

**Research Report**  
ETS RR-15-34

# Assessing Civic Competency and Engagement in Higher Education: Research Background, Frameworks, and Directions for Next-Generation Assessment

---

Judith Torney-Purta

Julio C. Cabrera

Katrina Crotts Roohr

Ou Lydia Liu

Joseph A. Rios

September 2015

# ETS Research Report Series

---

## EIGNOR EXECUTIVE EDITOR

James Carlson  
*Principal Psychometrician*

## ASSOCIATE EDITORS

Beata Beigman Klebanov  
*Senior Research Scientist - NLP*

Heather Buzick  
*Research Scientist*

Brent Bridgeman  
*Distinguished Presidential Appointee*

Keelan Evanini  
*Senior Research Scientist - NLP*

Marna Golub-Smith  
*Principal Psychometrician*

Shelby Haberman  
*Distinguished Presidential Appointee*

Donald Powers  
*Managing Principal Research Scientist*

Gautam Puhan  
*Principal Psychometrician*

John Sabatini  
*Managing Principal Research Scientist*

Matthias von Davier  
*Senior Research Director*

Rebecca Zwick  
*Distinguished Presidential Appointee*

## PRODUCTION EDITORS

Kim Fryer  
*Manager, Editing Services*

Ayleen Stellhorn  
*Editor*

---

Since its 1947 founding, ETS has conducted and disseminated scientific research to support its products and services, and to advance the measurement and education fields. In keeping with these goals, ETS is committed to making its research freely available to the professional community and to the general public. Published accounts of ETS research, including papers in the ETS Research Report series, undergo a formal peer-review process by ETS staff to ensure that they meet established scientific and professional standards. All such ETS-conducted peer reviews are in addition to any reviews that outside organizations may provide as part of their own publication processes. Peer review notwithstanding, the positions expressed in the ETS Research Report series and other published accounts of ETS research are those of the authors and not necessarily those of the Officers and Trustees of Educational Testing Service.

The Daniel Eignor Editorship is named in honor of Dr. Daniel R. Eignor, who from 2001 until 2011 served the Research and Development division as Editor for the ETS Research Report series. The Eignor Editorship has been created to recognize the pivotal leadership role that Dr. Eignor played in the research publication process at ETS.

## RESEARCH REPORT

# Assessing Civic Competency and Engagement in Higher Education: Research Background, Frameworks, and Directions for Next-Generation Assessment

Judith Torney-Purta,<sup>1</sup> Julio C. Cabrera,<sup>2</sup> Katrina Crotts Roohr,<sup>3</sup> Ou Lydia Liu,<sup>3</sup> & Joseph A. Rios<sup>3</sup>

1 University of Maryland, College Park

2 University of Minnesota, Twin Cities

3 Educational Testing Service, Princeton, NJ

Civic learning is increasingly recognized as important by the higher education and workforce communities. The development of high-quality assessments that can be used to evaluate students' civic learning during the college years has become a priority. This paper presents a comprehensive review of existing frameworks, definitions, and assessments of civic-related constructs from approximately 30 projects relevant to higher education, and includes a discussion of the challenges related to assessment design and implementation. Synthesizing information from the review, we propose an assessment framework to guide the design of a next-generation assessment of individuals' civic learning that takes advantage of recent advances in assessment methods. The definition identifies 2 key domains within civic learning: civic competency and civic engagement. Civic competency encompasses 3 areas (civic knowledge; analytic skills; and participatory and involvement skills), and civic engagement also captures 3 areas (motivations, attitudes, and efficacy; democratic norms and values; and participation and activities). We discuss item formats and task types that would ensure fair and reliable scoring for the assessment. The review of definitions of civic learning and its components developed by organizations, the proposed assessment framework, and assessment considerations presented here have potential benefits for a range of higher education institutions. This includes institutions that currently have students engaged in relevant curricular or cocurricular activities and also institutions that would find assessments of civic competency and engagement helpful in program development or in evaluating students' accomplishments.

**Keywords** Student learning outcomes; higher education; civic learning; civic competency; civic engagement; assessment

doi:10.1002/ets2.12081

## Introduction and Rationale

Taken as a whole, education seeks to do two things: help young persons fulfill the unique, particular functions in life which it is in them to fulfill, and fit them so far as it can for those common spheres which, as citizens and heirs of a joint culture, they will share with others. (Conant, 1945, p. 4)

Over the past several decades, educators have made it a priority to promote a civically literate society that helps to foster democracy and a growing economy. It has also been a priority for many who are striving to create a more just and fair world. In this paper, we provide a detailed description of civic learning for students in higher education. We then break down this larger construct of civic learning into two key domains: (a) civic competency (i.e., civic knowledge and skills), and (b) civic engagement. First we introduce the topic of civic learning and suggest several reasons why it is important. Then we provide a detailed review of current conceptual frameworks, research, and assessments of civic learning. After reviewing existing frameworks and measures, the main purpose of this paper is to construct an assessment framework for these two key domains of civic learning that could be elaborated to guide the development of next-generation assessments featuring a variety of item formats, innovative task types, and online delivery with accessibility considerations for all students. Challenges and limitations in assessing civic competency and engagement are also discussed.

