strongly disagree–strongly agree	Civic attitude	18
Personal political aspirations	1	*I am interested in a career in politics and government.*	Strongly disagree–strongly agree	Political attitude	11
Political efficacy	2	*I believe I can make a difference in my community.*	Strongly disagree–strongly agree	Civic attitude	16
Political interest	1	*I enjoy talking about politics and political issues.*	Strongly disagree–strongly agree	Political attitude	11
Political voice	3	*When you think about your life after high school, how likely is it that you would: Contact or visit someone in government who represents your community?*	Not at all likely–extremely likely	Political behavior	6
Protecting the environment	3	*It is important to me to do something to stop pollution.*	Not at all important–very important	Civic attitude	25
Religion	2	*It is important to me to be active in my religion.*	Not at all important–very important	Civic-related skills and character traits	24
Secure employment	2	*It is important to me to get a job where I won't get laid off.*	Not at all important–very important	Civic attitude	26
Serving the country	1	*It is important to me to serve my country in the military.*	Not at all important–very important	Civic attitude	25
Social trust	2	*Most people can be trusted.*	Strongly disagree–strongly agree	Civic attitude	27

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Trust in the American promise	3	*Basically, people get fair treatment in America, no matter who they are.*	Strongly disagree–strongly agree	Political attitude	17
Trustworthiness of elected officials	5	*In general, elected officials cannot be trusted.*	Strongly disagree–strongly agree	Political attitude	7
Trustworthiness of media	6	*How trustworthy is the local television in helping you learn about news, current events, and political candidates?*	Not at all trustworthy–extremely trustworthy	Political attitude	31
Unconditional support for government policies	3	*Newspapers should not criticize the government.*	Strongly disagree–strongly agree	Political attitude	9
Usefulness of mainstream media outlets	4	*How useful is the local television in helping you learn about news, current events, and political candidates?*	Not at all useful–extremely useful	Political attitude	29
Usefulness of popular media outlets	4	*How useful is the radio in helping you learn about news, current events, and political candidates?*	Not at all useful–extremely useful	Political attitude	30

Source: Flanagan et al. (2007) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Flanagan et al. (2007):
  - **Education stage:** Middle school and high school.
  - **Gender:** 50 percent female.
  - **Race/ethnicity:** 85 percent White, 5 percent Black, 3 percent Native American, 3 percent Hispanic, 2 percent Asian, 2 percent other.
  - **Family education:** 50 percent of mothers/guardians had a two-year degree or higher.
  - **Socioeconomic status:** Not reported.

- White and Mistry (2016, 2019):
  - **Education stage:** Upper elementary school.
  - **Gender:** 56 percent female.
  - **Race/ethnicity:** 42 percent White, 27 percent Latino, 15 percent multiracial, 12 percent Asian, 4 percent other.
  - **Family education:** 38 percent high school diploma or less, 29 percent bachelor's degree, 24 percent associate's degree or vocational degree/certificate, 10 percent graduate degree.
  - **Socioeconomic status:** 39 percent high-income household, 33 percent middle-income household, 28 percent low-income household.

Reliability and validity information

Table B8 includes evidence of reliability, when available, for all relevant survey scales. Table B9 includes evidence of validity for all relevant survey scales. Survey scale names in both tables are listed alphabetically.

Table B8. Reliability evidence for the survey scales in Flanagan et al. (2007)

Survey scale name	Reliability (Cronbach's alpha)	
	Time 1	Time 2
Alternative ways of expressing political voice	na	na
Anger about social injustice	.87	.87
Civic accountability	.69	.73
Civic knowledge	na	na
Communication with classmates about politics	.87	.86
Communication with friends about politics	.88	.86
Communication with parents about politics	.87	.86
Competence for civic action	.90	.92
Concern about the future	.83	.87
Critical consumer of political information	.88	.82
Endorsement of special interest groups	na	na
Expectation for engagement in community issues	.80	.80
Expectations for engagement in electoral politics	.74	.72
Expectations for unconventional political engagement	.69	.73
Government responsiveness to "the people"	.74	.74
Helping others	.62[a]	.64[a]
Improving race relations	.60[a]	.64[a]
Justice-oriented citizen	.81	.84
Overall media consumption	.78	.81
Participating in politics	na	na
Participatory citizen	.82	.82
Personally responsible citizen	.89	.91
Personal political aspirations	na	na
Political efficacy	.67[a]	.72[a]
Political interest	na	na
Political voice	.75	.79
Protecting the environment	.75	.74
Religion	.84[a]	.80[a]
Secure employment	.52[a]	.51[a]
Serving the country	na	na
Social trust	.56[a]	.57[a]
Trust in the American promise	.84	.83
Trustworthiness of elected officials	.77	.76
Trustworthiness of media	.84	.87

Survey scale name	Reliability (Cronbach's alpha)	
	Time 1	Time 2
Unconditional support for government policies	.71	.68
Usefulness of mainstream media outlets	.77	.79
Usefulness of popular media outlets	.74	.77

na indicates evidence of reliability is not reported.

Note: Time 1 = presurvey data collected during the 2004 election campaign. Time 2 = postsurvey data collected after the 2004 election.

a. Numbers are bivariate correlations between the two items that compose the scale with $p \leq .001$.

Source: Flanagan et al. (2007) and authors' analysis of instrument summary data.

Table B9. Validity evidence for the survey scales in Flanagan et al. (2007)

Survey scale name	Results
Flanagan et al. (2007)	
Civic accountability	CFA moderately supports a one-factor solution. Time 1: X^2 (2) = 56.245, p = .000; CFI = .953; RMSEA = .118. Time 2: X^2 (2) = 82.952, p = .000; CFI = .938; RMSEA = .144.
Competency for civic action	CFA moderately supports a one-factor solution. Time 1: X^2 (27) = 412.063, p = .000; CFI = .951; RMSEA = .086. Time 2: X^2 (27) = 325.276, p = .000; CFI = .961; RMSEA = .075.
Justice-oriented citizen	CFA moderately supports one-factor solution. Time 1: X^2 (2) = 34.942, p = .000; CFI = .980; RMSEA = .092. Time 2: X^2 (2) = 48.244, p = .000; CFI = .970; RMSEA = .109.
Overall media consumption	CFA moderately supports one-factor solution. Time 1: X^2 (5) = 127.335, p = .000; CFI = .944; RMSEA = .112. Time 2: X^2 (5) = 76.812, p = .000; CFI = .965; RMSEA = .086.
Political voice and competency for civic action	Authors report that principal components analysis supports a two-factor solution.
Trustworthiness of elected officials	CFA moderately supports a one-factor solution. Time 1: X^2 (5) = 58.309, p = .000; CFI = .976; RMSEA = .074. Time 2: X^2 (5) = 88.847, p = .000; CFI = .953; RMSEA = .093.
Usefulness of mainstream media outlets	CFA moderately supports a one-factor solution. Time 1: X^2 (2) = 30.608, p = .000; CFI = .985; RMSEA = .086. Time 2: X^2 (2) = 23.521, p = .000; CFI =.987; RMSEA = .074.
Usefulness of popular media outlets	CFA moderately supports a one-factor solution: Time 1: X^2 (2) = 101.371, p = .000; CFI = .941; RMSEA = .160. Time 2: X^2 (2) = 56.343, p = .000; CFI = .963; RMSEA = .118.
White and Mistry (2016, 2019)	
Civic values	Exploratory factor analysis moderately supported a one-factor solution.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation.

Source: Flanagan et al. (2007), White and Mistry (2016, 2019), and authors' analysis of instrument summary data.

Documentation

Authors: Flanagan et al. (2007).

Supporting documents: White and Mistry (2016, 2019).

Furco et al. (1998a)—Civic responsibility survey (middle school)

This source includes the three survey scales listed below (table B10). The source is available at https://t7-live-cyfar2.nyc3.cdn.digitaloceanspaces.com/cyfar.org/files//Civic%20Responsibility%20Survey%20Level%202%20(Middle%20School)_0.pdf or through the citation in the References section.