*Corresponding authors:* K. C. Roohr, E-mail: kroohr@ets.org; and J. Torney-Purta, E-mail: jtpurta@umd.edu

## The Importance of Civic Competency and Engagement in Higher Education

Educational leaders stress the need to include learning that is related to the development of individuals' civic capacity throughout all years of schooling in the United States (Conant, 1945; Dewey, 1916; Ehrlich, 1997; Pollack, 2013). They have examined a variety of sources of content and pedagogy in the United States, as well as in programs developed abroad. Recently, in a report commissioned by the U.S. Department of Education, the National Task Force on Civic Learning and Democratic Engagement, an initiative of the Association of American Colleges and Universities (AAC&U), made an urgent call to higher education institutions in the United States to make civic literacy, inquiry, and action part of the educational objectives to be achieved by every college graduate. This plan would involve adopting long-term measurable standards to indicate the extent to which college students are gaining a civic perspective during their postsecondary education (National Task Force on Civic Learning and Democratic Engagement [National Task Force], 2012). By referring to a "crucible moment" in the title and throughout the text, the report emphasized a convergence of issues and concerns over the last decade. Higher education institutions themselves have acknowledged the importance of postsecondary education in developing civic learning, with 68% of the chief academic officers surveyed from the 433 member institutions of the AAC&U recognizing civic engagement as an essential learning outcome (AAC&U, 2011, p. 20). A further exhortation appears in the National Task Force report that higher education institutions should be supported to "develop a national framework of civic indicators across knowledge, skills, values, and collective action" (National Task Force, 2012, p. 38). Recently, taking concrete steps in this direction, the Research Institute for Studies in Education (RISE) at Iowa State University completed a paper reviewing the literature in the area of civic learning and engagement for AAC&U and the American Association of State Colleges and Universities (AASCU; Reason & Hemer, 2015).

The groups in the higher education community referred to in the previous paragraph have extended calls to action in reports that focused on K–12 education, such as *Guardian of Democracy: The Civic Mission of Schools* (Gould, 2011). This widely cited report included calls for postsecondary institutions to "require all students, regardless of major, to take at least one engaging civic learning course" and encouraged postsecondary students to "volunteer as civic mentors in K–12 schools" (Gould, 2011, p. 43).

## Disciplinary Interest in Civic Engagement in Higher Education

Some who work in this area prefer the adjective *political* to the adjective *civic* (or vice versa) in describing engagement. Taking an empirical approach, Bennion and Dill (2013) examined the terminology found in titles and abstracts in the two major journals publishing research on undergraduate political science instruction (i.e., *Political Science and Politics* and the *Journal of Political Science Education*). They found that the concepts of civic skills or engagement and service learning were mentioned about equally. Engagement and skills with an explicitly political focus were mentioned slightly less frequently than either civic engagement or service learning (Bennion & Dill, 2013). Another attempt to distinguish civic and political concepts comes from a latent class analysis of the types of engagement among 1,800 recent college graduates who reported their organizational engagements on an ACT alumni survey (Weerts, Cabrera, & Perez Mejfas, 2014). Forty percent of their sample (the largest cluster group as revealed by a latent class analysis) was active in civic/charity activities but avoided political, partisan, or social change organizations. In general, there appears to be a tendency to avoid framing definitions in terms of explicitly political activism (especially partisan activities) in most of the studies reviewed and a preference toward the term *civic engagement*.

This issue also should also be considered in a more substantive way. Regardless of whether one promotes civic or political actions, this raises normative issues. These issues are contested among groups that advocate different civic-related programs. There is considerable common ground but also significant principled disagreement. The question can be framed in this way: On what values should programs be based? To name just a few, these values might include respect for the exceptional character of America's democracy and its economic system, a participatory democracy's need for high levels of conventional political participation (often assumed to be connected with partisanship), ideals of social justice or human rights (often fostered through programs of volunteering), or the need to encourage ethical and socially responsible personal behavior (Levine & Higgins-D'Alessandro, 2010; Reason, 2011; Westheimer & Kahne, 2004). The focus of this paper, however, is not to evaluate frameworks primarily in relation to their underlying value dimensions. It is more concretely to review existing frameworks, assessments, and research, and to propose a comprehensive, yet feasible approach to further elaborate this domain through the development of an assessment framework. The next sections

describe approaches to civic competency and engagement as they have been elaborated by scholars within academic institutions as well as employers.

Several fields of study have mentioned civic engagement prominently in their recommendations for undergraduate education, including political science. Data from national samples of adults of voting age have been the source of inferences about political engagement going back to election studies in the 1960s (see the review in American National Election Studies [2015] and the landmark 1995 book by Verba, Scholzman, and Brady, *Voice and Equality: Civic Voluntarism in American Politics*). In these conceptualizations, the process of involvement requires resources (e.g., discretionary time, money, civic skills, and political information) along with psychological engagement in political processes and recruitment to become involved in political activity. Higher education plays a vital role in the development of these resources. Ten years after Verba et al.'s (1995) landmark book, civic engagement was the central concept in a study of generational differences between adolescents and adults (Zukin, Keeter, Andolina, Jenkins, & Delli Carpini, 2006). The Center for Research on Civic Learning and Engagement (CIRCLE), established at about the same time and now located at Tufts University, has focused attention on political action (especially voting) but also on civic engagement. CIRCLE considers a range of ages and does not have a particular disciplinary focus.

Beginning about a decade ago, the American Sociological Association (ASA) began to elaborate the idea of *public sociology* after the concept was highlighted by Michael Burawoy in his address as the president of American Sociological Association, a presentation that has stimulated extensive commentary in the field (Jeffries, 2009). Public sociology attempts to make research more relevant to members of the public whose decisions could be informed by understanding concepts such as social power, marginalization, or social networks and by deliberating on their implications in a concrete situation. Gans (2009) has argued that addressing the public is an appropriate role for the sociologist, who often serves as “an investigative reporter and analyst of social injustice” and looks at “what is taken for granted and unexamined in everyday life” (p. 125).

*Engaged sociology* is the term used to describe programs of civic engagement and community activity among undergraduates who are learning to apply sociological concepts and use sociological tools (Korgen & White, 2010). These programs sometimes rely not only on volunteering or service-learning activities but also include involvement with social movement or activist organizations, with other civil society groups, and with journalists or media specialists.

In summary, the disciplines of political science and sociology, through general education courses as well as the preparation of majors, are in the forefront of enhancing young people's overall civic capacity, but they are not alone. History departments are increasingly offering (and sometimes requiring) courses on the history of democratic institutions, social movements, and civic action (e.g., James Madison University, 2015). Humanities departments, including departments of English, have recently shown interest in civic engagement (Grobman & Rosenberg, 2015). Tosh (2014) asserted that citizens' abilities to examine issues of public interest in their historical contexts are essential in a thriving democracy (and he invoked the concept of *public history*). Additionally, the American Psychological Association (APA) has taken a positive stance toward activities that foster students' action and sense of responsibility in the community (APA, 2013). Finally, there has been considerable attention to the “civic-minded graduate” who develops competence and engagement regardless of his or her major field (Steinberg, Hatcher, & Bringle, 2011; Steinberg & Norris, 2010). Required general studies courses and cocurricular activities are expected to contribute to the civic-minded graduate's political capacities.

## Employers' Interest in College Graduates' Civic Competency and Engagement

The value of colleges and universities promoting the development of civic-minded individuals has also been recognized as contributing to the quality of the workforce. Employers often report that the technical skills that have dominated the 20th century are important (especially for those entering science, technology, engineering, and mathematics [STEM] fields), but these skills are not sufficient for prospering in the global economy of today. Employers in the 21st century are seeking to hire and promote individuals with knowledge of significant changes in society, intercultural literacy, ethical judgment, humanitarian values, social responsibility, and civic engagement (Casner-Lotto & Barrington, 2006; Gould, 2011; Hart Research Associates, 2010, 2013, 2015; Peter D. Hart Research Associates, 2006, 2008). In fact, according to a recent survey conducted by Hart Research Associates (2015) on behalf of the AAC&U, 87% of over 400 employer respondents stated that all students, regardless of major, “should gain an understanding of the democratic institutions and values” (p. 4). Additionally, 86% of respondents stated that students should “take courses that build the civic knowledge, skills, and judgment essential for contributing to a democratic society” (p. 4).

A second way in which civic competency and engagement have been related to workplace readiness is through studies of organizational citizenship behavior (OCB). Organizational psychologists define OCB as individual employee's "behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the (employee's) organization" (Organ, 1988, p. 4). The civic virtue dimension of OCB pertains to employees taking an active interest in improving the social and psychological environments of the organizations in which they work. A meta-analysis of studies with more than 50,000 respondents showed significant associations between OCB scale scores and lower likelihood of employee turnover, as well as higher productivity at the organizational level (Podsakoff, Whiting, Podsakoff, & Blume, 2009).

Given the value employers place on civic-minded individuals entering the workforce (in addition to the disciplinary groups that support these aims), a civic-related strand of postsecondary education appears to have considerable potential. In fact, attention to civic competency and engagement is particularly appropriate in higher education because this is a developmental period when students are choosing career paths and acquiring both specialized knowledge or skills and the behaviors required to succeed in a job and as a citizen or member of the community. A review of civic missions across higher education institutions concluded that civic development is both a public good (i.e., enhancing the community and political or civic institutions) and a private good (i.e., enhancing employability and providing intrinsic satisfaction to individuals; Carnegie Foundation for the Advancement of Teaching & CIRCLE, 2006).