Survey scales

Table B10 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B10. Survey scales and related information for Furco et al. (1998a)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic awareness	3	*Doing something that helps others is important to me.*	Strongly disagree–strongly agree	Civic attitude	3
Civic efficacy	3	*I know what I can do to help make the community a better place.*	Strongly disagree–strongly agree	Civic attitude	3
Connection to community	4	*I know a lot of people in the community, and they know me.*	Strongly disagree–strongly agree	Civic attitude	3

Source: Furco et al. (1998a) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Furco et al. (1998a):
  - **Education stage:** Middle school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B11 includes evidence of reliability for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B11. Reliability evidence for the survey scales in Furco et al. (1998a)

Survey scale name	Reliability (Cronbach's alpha)
Civic awareness	.77
Civic efficacy	.70
Connection to community	.63

Note: Scores from the three scales were combined to create a global variable that has an internal reliability of .84.

Source: Furco et al. (1998a) and authors' analysis of instrument summary data.

Documentation

Authors: Furco et al. (1998a).

Furco et al. (1998b)—Civic responsibility survey (high school)

This source includes the three survey scales listed below (table B12). The source is available at https://t7-live-cyfar2.nyc3.cdn.digitaloceanspaces.com/cyfar.org/files//PsychometricsFiles/Civic%20Responsibility%20Survey%20Level%203%20(High%20School).pdf or through the citation in the References section.

Survey scales

Table B12 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B12. Survey scales and related information for Furco et al. (1998b)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic awareness	10	*I participate in political or social causes in order to improve the community.*	Strongly disagree–strongly agree	Civic attitude	3–4
Civic efficacy	10	*I benefit emotionally from contributing to the community, even if it is hard and challenging work.*	Strongly disagree–strongly agree	Civic attitude	3–4
Connection to community	4	*I have a strong and personal attachment to a particular community.*	Strongly disagree–strongly agree	Civic attitude	3–4

Source: Furco et al. (1998b) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Furco et al. (1998b):
  - **Education stage:** High school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

- Lee et al. (2007):
  - **Education stage:** High school.
  - **Gender:** 53 percent female.
  - **Race/ethnicity:** 53 percent Caucasian/White, 32 percent Asian/Pacific Islander, 4 percent African American, 4 percent no response, 2 percent American Indian/Alaska Native/Native Hawaiian, 2 percent Hispanic/Latino.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B13 includes evidence of reliability for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B13. Reliability evidence for the survey scales in Furco et al. (1998b)

Survey scale name	Reliability (Cronbach's alpha)
Civic awareness	.88
Civic efficacy	.85
Connection to community	.63

Note: Scores from the three scales were combined to create a global variable that has an internal reliability of .93.

Source: Furco et al. (1998a) and authors' analysis of instrument summary data.

Documentation

Authors: Furco et al. (1998b).

Supporting document: Instrument recently used by Lee et al. (2007).

Gainous and Martens (2011)

This source includes the five survey scales listed below (table B14). The source is available at https://doi.org/10.1177/1532673X11419492 or through the citation in the References section.

Survey scales

Table B14 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B14. Survey scales and related information for Gainous and Martens (2011)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic engagement	10	*Have you participated in a student council/student government?*	Dichotomous *Yes/no*	Civic behavior	258
External efficacy	6	*People in the government care a lot about what all of us think about new laws.*	Strongly disagree–strongly agree	Political attitude	257
Intent to vote	1	*When you are an adult, what do you expect that you will do? Vote in national elections.*	Certainly not do this–certainly do this	Political behavior	241
Internal efficacy	3	*I know more about politics than most people my age.*	Strongly disagree–strongly agree	Political attitude	257
Political knowledge	8	*Which of the following documents describes the powers of the president of the United States?*	Multiple choice	Civic/political knowledge	255–256

Source: Gainous and Martens (2011) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Gainous and Martens (2011):
  - **Education stage:** High school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B15 includes evidence of reliability, when available, for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B15. Reliability evidence for the survey scales in Gainous and Martens (2011)

Survey scale name	Reliability (Cronbach's alpha)
Civic engagement	.61
External efficacy	.61
Intent to vote	na
Internal efficacy	.69
Political knowledge	na

na indicates evidence of reliability is not reported.

Source: Gainous and Martens (2011) and authors' analysis of instrument summary data.

Documentation

Authors: Gainous and Martens (2011).

Kahne et al. (2013)—California civic survey

This source includes the six survey scales listed below (table B16). The source is available at https://doi.org/10.1111/j.1467–9221.2012.00936.x or through the citation in the References section.

Survey scales

Table B16 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B16. Survey scales and related information for Kahne et al. (2013)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Expressive and youth-center action	3	*I have participated in poetry slam, youth forum, musical performance, or other event where young people express their political views.*	Never–more than once a month	Political behavior	438–439
Intention to vote	1	*Once I am 18, I expect I will vote regularly.*	Strongly disagree–strongly agree	Political behavior	439
Interest in diverse perspectives	3	*I can learn a lot from people with backgrounds and experiences that are different from mine.*	Strongly disagree–strongly agree	Civic attitude	439
Interest in politics	1	*I am interested in political issues.*	Strongly disagree–strongly agree	Political attitude	439
Participatory citizenship	4	*Being actively involved in state and local issues is my responsibility.*	Strongly disagree–strongly agree	Civic attitude	439
Voluntary activity	2	*I have volunteered in my community (e.g., by tutoring, mentoring, doing environmental work, working with the elderly, etc.).*	Never–more than once a month	Civic behavior	439

Source: Kahne et al. (2013) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Kahne et al. (2013):
  - **Education stage:** High school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** 37 percent European American, 31 percent Asian American, 18 percent Latino, 8 percent African American.
  - **Family education:** Not reported.
  - **Socioeconomic status:** 83 percent of students across the schools eligible for the national school lunch program.

Reliability and validity information

Table B17 includes evidence of reliability, when available, for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B17. Reliability evidence for the survey scales in Kahne et al. (2013)

	Reliability (Cronbach's alpha)	
Survey scale name	Time 1	Time 2
Expressive and youth-center action	.66	.73
Intention to vote	na	na
Interest in diverse perspectives	.83	.76
Interest in politics	na	na
Participatory citizenship	.80	.78
Voluntary activity	.72	.71

na indicates evidence of reliability is not reported.

Note: Time 1 = junior year, and Time 2 = senior year.

Source: Kahne et al. (2013) and authors' analysis of instrument summary data.

Documentation

Authors: Kahne et al. (2013).

Kahne and Sporte (2008)

This source includes the survey scale listed below (table B18). The source is available at https://doi.org/10.3102/0002831208316951 or through the citation in the References section.

Survey scales

Table B18 includes the following information for the survey scale: the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B18. Survey scale and related information for Kahne and Sporte (2008)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Commitment to civic participation	5	*Being actively involved in community issues is my responsibility.*	Strongly disagree–Strongly agree	Civic attitude	758

Source: Kahne and Sporte (2008) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Kahne and Sporte (2008):
  - **Education stage:** High school.
  - **Gender:** 59 percent female.
  - **Race/ethnicity:** 42 percent Latino, 36 percent African American, 14 percent White, 8 percent Asian.
  - **Family education:** Not reported.
  - **Socioeconomic status:** 79 percent of students eligible for the national school lunch program.

Reliability and validity information

Table B19 includes evidence of reliability for the survey scale. No validity evidence was provided for the survey scale.

Table B19. Reliability evidence for the survey scale in Kahne and Sporte (2008)

Survey scale name	Reliability (Cronbach's alpha)
Commitment to civic participation	.73

Source: Kahne and Sporte (2008) and authors' analysis of instrument summary data.

Documentation

Authors: Kahne and Sporte (2008).

Adapted from: Westheimer and Kahne (2004).