### The Need for a Coherent Set of Definitions

Even though there is agreement about the importance of civic learning, little shared language exists for labeling its dimensions in a way that could serve as the basis for developing a next-generation assessment. A number of labels (e.g., civic learning, civic capacity, civic education, citizenship) and competencies (e.g., civic skills, civic inclinations) have been proposed by professional organizations, governmental agencies, researchers, and institutions of higher education when referring to civic learning (e.g., Markle, Brennenman, Jackson, Burrus, & Robbins, 2013). The lack of a coherent definition has also been recognized as a general problem. Finley (2011) concluded, "It cannot be expected that students (or faculty) are responding to the same set of conceptual ideas [about civic engagement] when taking a survey, writing a journal or responding to an interview" (p. 18). In one of the influential volumes in the *Bringing Theory to Practice* monograph series, Finley has further argued that "most of what we know about the empirical effects of civic engagement comes through the lens of service learning" (Finley, 2012, p. xvi). That limits the generality of findings, although she also noted that "regardless of whether civic engagement is defined as service learning or democratic skill building, there seems to be broad agreement on best practices (e.g., reflection, high levels of interaction . . . and real-world applications)" (Finley, 2012, p. xvi).

Additionally, a number of challenges are associated with measuring an individual's civic competency and engagement. A considerable number of the existing assessments of civic competency and engagement in higher education have psychometric weaknesses, with many being self-report surveys that lack strong validity evidence. In a meta-analysis, Bowman (2011) found that self-reported gains in civic- and diversity-related attitudes were substantially larger than the gains measured when assessments were conducted over time. This study, along with a broader review, led Reason and Hemer (2015) to conclude, "Civic learning research has predominantly been based on student self-report and cross-sectional design. The addition of more direct measures of civic learning, especially those that can be applied longitudinally, would strengthen the current understanding of how college experiences affect civic learning" (p. 33).

The number of quality assessments in this area has been increasing in higher education, as individual institutions as well as centers and projects have developed measures (see Beaumont, Colby, Ehrlich, & Torney-Purta, 2006; Hurtado & DeAngelo, 2012; Hurtado, Ruiz, & Whang, 2012a, 2012b; Office for Standards in Education, 2003). The issue of psychometric quality will be discussed later in sections on reliability and validity. Concerns about socially desirable answering patterns to self-report questions, which may make respondents appear more civically engaged than they actually are, will be considered.

As illustrated by the previous discussion, it is an appropriate time to look at the variety of ways in which civic competency and engagement have been defined and assessed across the wide range of higher education institutions in the United States. There are growing calls for recognition of students' achievements in this area. This includes suggestions to award campus-based certificates or to offer structured course programs leading to a college minor (Butin & Seider, 2012) and/or digital badges, an effort explored by CIRCLE supported by the Bechtel Foundation (Sullivan, 2013). In particular, Holland (2014) has persuasively argued that at this time of rapid change in higher education — in its economic models, the

diversity of its students, the modes of teaching, and the criteria associated with institutional reputation—the field needs to move toward coherent and shared definitions of terms such as *civic engagement*, *civic motivation*, and *civic achievement*. Furthermore, it is an appropriate time to exert leadership in designing a process of institutional or program-level assessments that colleges and universities could use to examine their own campuses and/or to recognize students' civic competency and engagement.

In the subsequent sections of this paper, we provide a review of the current frameworks, research, and assessments in the area of students' civic learning, and propose an assessment framework with considerations for the design of a next-generation assessment. The term *civic learning* is sometimes used as a higher-level descriptor to integrate knowledge, intellectual, and participatory skills, values, and dispositions or attitudes (Gould, 2011; Hurtado et al., 2012a, 2012b; Musil, 2009; U.S. Department of Education, 2012). In the remainder of the paper, we acknowledge the overarching construct of civic learning while distinguishing between civic competency (i.e., knowledge and skills) and civic engagement (i.e., motivation, values, and participation).

### Current Frameworks, Definitions, and Assessments of Civic Competency and Engagement

Professional organizations, governmental entities, think tanks, scholars from universities, and experts from foundations have provided definitions and frameworks in an attempt to establish more coherent approaches to constructs related to civic competency and engagement at all levels of education. Internationally, especially in Europe, definitions and frameworks have also been developed, and assessment initiatives have been led by large-scale testing organizations such as the International Association for the Evaluation of Educational Achievement (IEA; headquartered in Amsterdam) and by the Qualifications and Curriculum Authority (QCA in the United Kingdom).

Table 1 presents more than a dozen definitional frameworks, primarily from organizations with an interest in higher education in the United States. These frameworks of civic-related constructs will be discussed, highlighting both their similarities and differences. Table 2 presents a structured summary of assessments measuring constructs in the categories of civic competency and civic engagement. The majority of the organizations whose conceptual frameworks are found in Table 1 also appear together with some specifics of their assessments in Table 2. In other words, the entries in Table 1 were in most cases intended by their authors for use both as frameworks to develop programs and as guidelines for assessments. However, a number of frameworks have also been developed for the purpose of guiding instrument or assessment design and not primarily for program guidance. Frameworks that fall into this category are found only in Table 2 (e.g., National Assessment of Educational Progress [NAEP] Civics Assessment, National Survey of Student Engagement [NSSE] Topical Module on Civic Engagement). Both tables provide relevant information to guide the development of a conceptual definition and a next-generation assessment, as well as ideas about modes and topics for assessment.

### Foundational Frameworks of Civic Competency and Engagement in the United States

Beginning in the mid-1990s, scholars such as Ehrlich (1997) highlighted the lack of research on the relation of higher education and civic engagement and described some avenues, components, and strategies that institutions of higher education could use to remedy this situation. Ehrlich's vision was exemplified in the Political Engagement Project (PEP) at the Carnegie Foundation for the Advancement of Teaching from about 2000 to 2007. Saltmarsh (2005), a scholar who studies the ways that engagement for democracy could transform higher education, defined civic learning as the learning and development of an ability for effective civic engagement by the process of acquiring knowledge (e.g., historical and contemporary), skills (e.g., civic imagination and creativity), and values (e.g., justice) through college courses that focus on democratic societies, as well as other experiences on campus and in the community.

A number of other scholars and organizations have also put forth conceptual frameworks and learning outcomes of civic learning, such as the recent work of the AAC&U culminating in the publication titled *A Crucible Moment: College Learning and Democracy's Future* (National Task Force, 2012), research initiated at the Carnegie Foundation for the Advancement of Teaching in PEP and continued in an action project (The American Democracy Project) at the AACSCU (Beaumont et al., 2006; Colby, Beaumont, Ehrlich, & Corngold, 2007; Goldfinger & Presley, 2010), and the Lumina Foundation's Degree Qualification Profile (Adelman, Ewell, Gaston, & Schneider, 2011, 2014). Similar to the approach of Saltmarsh, these definitions and conceptual frameworks identify civic knowledge, skills, values, dispositions, and behaviors as part of the learning outcomes that college graduates should possess to be prepared, knowledgeable, active, and

**Table 1** Terms and Definitions of Civic Competency and Engagement from Current Frameworks

Framework	Term	Definition
<b>Frameworks developed by organizations in the United States</b> AAC&U’s (Association of American Colleges and Universities) Framework for 21st-Century Civic Learning and Democratic Engagement	Civic literacy	“The cultivation of foundational knowledge about fundamental principles and debates about democracy expressed over time, both within the United States and in other countries; familiarity with several key historical struggles, campaigns, and social movements undertaken to achieve the full promise of democracy; the ability to think critically about complex issues and to seek and evaluate information about issues that have public consequences” ([National Task Force, 2012, p. 15]. Also referred to as “knowledge” with an elaborated list including elements from history, sociology, cultural studies, and political science (National Task Force, 2012, p. 4).
	Civic inquiry	“The practice of inquiring about the civic dimensions and public consequences of a subject of study; the exploration of the impact of choices on different constituencies and entities, including the planet; the deliberate consideration of differing points of views; the ability to describe and analyze civic intellectual debates within one’s major or areas of study” (National Task Force, 2012, p. 15). Also referred to as “skills” with an elaborated list adding multiple perspectives and collaboration (National Task Force, 2012, p. 4).
AAC&U’s Valid Assessment of Learning in Undergraduate Education (VALUE) rubric	Civic action	“The capacity and commitment both to participate constructively with diverse others and to work collectively to address common problems; the practice of working in a pluralistic society and world to improve the quality of people’s lives and the sustainability of the planet; the ability to analyze systems in order to plan and engage in public action; the moral and political courage to take risks to achieve a greater public good” (National Task Force, 2012, p. 15). Also referred to as “values” and “collective action” with an elaborated list including respect, responsibility, and public problem solving (National Task Force, 2012, p. 4).
	Civic engagement	“Civic engagement is working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes” (Excerpted by Rhodes, 2010, from <i>Civic Responsibility and Higher Education</i> , edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.). In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually life enriching and socially beneficial to the community” (Rhodes, 2010, p. 1).
AAC&U’s Valid Assessment of Learning in Undergraduate Education (VALUE) rubric	Civic communication skills	“Listening, deliberating, negotiation, consensus building; and productive use of conflict” (Rhodes, 2010, p. 1).
	Civic action/reflection	Showing initiative in leadership of civic activities and having reflective insights about accomplishments.
	Civic identity	Seeing oneself “as an active participant in society with responsibility to work with others toward public purposes” (Rhodes, 2010, p. 1).