Krasny et al. (2015)—Social captial survey

This source includes the two survey scales listed below (table B20). The source is available at https://doi.org/10.1080/13504622.2013.843647 or through the citation in the References section.

Survey scales

Table B20 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B20. Survey scales and related information for Krasny et al. (2015)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic leadership	5	*Check all that apply to you: I am on student council or student government.*	Dichotomous *Yes/no*	Civic behavior	13
Social trust	5	*I trust people I go to school with.*	Strongly disagree–strongly agree	Civic attitude	12

Source: Kransy et al. (2015) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Krasny et al. (2015):
  - **Education stage:** High school.
  - **Gender:** 57 percent female (intervention group), 54 percent female (comparison group).
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B21 includes evidence of reliability, when available, for all relevant survey scales. Table B22 includes evidence of validity for all relevant survey scales. The survey scale names are listed alphabetically.

Table B21. Reliability evidence for the survey scales in Krasny et al. (2015)

Survey scale name	Reliability (Cronbach's alpha)
Civic leadership	na
Social trust	.64

na indicates evidence of reliability is not reported.

Source: Kransy et al. (2015) and authors' analysis of instrument summary data.

Table B22. Validity evidence for the survey scales in Krasny et al. (2015)

Survey scale name	Results
Validity was reported for the overall instrument rather than for individual survey scales.	Face validity of the instrument was supported by content expert review.

Source: Kransy et al. (2015) and authors' analysis of instrument summary data.

Documentation

Authors: Krasny et al. (2015).

Adapted from: Putnam (2000).

Lee et al. (2012)

This source includes the eight survey scales listed below (table B23). The source is available at https://eric.ed.gov/?id=EJ781805 or through the citation in the References section.

Survey scales

Table B23 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B23. Survey scales and related information for Lee et al. (2012)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic participation	3	*Raised money for a charitable cause.*	Not at all–very frequently	Civic behavior	691
Conventional online news	3	*Use of the following as information sources: National newspaper websites (nytimes.com, usatoday.com).*	Dichotomous *Yes/no*	Political behavior	691
Face-to-face discussion	1	*Talked about news and current events with friends.*	Not at all–very frequently	Political behavior	691
Newspaper	1	*How many days you use media in that way in a typical week?*	0–7 days	Political behavior	690
Nonconventional online political information	3	*Use of the following as information sources: Conservative political blogs, liberal political blogs, political candidate websites.*	Dichotomous *Yes/no*	Political behavior	691
Online political messaging	5	*Use of online political messaging for the following: Exchanged political emails with friends and family.*	Dichotomous *Yes/no*	Political behavior	691
Political participation	4	*Contributed money to a political campaign.*	Dichotomous *Yes/no*	Political behavior	691
TV news	2	*How many days you watch that kind of programming in a typical week?*	0–7 days	Political behavior	690

Source: Lee at al. (2012) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Lee et al. (2012):
  - **Education stage:** Middle school, high school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported

Reliability and validity information

Table B24 includes evidence of reliability, when available, for all relevant survey scales. Table B25 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B24. Reliability evidence for the survey scales in Lee et al. (2012)

Survey scale name	Reliability (Cronbach's alpha)	
	Wave 1	Wave 2
Civic participation	.83	.85
Conventional online news	.66[a]	.69[a]
Face-to-face discussion	na	na
Newspaper	na	na
Nonconventional online political information	.71[a]	.71[a]
Online political messaging	.84[a]	.80[a]
Political participation	.84[a]	.80[a]
TV news	.68[b]	.71[b]

na indicates evidence of reliability is not reported.

Note: Wave 1 and 2 data were collected from the same group of respondents approximately six months apart from each other (Wave 1 = May–June 2008, Wave 2 = November–December 2008).

a. Kuder–Richardson Formula 20 values.

b. Bivariate correlations between the scale's two items, with $p \leq .001$.

Source: Lee at al. (2012) and authors' analysis of instrument summary data.

Table B25. Validity evidence for the survey scales in Lee et al. (2012)

Survey scale name	Results
Validity was reported for the overall instrument rather than for individual survey scales.	CFA supports the overall structure of the instrument. Wave 1: X^2 (675) = 748.62, p = .030; CFI = .98; TLI = .97; RMSEA = .01. Wave 2: X^2 (592) = 724.18, p < .001; CFI = .98; TLI = .97; RMSEA = .02.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. TLI is Tucker-Lewis index.

Source: Lee at al. (2012) and authors' analysis of instrument summary data.

Documentation

Authors: Lee et al. (2012).

Littenberg-Tobias and Cohen (2016)

This source includes the two survey scales listed below (table B26). The source is available at https://doi.org/10.1002/ajcp.12027 or through the citation in the References section.

Survey scales

Table B26 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B26. Survey scales and related information for Littenberg-Tobias and Cohen (2016)

Survey scale name	Number of survey items	Example survey item	Response scale	Domain	Page number
Civic self-efficacy	5	*I can make a difference, on my own, in my community.*	Definitely no–definitely yes	Civic attitude	107
Future civic engagement	4	*When you think about life after high school, do you think you will vote in every election?*	Definitely no–definitely yes	Political behavior	107

Source: Littenberg-Tobias and Cohen (2016) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Ballard et al. (2015)
  - **Education stage:** High school.
  - **Gender:** 47 percent female.
  - **Race/ethnicity:** 88 percent White.
  - **Family education:** 88 percent of both mothers and fathers had a college degree; over 60 percent of fathers and over 40 percent of mothers had a graduate or professional degree.
  - **Socioeconomic status:** Not reported.

- Littenberg-Tobias and Cohen (2016):
  - **Education stage:** Middle school, high school.
  - **Gender:** 52 percent female.
  - **Race/ethnicity:** 40 percent Latino/a, 38 percent African American, 26 percent White.
  - **Family education:** Not reported.
  - **Socioeconomic status:** 68 percent of students were from low-income households.

Reliability and validity information

Table B27 includes evidence of reliability for all relevant survey scales. Table B28 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B27. Reliability evidence for the survey scales in Littenberg-Tobias and Cohen (2016)

Survey scale name	Reliability (Cronbach's alpha)
Civic self-efficacy	.69
Future civic engagement	.63
Supporting evidence: • Ballard et al. (2015): Civic efficacy: Cronbach's alpha = .74.	

Source: Ballard et al. (2015), Littenberg-Tobias and Cohen (2016), and authors' analysis of instrument summary data.

Table B28. Validity evidence for the survey scales in Littenberg-Tobias and Cohen (2016)

Survey scale name	Results
Validity was reported for the overall instrument rather than for individual survey scales.	CFA moderately supports the overall structure of the instrument. X^2 (678) = 1,187.85, $p < .001$; CFI = .85; TLI = .85; RMSEA = .05. CFA results suggest the instrument functions differently for students of different racial/ethnic groups.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. TLI is Tucker-Lewis index.

Source: Littenberg-Tobias and Cohen (2016) and authors' analysis of instrument summary data.

Documentation

Authors: Littenberg-Tobias and Cohen (2016).

Supporting document: Ballard et al. (2015).

Malin et al. (2017)

This source includes the three survey scales listed below (table B29). The source is available at https://doi.org/10.1037/dev0000322 or through the citation in the References section.

Survey scales

Table B29 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B29. Survey scales and related information for Malin et al. (2017)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Expressive activities	4	*How often have you participated in each of the following activities since the time you started high school? Contacted a political representative.*	Never–regularly	Political behavior	1393–1394, 1397
Future civic intentions	5	*Thinking about your future, how meaningful are the following goals in your life? Becoming a leader in the community.*	Not at all meaningful–extremely meaningful	Civic attitude	1397
Political and volunteer motivations	12	*Think about the political/volunteer activities you have been involved in since you have been in high school. Please rank THE 3 MOST IMPORTANT REASONS.*	Ranking	Civic/political attitude	1397

Source: Malin et al. (2017) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Malin et al. (2017):
  - **Education stage:** High school.
  - **Gender:** 61 percent female.
  - **Race/ethnicity:** 40 percent Latino, 35 percent Asian, 9 percent more than one race/ethnicity, 6 percent White, 5 percent African American, 5 percent other.
  - **Family education:** Not reported.
  - **Socioeconomic status:** 62 percent middle socioeconomic status, 25 percent low socioeconomic status, 1 percent high socioeconomic status, 16 percent did not respond.