Table 1 Continued.

Framework	Term	Definition
AASCU (American Association of State College and Universities) American Democracy Project (Partnered with the Political Engagement Project (PEP); described below)	Political knowledge	“Knowledge and understanding to make the most of students’ political activity—both foundational and topical (about issues and events)” (Goldfinger & Presley, 2010, pp. 13–14).
	Democratic participation skills	“Collaborate, plan strategically, reach compromises, articulate arguments ... practiced as political skills” (Goldfinger & Presley, 2010, pp. 13–14).
	Motivation	“Interest, personal identity and sense of efficacy” (Goldfinger & Presley, 2010, pp. 13–14).
	eCitizenship	Media and information literacy; use of social networks and technology tools for civic purposes (AASCU, 2014).
Advancing Civic Learning and Engagement in Democracy Road Map—U.S. Department of Education	Civic learning and democratic engagement	“Educational experiences that intentionally prepare students for informed, engaged participation in civic and democratic life by providing opportunities to develop civic knowledge, skills, and dispositions through learning and practice. These include civics and government as subjects unto themselves but also service-learning and other approaches for integrating a civic and democratic dimension into other disciplines, such as science, technology, engineering, and math” (U.S. Department of Education, 2012, p. 1).
	Intellectual skills	“Gathering, interpreting and presenting information; understanding issues, their history, and contemporary relevance; evaluating and defending a position; assessing involvement; identifying rights and responsibilities” (Gottlieb & Robinson, 2006, p. 22).
American Association of Community Colleges	Participatory skills	“Collaborating, building coalitions; negotiating and seeking consensus; making decisions; learning cooperatively; working with diverse groups (in race, culture, ideology)” (Gottlieb & Robinson, 2006, p. 22).
	Research skills	Using resources in print and online; “tracking issues in the media; researching issues in the community; reflecting on meetings; judging the reliability of information and identifying bias” (Gottlieb & Robinson, 2006, p. 22).
Bringing Theory to Practice	Persuasion Skills	“Writing letters to newspapers and government; identifying group and personal interests; developing a rationale for one’s point of view; leadership skills; getting others involved in civic action” (Gottlieb & Robinson, 2006, p. 22. Adapted from Constitutional Rights Foundation).
	Civic-mindedness; commitment to the public good; campus leadership	“Thinking about and paying attention to the public good and well-being of society in developing knowledge for a public purpose” (Checkoway, 2014, p. 77). “Recognizing the link to wage earning and professional preparation” (Scobey, 2012, p. 6). “Recognizing the values, obligations, and risks of civic understanding and action” (Harward, 2013, p. xviii).
CIRCLE (Center for Research and Information on Civic Learning and Engagement)	Civic skills	“Civic skills include communication (both expressing and understanding facts and opinions), democratic deliberation/collective decision making, and critical analysis of political information” (CIRCLE, 2010, p. 3). In addition to K-12 schools, these are built in higher education, workplaces, religious and voluntary organizations, national and community service, families, and neighborhoods (CIRCLE, 2010). These skills are necessary for governmental transparency to be meaningful, for effective participation, and for citizen collaboration.

Table 1 Continued.

Framework	Term	Definition
Degree Qualifications Profile (DQP)	Civic learning	Associate level: the student “describes his/her own civic and cultural background; describes diverse positions ... on selected democratic values or practices, and present his or her own position on a specific (related) problem; provides evidence of participation in a community project; identifies an economic, environmental, or public health challenge spanning countries ... presents evidence for the challenge, and takes a position on it” (Adelman et al., 2014, p. 19).
Delli Carpini and Keeter	Civic knowledge	Bachelor’s level: the student “explains diverse positions ... on a contested public issue and evaluates the issue in light of those interests and evidence drawn from journalism and scholarship; develops and justifies a position on a public issue and relates ... to alternative views held by the public or within the policy environment; collaborates with others in developing and implementing an approach to a civic issue, evaluates the strengths and weaknesses of the process; identifies a significant issue affecting countries ... presents quantitative evidence of that challenge through tables and graphs, and evaluates the activities of either non-governmental organizations or cooperative inter-governmental initiatives addressing that issue” (Adelman, et al. 2014, p. 19).
Framework for Learning and Development	Humanitarianism and civic engagement	Factual information about politics including “institutions and processes of government, current economic and social conditions, the major issues of the day, the stands of political leaders on those issues” (Delli Carpini & Keeter, 1996, p. 1). In an earlier study, gender issues and party politics were also considered as separate categories of knowledge (Delli Carpini & Keeter, 1993, p. 1185).
Outcomes — Council for the Advancement of Standards (CAS) in Higher Education	Ethical and social responsibility in a diverse world	A student ought to possess (a) an “understanding and appreciation of cultural and human differences,” (b) a “global perspective,” (c) “social responsibility,” and (d) a “sense of civic responsibility” and capacities for collaboration and effective leadership (Council for the Advancement of Standards in Higher Education, 2008, pp. 3–4). Academic advising and other processes in higher education should contribute to these goals.
(APA) Guidelines for the Undergraduate Psychology Major (Version 2.0)		“The development of ethically and socially responsible behaviors for professional and personal settings” (APA, 2013, p. 26). Baccalaureate students ought to be able to (a) “apply ethical standards to evaluate psychological science and practice;” (b) “promote values that build trust and enhance interpersonal relationships;” and (c) “adopt values that build community at local, national, and global levels” (APA, 2013, p. 20). These include the following indicators: “pursue personal opportunities to promote civic, social and global outcomes that benefit the community; consider the potential effects of psychology-based interventions on issues of global concern (poverty, health, migration, human rights, rights of children, international conflict, sustainability); apply psychological principles to a public policy issue and describe the anticipated institutional benefits or societal changes; seek opportunities to serve others through volunteer service” (APA, 2013, p. 27).

Table 1 Continued.

Framework	Term	Definition
Indiana University-Purdue University Indianapolis (IUPUI) Center for Service and Learning	Civic-mindedness	Civic-mindedness has these elements: “academic knowledge and technical skills, knowledge of . . . non-profit organizations, knowledge of contemporary social issues; listening and communication skills, diversity skill, self-efficacy, behavior intentions toward civic behavior” (Bringle & Steinberg, 2010, p. 430). Further, a specific definition is given of a “civic-minded graduate,” as having “the capacity and desire to work with others to achieve the common good.” This includes awareness of how knowledge and skills in at least one discipline are relevant to addressing issues in society, as well as “understanding the complexity of issues in modern society,” “skills in communication, diversity and consensus,” “disposition valuing community engagement, self-efficacy, and sense of responsibility to use knowledge gained in higher education to serve others.” Finally there are behavioral intentions (Steinberg et al., 2011, p. 22).
	Civic responsibility	A student ought to (a) possess a “sense of civic responsibility,” (b) possess “commitment to public life through communities of practice,” (c) “engage in principled dissent,” and (d) be “effective in leadership” (NASPA & the American College Personnel Association, 2004, p. 21). Based on leadership theory, community development theory, organizational development, and change theory. Civic knowledge and understanding includes “interpretation, judgment, understanding of complex social issues, and a grasp of ethical and democratic principles” (Beaumont, 2005, p. 292). It is important because political interest depends upon possessing knowledge resources to understand issues or engage in discussion.
Learning Reconsidered — National Association of Student Personnel Administrators (NASPA)	Civic engagement	The dimensions of motivation include “substantive values, ideals, convictions and interests” (Beaumont, 2005, p. 292). “A sense of a politically engaged identity and political agency or efficacy” were also important along with a sense of community or solidarity. These were seen as precursors to action.
	Civic knowledge and understanding	“Organizational and communication capacities required for civic and political action” (Beaumont, 2003, p. 20). Different projects stress different aspects of skills, some more cognitive or analytic, some concerned with deliberation or discussion, others involving the ability to identify important pressure points in a given context. Examples of how and where these skills might be fostered in a college setting were included (Beaumont, 2005, p. 301).
Political Engagement Project (PEP)—Carnegie Foundation for the Advancement of Teaching until 2007	Motivation, values, and identity	Actions and involvement were rooted in the political science literature but more broadly conceived. They included voting and campaigning, and also group membership, volunteerism and community service, discussion participation, voicing an opinion, direct action on a social problem, and consumer-oriented action.
	Skills and capacities <sup>a</sup>	
	Action and involvement <sup>a</sup>	

Table 1 Continued.

Framework	Term	Definition
<b>Selected frameworks developed in Europe</b> Citizenship Studies: Programme of study for General Certificate of Secondary Education (GCSE) Examination in UK	Active citizenship	Active citizenship involves having an awareness of issues, having the desire to act on issues, being able to make judgments and decisions, taking direct peaceful action, collaborating with others, and reflecting on decisions and actions (Qualifications and Curriculum Authority, 1998). Topics of study for the GCSE assessment include community action and active citizenship; being a citizen in the UK; democracy and identity; fairness and justice; and global issues and making a difference (AQA, 2012).
Framework for Learning UK	Citizenship	Citizenship goes beyond “doing good works;” it develops young people’s ability to apply political knowledge and understanding to issues that concern them. In addition, particularly at post-16, they are encouraged to investigate issues, express their views, and take actions that make a difference to the communities of which they are part (college, neighborhood, region, country, other parts of the world), helping them to develop as more effective members of society (Quality Improvement Agency for Lifelong Learning, 2007, p. 4).
Processes Influencing Democratic Ownership and Participation (PIDOP) (A European Commission Project at the University of Surrey, UK)	Political and civic participation	Individuals aged 16 through 26 should be participating actively in the life of the (culturally diverse) societies to which they belong while simultaneously respecting the fundamental principles of democratic processes, human rights, and the rule of law. This implies knowledge of these principles. Distinguishes between nonparticipation, civic participation (activity focused on the public good or community problems), latent-political participation (paying attention to politics, ready to be mobilized), and political participation (both formal and activist; Barrett, 2012).