Reliability and validity information

Table B30 includes evidence of reliability, when available, for all relevant survey scales. Table B31 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B30. Reliability evidence for the survey scales in Malin et al. (2017)

Survey scale name	Reliability (Cronbach's alpha)	
	Time 1	Time 2
Expressive activities	.70	.75
Future civic intentions	.77	.81
Political and volunteer motivations	na	na

na indicates evidence of reliability is not reported.

Note: Time 1 numbers represent data collected during grade 12. Time 2 numbers represent data collected one year after completing high school.

Source: Malin et al. (2017) and authors' analysis of instrument summary data.

Table B31. Validity evidence for the survey scales in Malin et al. (2017)

Survey scale name	Results
na	Authors report that principal axis factor analysis supported a three-factor structure for the subscales (political activities, expressive activities, community service).

Note: Political activities, expressive activities, and community services subscales were adapted from the civic activities scale (Pancer et al., 2007).

Source: Malin et al. (2017) and authors' analysis of instrument summary data.

Documentation

Authors: Malin et al. (2017).

Civic activities scale adapted from: Pancer et al. (2007).

McIntosh and Muñoz (2009)—Comprehensive school survey

This source includes the eight survey scales listed below (table B32). The source is available at https://eric.ed.gov/?id=ED509714 or through the citation in the References section.

Survey scales

Table B32 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B32. Survey scales and related information for McIntosh and Muñoz (2009)

Survey scale name	Number of survey items	Example survey item	Response scale	Domain	Page number
Community service	1	*Asks students if they are currently performing, or have in the past performed, service to people or other work "to make my community a better place."*	Dichotomous *Yes/no*	Civic behavior	11
Conflict resolution skills	3	*I'm good at finding fair solutions to problems.*	Strongly disagree–strongly agree	Civic-related skills and character traits	12
Environmental (personal) conservation	2	*I routinely reuse and recycle everything that I can.*	Strongly disagree–strongly agree	Civic behavior	11
Intention to vote	1	*When I am 18, I am planning to vote in a public election.*	Dichotomous *Yes/no*	Political behavior	11
Personal efficacy	1	*I have the ability to make a difference in my local community.*	Strongly disagree–strongly agree	Civic attitude	11
Political discussion	3	*I often talk about politics or national issues with my friends.*	Strongly disagree–strongly agree	Political behavior	11
Positive character	3	*I always try to tell the truth.*	Strongly disagree–strongly agree	Civic-related skills and character traits	11
Willingness to contact official	1	*I would contact a public official about an issue of concern.*	Dichotomous *Yes/no*	Political behavior	11

Note: The authors created a global youth civic engagement scale by combining the community service, environmental (personal) conservation, intention to vote, personal efficacy, political discussion, and intention to vote subscales.

Source: McIntosh and Muñoz (2009) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- McIntosh and Muñoz (2009):
  - **Education stage:** High school.
  - **Gender:** 51 percent female.
  - **Race/ethnicity:** 57 percent White, 33 percent African American, 6 percent other, 4 percent Latino.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Approximately 40 percent of students eligible for the national school lunch program.

Reliability and validity information

Table B33 includes evidence of reliability, when available, for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B33. Reliability evidence for the survey scales in McIntosh and Muñoz (2009)

	Reliability (Cronbach's alpha)	
Survey scale name	Time 1	Time 2
Community service	na	na
Conflict resolution skill	.77	.73
Environmental (personal) conservation	.76	.78
Intention to vote	na	na
Personal efficacy	na	na
Political discussion	.75	.73
Positive character	.77	.74
Willingness to contact official	na	na

na indicates evidence of reliability is not reported.

Note: Scores from the six subscales that fall under the civic engagement scale were combined to create a global variable that had an internal consistency value of .65 at Time 1 and .64 at Time 2.

Source: McIntosh and Muñoz (2009) and authors' analysis of instrument summary data.

Documentation

Authors: McIntosh and Muñoz (2009).

Metz et al. (2003)

This source includes the four survey scales listed below (table B34). The source is available at https://doi.org/10.1177/0743558402250350 or through the citation in the References section.

Survey scales

Table B34 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B34. Survey scales and related information for Metz et al. (2003)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Concern for social issues	3	*How concerned are you about poverty?*	Not at all concerned–very concerned	Civic attitude	191
Future service	1	*How likely is it that you will perform voluntary service after high school?*	Not very likely–definitely will	Civic behavior	191
Future unconventional civic involvement	3	*How likely is it that you will demonstrate for a cause in the future?*	Not very likely–definitely will	Political behavior	191
Future voting	1	*What is the likelihood you will vote when you reach 18?*	Not very likely–definitely will	Political behavior	191

Source: Metz et al. (2003) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Ballard et al. (2015):
  - **Education stage:** High school.
  - **Gender:** 47 percent female.
  - **Race/ethnicity:** 88 percent White.
  - **Family education:** 88 percent of both mothers and fathers had a college degree; over 60 percent of fathers and over 40 percent of mothers had a graduate or professional degree.
  - **Socioeconomic status:** Not reported.

- Jahromi et al. (2012):
  - **Education stage:** High school.
  - **Gender:** 52 percent female.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

- Metz et al. (2003):
  - **Education stage:** High school.
  - **Gender:** 56 percent female.
  - **Race/ethnicity:** 78 percent White.
  - **Family education:** Mother's level of education: 64 percent with a college degree or higher, 36 percent with less than a college degree.
  - **Socioeconomic status:** Students from a suburban middle-class community (near Boston).

- Metz and Youniss (2005):
  - **Education stage:** High school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** 78 percent White.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B35 includes evidence of reliability, when available, for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B35. Reliability evidence for the survey scales in Metz et al. (2003)

Survey scale name	Reliability (Cronbach's alpha)
Concern for social issues	.91
Future service	na
Future unconventional civic involvement	.70
Future voting	na

Supporting evidence:
- Ballard et al. (2015): Future volunteerism (future service) in the upcoming summer and after graduation (Cronbach's alpha = .78 for school 1 and .74 for school 2); future unconventional civic involvement (Cronbach's alpha = .79 for school 1 and .76 for school 2).
- Jahromi et al. (2012): Future conventional civic involvement (future service) in the upcoming summer and after graduation (Cronbach's alpha = .77); future unconventional civic involvement (Cronbach's alpha = .60).
- Metz and Youniss (2005): Future unconventional civic involvement (Cronbach's alpha = .69 at the beginning of grade 11, .65 at the end of grade 11, and .70 at the end of grade 12).

na indicates evidence of reliability is not reported.

Source: Ballard et al. (2015), Jahromi et al. (2012), Metz et al. (2003), Metz and Youniss (2005), and authors' analysis of instrument summary data.

Documentation

Authors: Metz et al. (2003).

Supporting documents: Ballard et al. (2015); Jahromi et al. (2012); Metz and Youniss (2005).

Schulz and Sibberns (2004)—CivEd survey

This source includes the 10 survey scales listed below (table B36). The source is available at https://www.iea.nl/publications/technical-reports/iea-civic-education-study-technical-report or through the citation in the References section.

Survey scales

Table B36 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B36. Survey scales and related information for Schulz and Sibberns (2004)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic knowledge	38	*What is the major purpose of the United Nations?*	Multiple choice	Civic/political knowledge	237–241
Concept of economy-related government responsibilities	5	*What responsibilities should the government have? (e.g., to guarantee a job for everyone who wants one)*	Definitely should not be the government's responsibility–definitely should be the government's responsibility	Political attitude	250
Concept of society-related government responsibilities	7	*What responsibilities should the government have? (e.g., to control pollution of the environment)*	Definitely should not be the government's responsibility–definitely should be the government's responsibility	Political attitude	250
Expected political participation	3	*When you are an adult, what do you expect that you will do? Join a political party.*	I will certainly not do this–I will certainly do this	Political behavior	117
Importance of conventional citizenship	6	*An adult who is a good citizen votes in every election.*	Not important–very important	Political attitude	248–249
Importance of social-movement citizenship	4	*An adult who is a good citizen takes part in activities promoting human rights.*	Not important–very important	Political attitude	248–249
Positive attitudes toward immigrants	5	*Immigrants should have all the same rights that everyone else in a country has.*	Strongly disagree–strongly agree	Political attitude	257
Positive attitudes toward one's nation	4	*I have great love for the United States.*	Strongly disagree–strongly agree	Political attitude	252–253
Positive attitudes toward women's political and economic rights	6	*Women should have the same rights as men in every way.*	Strongly disagree–strongly agree	Political attitude	255–256
Trust in government-related institutions	5	*How much of the time can you trust each of the following institutions? (e.g., courts)*	Never–always	Political attitude	251

Source: Schulz and Sibberns (2004) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Schulz and Sibberns (2004):
  - **Education stage:** Middle school, high school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** Not reported.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Not reported.

Reliability and validity information

Table B37 includes evidence of reliability, when available, for all relevant survey scales. Table B38 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B37. Reliability evidence for the survey scales in Schulz and Sibberns (2004)

Survey scale name	Reliability (Cronbach's alpha)
Civic knowledge	na
Concept of economy-related government responsibilities	.61
Concept of society-related government responsibilities	.72
Expected political participation	.74
Importance of conventional citizenship	.75
Importance of social-movement citizenship	.73
Positive attitudes toward immigrants	.85
Positive attitudes toward one's nation	.68
Positive attitudes toward women's political and economic rights	.82
Trust in government-related institutions	.80

na indicates evidence of reliability is not reported.

Source: Schulz and Sibberns (2004) and authors' analysis of instrument summary data.

Table B38. Validity evidence for the survey scales in Schulz and Sibberns (2004)

Survey scale name	Results
Expected political participation	CFA supports the idea that scale items belonged together and were distinct from other items assessing different factors: RMSEA = .039, AGFI = .99, NNFI = .98, CFI = .99.
Importance of conventional citizenship and Importance of social-movement citizenship	CFA moderately supports a two-factor structure: RMSEA = .056, AGFI = .96, NNFI = .91, CFI = .93.
Positive attitudes toward immigrants	CFA supports a one-factor solution: RMSEA = .046, AGFI = .98, NNFI = .98, CFI = .99.
Positive attitudes toward one's nation	CFA supports the idea that scale items belonged together and were distinct from other items assessing different factors: RMSEA =.044, AGFI = .98, NNFI = .95, CFI = .96.
Positive attitudes toward women's political and economic rights	CFA moderately supports the idea that scale items belonged together and were distinct from other items assessing different factors: RMSEA = .052, AFGI = .96, NNFI = .93, CFI = .94.
Society-related government responsibilities and economy-related government responsibilities	CFA moderately supports a two-factor structure: RMSEA = .046, AGFI = .97, NNFI = .92, CFI = .93.
Trust in government-related institutions	CFA supports the idea that scale items belonged together and were distinct from other items assessing different factors: RMSEA = .046, AGFI = .98, NNFI = .97, CFI = .98.

AGFI is adjusted goodness of fit index. CFA is confirmatory factor analysis. CFI is comparative fit index. NNFI is non-normed fit index. RMSEA is root mean square error of approximation.

Source: Schulz and Sibberns (2004) and authors' analysis of instrument summary data.

Documentation

Authors: Schulz and Sibberns (2004).

Syvertsen et al. (2015)—Youth civic and character measures toolkit (high school version)

This source includes the 24 survey scales listed below (table B39). The source is available at https://www.search-institute.org/downloadable/Youth-Civic-Character-Measures-Toolkit.pdf or through the citation in the References section.

Survey scales

Table B39 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B39. Survey scales and related information for Syvertsen et al. (2015)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic efficacy	3	*I can make a positive difference in my community.*	Strongly disagree–strongly agree	Civic attitude	11
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	Strongly disagree–strongly agree	Political attitude	11
Critical information analysis	3	*When I see or read a news story about an issue, I try to figure out if they're just telling one side of the story.*	Not at all like me–very much like me	Civic-related skills and character traits	18
Future-mindedness	3	*I am hopeful about my future.*	Not at all like me–very much like me	Civic-related skills and character traits	23
Gratitude	3	*I feel thankful for everyday things.*	Not at all like me–very much like me	Civic-related skills and character traits	24
Humility	2	*I try not to draw attention to myself when I do something well.*	Not at all like me–very much like me	Civic-related skills and character traits	25
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Never–very often	Civic behavior	14
Leadership	3	*I am good at leading others to reach a goal.*	Not at all like me–very much like me	Civic-related skills and character traits	26
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	Never–very often	Political behavior	15
Participation skills	6	*Rate how well you can do each skill: Express my views to others in-person or in writing.*	I definitely can't–I definitely can	Civic-related skills and character traits	18

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Perseverance	3	*I am a hard worker.*	Strongly disagree–strongly agree	Civic-related skills and character traits	27
Personal responsibility	3	*If I do something wrong, I take responsibility for my actions I am responsible.*	Not at all like me–very much like me	Civic-related skills and character traits	28
Political engagement	4	*Have you ever done the following: Volunteer to campaign for a political candidate?*	I wouldn't do this–I will do this or have already done this	Political behavior	15
Respect	3	*I treat others with respect.*	Not at all like me–very much like me	Civic-related skills and character traits	29
Self-interest values	4	*It is important to me to have many expensive possessions.*	Not at all important–extremely important	Civic-related skills and character traits	13
Social responsibility (personal beliefs)	4	*I have a responsibility to improve my community.*	Strongly disagree–strongly agree	Civic attitude	12
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	Not at all important–extremely important	Civic attitude	12
Sociopolitical discussion (friends)	3	*My friends and I talk about politics and current events.*	Never–very often	Political behavior	22
Sociopolitical discussion (parents)	3	*In my family, we talk about politics and current events.*	Never–very often	Political behavior	21
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	Not at all like me–very much like me Not a spiritual person–a very spiritual person	Civic-related skills and character traits	30
Teamwork	3	*When I work with others, I think about what is best for my team.*	Not at all like me–very much like me	Civic-related skills and character traits	31
Thrift	3	*Reusing an item you already have is better than buying something new.*	Not at all like me–very much like me	Civic-related skills and character traits	32
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	0 hours–5 or more hours	Civic behavior	16
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	I wouldn't do this–I will do this or have already done this	Political behavior	17

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Syversten et al. (2015):
  - **Education stage:** High school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** 50 percent White, 30 percent Hispanic or Latino, 10 percent Black or African American, 8 percent another race/ethnicity, 7 percent Asian, 4 percent American Indian/Alaska Native, 2 percent Native Hawaiian or Other Pacific Islander.
  - **Family education:** 33 percent high school or below, 31 percent college degree or higher.
  - **Socioeconomic status:** 42 percent reported financial strain.

Reliability and validity information

Table B40 includes evidence of reliability, when available, for all relevant survey scales. Table B41 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B40. Reliability evidence for the survey scales in Syvertsen et al. (2015)

Survey scale name	Reliability (Cronbach's alpha)
Civic efficacy	.84
Critical consciousness	.82
Critical information analysis	.85
Future-mindedness	.71
Gratitude	.76
Humility	na
Informal helping	.72
Leadership	.78
News consumption	na
Participation skills	.90
Perseverance	.69
Personal responsibility	.76
Political engagement	.84
Respect	.81
Self-interest values	.69
Social responsibility (personal beliefs)	.83
Social responsibility (personal values)	.80
Sociopolitical discussions (friends)	.78
Sociopolitical discussions (parent)	.85
Spirituality	na
Teamwork	.77
Thrift	.74
Volunteering	na
Voting	na

na indicates evidence of reliability is not reported.

Note: Omega coefficients are also available for all scales with Cronbach's alphas.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Table B41. Validity evidence for the survey scales in Syvertsen et al. (2015)

Survey scale name	Results
Informal helping	CFA moderately supports a one-factor solution: X^2 (9) = 174.81, p = .000; RMSEA = .13; CFI = .87; TLI = .78; SRMR = .06.
Participation skills	CFA supports a one-factor solution: X^2 (9) = 42.88, p = .000; RMSEA = .06; CFI = .98; TLI = .97; SRMR = .02.
Political engagement	CFA supports a one-factor solution: X^2 (2) = 13.87, p = .001; RMSEA = .07; CFI = .99; TLI = .97; SRMR = .02.
Self-interest values	CFA moderately support a one-factor solution: X^2 (2) = 55.51, p = .000; RMSEA = .15; CFI = .89; TLI = .68; SRMR = .06.
Social responsibility (personal beliefs)	CFA supports a one-factor solution: X^2 (2) = 4.41, p = .110; RMSEA = .03; CFI = 1.00; TLI = .99; SRMR = .01.
Social responsibility (personal values)	CFA moderately supports a one-factor solution: X^2 (2) = 14.73, p = .001; RMSEA = .08; CFI = .99; TLI = .97; SRMR = .02.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. SRMR is standardized root mean square residual. TLI is Tucker-Lewis index.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Documentation

Authors: Syvertsen et al. (2015).

Adapted from: Items were adopted from an extensive list of instruments. See Syvertsen et al. (2015) for a detailed list.

Syvertsen et al. (2015)—Youth civic and character measures toolkit (middle school version)

This source includes the 22 survey scales listed below (table B42). The source is available at https://www.search-institute.org/downloadable/Youth-Civic-Character-Measures-Toolkit.pdf or through the citation in the References section.

Survey scales

Table B42 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B42. Survey scales and related information for Syvertsen et al. (2015)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	Strongly disagree–strongly agree	Political attitude	11
Critical information analysis	3	*When I see or read a news story about an issue, I try to figure out if they're just telling one side of the story.*	Not at all like me–very much like me	Civic-related skills and character traits	18
Future-mindedness	3	*I am hopeful about my future.*	Not at all like me–very much like me	Civic-related skills and character traits	23
Gratitude	3	*I feel thankful for everyday things.*	Not at all like me–very much like me	Civic-related skills and character traits	24
Humility	2	*I try not to draw attention to myself when I do something well.*	Not at all like me–very much like me	Civic-related skills and character traits	25
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Never–very often	Civic behavior	14
Leadership	3	*I am good at leading others to reach a goal.*	Not at all like me–very much like me	Civic-related skills and character traits	26
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	Never–very often	Political behavior	15
Participation skills	6	*Rate how well you can do each skill: Create a plan to address a problem.*	I definitely can't–I definitely can	Civic-related skills and character traits	18
Perseverance	3	*I am a hard worker.*	Strongly disagree–strongly agree	Civic-related skills and character traits	27

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Personal responsibility	3	*When I say I'm going to do something, I do it. I am responsible.*	Not at all like me–very much like me	Civic-related skills and character traits	28
Political engagement	4	*Have you ever done the following: Volunteer to campaign for a political candidate?*	I wouldn't do this–I will do this or have already done this	Political behavior	15
Respect	3	*I treat others with respect.*	Not at all like me–very much like me	Civic-related skills and character traits	29
Social responsibility (personal beliefs)	4	*I have a responsibility to improve my community.*	Strongly disagree–strongly agree	Civic attitude	12
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	Not at all important–extremely important	Civic attitude	12
Sociopolitical discussion – (friends)	3	*My friends and I talk about politics and current events.*	Never–very often	Political behavior	22
Sociopolitical discussion – (parents)	3	*In my family, we talk about politics and current events.*	Never–very often	Political behavior	21
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	Not at all like me–very much like me Not a spiritual person–a very spiritual person	Civic-related skills and character traits	30
Teamwork	3	*When I work with others, I think about what is best for my team.*	Not at all like me–very much like me	Civic-related skills and character traits	31
Thrift	3	*Reusing an item you already have is better than buying something new.*	Not at all like me–very much like me	Civic-related skills and character traits	32
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	0 hours–5 or more hours	Civic behavior	16
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	I wouldn't do this–I will do this or have already done this	Political behavior	17

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Syversten et al. (2015):
  - **Education stage:** Middle school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** 50 percent White, 30 percent Hispanic or Latino, 10 percent Black or African American, 8 percent another race/ethnicity, 7 percent Asian, 4 percent American Indian/Alaska Native, 2 percent Native Hawaiian or Other Pacific Islander.
  - **Family education:** 22 percent high school or below, 28 percent college degree or higher.
  - **Socioeconomic status:** 41 percent reported financial strain.

Reliability and validity information

Table B43 includes evidence of reliability, when available, for all relevant survey scales. Table B44 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B43. Reliability evidence for the survey scales in Syvertsen et al. (2015)

Survey scale name	Reliability (Cronbach's alpha)
Critical consciousness	.71
Critical information analysis	.79
Future-mindedness	.76
Gratitude	.77
Humility	na
Informal helping	.73
Leadership	.80
News consumption	na
Participation skills	.89
Perseverance	.65
Personal responsibility	.76
Political engagement	.83
Respect	.80
Social responsibility (personal beliefs)	.82
Social responsibility (personal values)	.81
Sociopolitical discussions (friends)	.80
Sociopolitical discussions (parent)	.81
Spirituality	na
Teamwork	.79
Thrift	.67
Volunteering	na
Voting	na

na indicates evidence of reliability is not reported.

Note: Omega coefficient available for all measures with Cronbach's alphas.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Table B44. Validity evidence for the surveys scales in Syvertsen et al. (2015)

Survey scale name	Results
Informal helping	CFA results moderately supports a one-factor solution: X^2 (9) = 116.34, p = .000; RMSEA = .12; CFI = .88; TLI = .80; SRMR = .06.
Participation skills	CFA supports a one-factor solution: X^2 (9) = 21.73, p = .010; RMSEA = .04; CFI = .99; TLI = .98; SRMR = .02.
Political engagement	CFA supports a one-factor solution: X^2 (2) = 6.40, p = .041; RMSEA = .05; CFI = .99; TLI = .98; SRMR = .02.
Social responsibility (personal beliefs)	CFA supports a one-factor solution: X^2 (2) = 0.72, p = .699; RMSEA = .00; CFI = 1.00; TLI = 1.01; SRMR = .01.
Social responsibility (personal values)	CFA moderately supports a one-factor solution: X^2 (2) = 12.95, p = .002; RMSEA = .08; CFI = .99; TLI = .97; SRMR = .02.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. SRMR is standardized root mean square residual. TLI is Tucker-Lewis index.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Documentation

Authors: Syvertsen et al. (2015).

Adapted from: Items were adopted from an extensive list of instruments. See Syvertsen et al. (2015) for a detailed list.

Syvertsen et al. (2015)—Youth civic and character measures toolkit (elementary school version)

This source includes the 17 survey scales listed below (table B45). The source is available at https://www.search-institute.org/downloadable/Youth-Civic-Character-Measures-Toolkit.pdf or through the citation in the References section.

Survey scales

Table B45 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B45. Survey scales and related information for Syvertsen et al. (2015)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Critical consciousness	3	*In America, political leaders only listen to the opinions of certain groups.*	Strongly disagree–strongly agree	Political attitude	11
Future-mindedness	3	*I am hopeful about my future.*	Not at all like me–very much like me	Civic-related skills and character traits	23
Gratitude	3	*I feel thankful for everyday things.*	Not at all like me–very much like me	Civic-related skills and character traits	24
Informal helping	6	*I have stood up for a classmate who was being picked on.*	Never–very often	Civic behavior	14
Leadership	3	*I am good at leading others to reach a goal.*	Not at all like me–very much like me	Civic-related skills and character traits	26
News consumption	1	*In a typical week, how often do you access information about politics and current events on TV, the radio, in the newspaper, or on news websites?*	Never–very often	Political behavior	15
Participation skills	6	*Rate how well you can do each skill: Create a plan to address a problem.*	I definitely can't–I definitely can	Civic-related skills and character traits	18
Perseverance	3	*I am a hard worker.*	Strongly disagree–strongly agree	Civic-related skills and character traits	27
Personal responsibility	3	*I am responsible.*	Not at all like me–very much like me	Civic-related skills and character traits	28
Respect	3	*I treat others with respect.*	Not at all like me–very much like me	Civic-related skills and character traits	29

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Social responsibility (personal values)	4	*It is important to me to help those who are less fortunate.*	Not at all important–extremely important	Civic attitude	12
Sociopolitical discussion (parents)	3	*In my family, we talk about politics and current events.*	Never–very often	Political behavior	21
Spirituality	2	*A spiritual person may or may not participate in a particular religion, but still feels connected to a higher power or God. In general, I consider myself to be…*	Not at all like me–very much like me Not a spiritual person–a very spiritual person	Civic-related skills and character traits	30
Teamwork	3	*When I work with others, I think about what is best for my team.*	Not at all like me–very much like me	Civic-related skills and character traits	31
Thrift	3	*Reusing an item you already have is better than buying something new.*	Not at all like me–very much like me	Civic-related skills and character traits	32
Volunteering	1	*In a typical month, about how many hours do you spend VOLUNTEERING (not part of a class project, graduation requirement, or court-ordered requirement) to help other people or to help make your community a better place?*	0 hours–5 or more hours	Civic behavior	16
Voting	1	*Have you ever done or plan to do the following? Vote in national elections.*	I wouldn't do this–I will do this or have already done this	Political behavior	17

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Syversten et al. (2015):
  - **Education stage:** Upper elementary school.
  - **Gender:** Not reported.
  - **Race/ethnicity:** 50 percent White, 30 percent Hispanic or Latino, 10 percent Black or African American, 8 percent another race/ethnicity, 7 percent Asian, 4 percent American Indian/Alaska Native, 2 percent Native Hawaiian or Other Pacific Islander.
  - **Family education:** 27 percent college degree or higher, 12 percent high school or below.
  - **Socioeconomic status:** 36 percent reported financial strain.

Reliability and validity information

Table B46 includes evidence of reliability, when available, for all relevant survey scales. Table B47 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B46. Reliability evidence for the survey scales in Syvertsen et al. (2015)

Survey scale name	Reliability (Cronbach's alpha)
Critical consciousness	.67
Future-mindedness	.71
Gratitude	.77
Informal helping	.71
Leadership	.72
News consumption	na
Participation skills	.79
Perseverance	.75
Personal responsibility	.61
Respect	.72
Social responsibility (personal values)	.67
Sociopolitical discussions (parent)	.65
Spirituality	na
Teamwork	.78
Thrift	.66
Volunteering	na
Voting	na

na indicates evidence of reliability is not reported.

Note: Omega coefficient available for all measures with Cronbach's alphas.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Table B47. Validity evidence for the survey scales in Syvertsen et al. (2015)

Survey scale name	Results
Informal helping	CFA moderately supports a one-factor solution: X^2 (9) = 43.30, p = .000; RMSEA = .09; CFI = .92; TLI = .86; SRMR = .05.
Participation skills	CFA supports a one-factor solution: X^2 (9) = 15.07, p = .089; RMSEA = .04; CFI = .99; TLI = .97; SRMR = .03.
Social responsibility (personal values)	CFA supports a one-factor solution: X^2 (2) = 6.10, p = .047; RMSEA = .06; CFI = .99; TLI = .96; SRMR = .02.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. SRMR is standardized root mean square residual. TLI is Tucker-Lewis index.

Source: Syversten et al. (2015) and authors' analysis of instrument summary data.

Documentation

Authors: Syvertsen et al. (2015).

Adapted from: Items were adopted from an extensive list of instruments. See Syvertsen et al. (2015) for a detailed list.

Vercellotti and Matto (2010)

This source includes the two survey scales listed below (table B48). The source is available at https://eric.ed.gov/?id=ED512248 or through the citation in the References section.

Survey scales

Table B48 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B48. Survey scales and related information for Vercellotti and Matto (2010)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Political efficacy	3	*I consider myself well-qualified to participate in politics.*	Disagree strongly–agree strongly	Political attitude	20
Sources of information for students	8	*Out of the last seven days, how many days have you _____ for information about government or politics? (e.g., read a local newspaper)*	0–7 days	Political behavior	12–13

Source: Vercellotti and Matto (2010) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Vercellotti and Matto (2010):
  - **Education stage:** High school.
  - **Gender:** 47 percent female.
  - **Race/ethnicity:** 87 percent White.
  - **Family education:** 65 percent had at least a college degree.
  - **Socioeconomic status:** 55 percent had an annual income of $100,000 or more.

Reliability and validity information

Table B49 includes evidence of reliability for all relevant survey scales. The survey scale names are listed alphabetically. No validity evidence was provided for the survey scales.

Table B49. Reliability evidence for the survey scales in Vercellotti and Matto (2010)

	Reliability (Cronbach's alpha)		
Survey scale name	Time 1	Time 2	Time 3
Political efficacy	.80	.82	.81
Sources of information for students	.81	.80	.83

Note: Time 1 = baseline, Time 2 = immediately after news engagement intervention, and Time 3 = six weeks after intervention.

Source: Vercellotti and Matto (2010) and authors' analysis of instrument summary data.

Documentation

Authors: Vercellotti and Matto (2010).

Wicks et al. (2014)

This source includes the five survey scales listed below (table B50). The source is available at https://doi.org/10.1177/0002764213515226 or through the citation in the References section.

Survey scales

Table B50 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B50. Survey scales and related information for Wicks et al. (2014)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Attitudes toward citizenship	4	*Being a good citizen requires that you volunteer in your community.*	Not at all–very frequently	Political attitude	633
Civic engagement	5	*Worked on solving a problem in my community.*	Not at all–very frequently	Civic behavior	632
Discuss news and politics	8	*Talked to my parents about the news.*	Not at all–very frequently	Political behavior	633
Political engagement	4	*Participated in a political protest activity.*	Not at all–very frequently	Political behavior	632
Take action/ boycott or buycott	2	*Boycotted products or companies that offend my values.*	Not at all–very frequently	Political behavior	633

Source: Wicks et al. (2014) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Wicks et al. (2014):
  - **Education stage:** Middle school, high school.
  - **Gender:** 52 percent female.
  - **Race/ethnicity:** 71 percent White, 13 percent African American, 7 percent Multiracial, 6 percent Hispanic/Latino, 1 percent Asian, 1 percent Native American, 1 percent other or no answer.
  - **Family education:** Not reported.
  - **Socioeconomic status:** 39 percent of households earned $50,000 a year or less; 39 percent earned between $50,000 and $100,000; and 22 percent earned more than $100,000.

Reliability and validity information

Table B51 includes evidence of reliability for all relevant survey scales. Table B52 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B51. Reliability evidence for the surveys scales in Wicks et al. (2014)

Survey scale name	Reliability (Cronbach's alpha)
Attitudes toward citizenship	.81
Civic engagement	.87
Discuss news and politics	.91
Political engagement	.84
Take action/boycott or buycott	.77

Source: Wicks et al. (2014) and authors' analysis of instrument summary data.

Table B52. Validity evidence for the surveys scales in Wicks et al. (2014)

Survey scale name	Results
Attitudes toward citizenship, discuss news and politics, and take action/boycott or buycott	Principal component factor analysis supports a three-factor solution.
Civic engagement and political engagement	Principal component factor analysis supports a two-factor solution.

Source: Wicks et al. (2014) and authors' analysis of instrument summary data.

Documentation

Authors: Wicks et al. (2014).

Wray-Lake and Sloper (2016)

This source includes the four survey scales listed below (table B53). The source is available at https://doi.org/10.1080/10888691.2015.1114888 or through the citation in the References section.

Survey scales

Table B53 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B53. Survey scales and related information for Wray-Lake and Sloper (2016)

Survey scale name	Number of survey items	Example survey item	Response scale	Domain	Page number
Conventional political behaviors	8	*Participate in a rally or protest for a cause.*	I would never do this–I have already done this Never–daily	Political behavior	256
Informal helping	6	*I help my friends and neighbors without being paid.*	Never–always	Civic behavior	256
Online political behavior	8	*Get political information from a social networking website.*	I would never do this–I have already done this	Political behavior	256
Volunteering	2	*Participate in unpaid volunteer work or community service.*	Never–always Never–daily	Civic behavior	256

Source: Wray-Lake and Sloper (2016) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Wray-Lake and Sloper (2016):
  - **Education stage:** Middle school, high school.
  - **Gender:** 54 percent female.
  - **Race/ethnicity:** 46 percent Hispanic, 13 percent White, 8 percent Asian, 6 percent African American, 1 percent Native Hawaiian or Pacific Islander, 20 percent selected multiple racial/ethnic categories (with 58 percent of these youth reporting Hispanic as one ethnicity and no other clear pattern evident), 6 percent indicated other racial/ethnic categories or left this item blank.
  - **Family education:** 40 percent of fathers had a high school degree or less; 38 percent of mothers had a high school degree or less.
  - **Socioeconomic status:** 43 percent classified as socioeconomically disadvantaged.

Reliability and validity information

Table B54 includes evidence of reliability for all relevant survey scales. Table B55 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B54. Reliability evidence for the survey scales in Wray-Lake and Sloper (2016)

Survey scale name	Reliability (Cronbach's alpha)
Conventional political behaviors	.80
Informal helping	.64
Online political behaviors	.88
Volunteering	.63[a]

a. Number is a bivariate correlation with $p \leq .001$.

Source: Wray-Lake and Sloper (2016) and authors' analysis of instrument summary data.

Table B55. Validity evidence for the survey scales in Wray-Lake and Sloper (2016)

Survey scale name	Results
Conventional political behavior and online political behavior	CFA moderately supports a two-factor solution: X^2 (103) = 412.29, $p < .001$; RMSEA = .07; CFI = .92; TLI = .90.
Informal helping	CFA moderately supports a one-factor solution: X^2 (9) = 37.94, $p < .001$; RMSEA = .07; CFI = .95; TLI = .91.

CFA is confirmatory factor analysis. CFI is comparative fit index. RMSEA is root mean square error of approximation. TLI is Tucker-Lewis index.

Source: Wray-Lake and Sloper (2016) and authors' analysis of instrument summary data.

Documentation

Authors: Wray-Lake and Sloper (2016).

Adapted from: Flanagan et al. (2007); Kaiser et al. (2007).

Zaff et al. (2010)—Active and engaged citizenship

This source includes the four survey scales listed below (table B56). The source is available at https://doi.org/10.1007/s10964-010-9541-6 or through the citation in the References section.

Survey scales

Table B56 is organized alphabetically by survey scale name. Information for each survey scale includes the number of survey items, an example survey item, the response scale, the civic readiness category in which the survey scale is placed in this resource, and the page number in the source where you can find the survey scale and associated items.

Table B56. Survey scales and related information for Zaff et al. (2010)

Survey scale name	Number of survey items	Example survey item	Response scale	Category	Page number
Civic duty	12	*I often think about doing things so that people in the future can have things better.*	Not important–extremely important Strongly disagree–strongly agree	Civic attitude	742
Civic participation	8	*How often do you help make your city or town a better place for people to live?*	Never–very often Never–every day Never–5 or more times	Civic behavior	743
Civic skills	6	*To what extent can you write an opinion letter to a local newspaper?*	I definitely can't–I definitely can	Civic-related skills and character traits	742
Neighborhood social connection	6	*In my town or city, I feel like I matter to people.*	Strongly disagree–strongly agree	Civic attitude	742

Source: Zaff et al. (2010) and authors' analysis of instrument summary data.

Student sample

The survey instrument was administered to the following student groups:

- Bobek et al. (2009):
  - **Education stage:** Middle school.
  - **Gender:** 60 percent female.
  - **Race/ethnicity:** 69 percent White, 13 percent Hispanic, 9 percent African American, 9 percent other.
  - **Family education:** Not reported.
  - **Socioeconomic status:** Household income (per capita): 17 percent $5,001–$10,000, 13 percent $10,001–$15,000, 12 percent $15,001–$20,000, 11 percent $0–$5,000, 9 percent $20,001–$25,000, 8 percent $25,001 or above, 30 percent not available.

- Zaff et al. (2010):
  - **Education stage:** Upper elementary school,[2] middle school, high school.
  - **Gender:** 62 percent female.
  - **Race/ethnicity:** 70 percent White.
  - **Family education:** Mother's education: 17 percent two-year degree, 15 percent four-year degree, 14 percent high school diploma/GED, 10 percent trade/vocational/some college, 8 percent master's degree, 3 percent some high school, 2 percent doctoral/professional degree, 1 percent grade 8 or less, 30 percent not available.
  - **Economic status:** Household income: 16 percent $5,001–$10,000, 13 percent $10,001–$15,000, 12 percent $15,001–$20,000, 9 percent $20,001–$25,000, 7 percent $0–$5,000, 5 percent $25,001–$30,000, 4 percent $35,001 or above, 2 percent $30,001–$35,000, 33 percent not available.

Reliability and validity information

Table B57 includes evidence of reliability for all relevant survey scales. Table B58 includes evidence of validity for all relevant survey scales. The survey scale names in both tables are listed alphabetically.

Table B57. Reliability evidence for the survey scales in Zaff et al. (2010)

Survey scale name	Reliability (Cronbach's alpha)		
	Time 1	Time 2	Time 3
Civic duty	.86	.87	.87
Civic participation	.76	.78	.77
Civic skills	.92	.92	.91
Neighborhood social connection	.87	.89	.89
Supporting evidence from Bobek et al. (2009)			
Civic duty	.80		
Civic skills	.91		
Neighborhood social connection	.86		

Note: Time 1 = grade 8, Time 2 = grade 9, and Time 3 = grade 10. Scores from the four subscales that fall under the active and engaged citizen scale were combined to create a global variable that had internal reliability values of .72 at Time 1, .73 at Time 2, and .70 and Time 3.

Source: Zaff et al. (2010) and authors' analysis of instrument summary data.

Table B58. Validity evidence for the survey scales in Zaff et al. (2010)

Survey scale name	Results
Active and engaged citizen	CFA supports a single second-order factor (active and engaged citizen) and four first-order factor solutions (civic duty, civic skills, neighborhood social connection, and civic participation): X^2 (460) = 4522.96, p <.001; RMSEA = .066. CFA supports the invariance in validity of the instrument across gender. CFA supports the invariance in validity of the instrument across time.

CFA is confirmatory factor analysis. RMSEA is root mean square error of approximation.

Source: Zaff et al. (2010) and authors' analysis of instrument summary data.

2. Sample included students in grades 8–10. However, the sample was drawn from a larger study that included students in grades 5–12.

Documentation

Authors: Zaff et al. (2010).

Adapted from: Items were adopted from an extensive list of instruments. See Zaff et al. (2010) for a detailed list.

Supporting document: Bobek et al. (2009).

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