<sup>a</sup>These definitions were refined throughout the project based on framed interviews and case studies conducted on 12 campuses. Refinement was also based on a pre-post survey of students involved in political engagement projects in 21 universities’ programs (Beaumont, 2003; Beaumont, 2005; Beaumont, Colby, Ehrlich, & Torney-Purta, 2006; Colby et al., 2007).

**Table 2** Existing Assessments Measuring Civic Competency<sup>a</sup> and Engagement<sup>b</sup>

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
AAC&U's (Association of American Colleges and Universities) Valid Assessment of Learning in Undergraduate Education (VALUE) rubric <sup>b</sup>	AAC&U	Rubrics for judging written material	Various	Various (depends on choice of topic)	Various	College students	Measures diversity of communities and cultures, analysis of knowledge, civic identity and commitment, civic communication, civic action and reflection, and civic context/structures (Rhodes, 2010).
AASCU (American Association of State Colleges and Universities) Audit and Assessment Activities <sup>b</sup>	AASCU Civic Health Initiative	Rubrics for assessing community information	Various	Various	Various	College students and adults	Measures political engagement, public work, volunteering, groups, online participation (AASCU/NCoc, 2012).
Activism Orientation Scale <sup>b</sup>	Notre Dame University (published article)	Likert-type	Paper-and-pencil	Various	35-item scale with 2 potential subscales	College students and adults	Measures two aspects of activism orientational: low risk/conventional activism and high risk activism (Corning & Myers, 2002).
CIRCLE (Center for Research on Civic Learning and Engagement) <sup>a,b</sup>	CIRCLE (Tufts University), working papers No. 55 and No. 77	Multiple-choice; Likert-type (some with justifications)	Usually paper-and-pencil	Various	Set of items determined by the individual doing the research	Adolescents and young adults	Measures civic competence for specific actions (15 items), views of elected officials (15), conventional civic engagement (32), political efficacy (6), equality and injustice (6), citizenship types (16), parents' civic engagement (3), political conversation (12), values (13), personal beliefs (7), media perceptions (19), school climate (24), civic knowledge (6) (Flanagan et al., 2007).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
Civic Literacy Exam (2007 and 2008 versions) <sup>a</sup>	Intercollegiate Studies Institute (ISI) National Civic Literacy Board	Multiple-choice	Paper-and-pencil; Web-based (2007); Telephone survey (2008)	Untimed	60 items (2007); 118 items (2008)	Freshman and senior students in higher education institutions (2007); Sample of adult individuals with residential telephone service (2008)	Measures “the top 50 themes related to ... ordered liberty” in America that “capture the essential facts and concepts of history, political science, and economics that contribute to most civic knowledge” (ISI National Civic Literacy Board, 2006, para. 3). Measures respondent’s civic knowledge (33 items), their public philosophy (39), civic behavior (29), and demographics (16) (ISI National Civic Literacy Board, 2011).
College Senior Survey (CSS) <sup>b</sup>	Higher Education Research Institute (HERI)-UCLA	Likert-type	Web-based	Untimed (typically takes around 25 minutes)	38 items (some items have subitems)	Freshmen and graduating college seniors	Measures academic, civic, and diversity outcomes along with a comprehensive set of college experiences. Activities from campaigns to demonstrations to volunteering; emphasizes awareness of the world around them and social agency (HERI, 2014a). An 8-item subscale of Civic Values (Lott & Eagan, 2011).
Delli Carpini & Keeter <sup>a</sup>	<i>What Americans Know About Politics and Why it Matters</i> (Book)	Short oral answer	Telephone surveys	Varies by survey	The book’s appendix includes more than 100	Adult samples	Measures political and economic concepts, foreign affairs, institutions, processes, public figures, parties (Delli Carpini & Keeter, 1996, pp. 307–328; see also Delli Carpini & Keeter, 1993).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
DIT-2 (Defining Issues Test) focused on social/political topics <sup>a</sup>	University of Minnesota (Rest & Narvaez, 1998; Thoma & Dong, 2014)	Problem scenarios followed by multiple-choice	Paper-and-pencil	Untimed	5 scenarios each with 12 “issues” ranked on importance in deciding an action	College students and adults	Measures the extent to which an individual’s judgments in social/political dilemmas are based on self-interest, maintaining social norms, or postconventional moral schemas (e.g., shared ideals, reciprocity). Political topics include famine in developing countries, journalists’ disclosures about a candidate, community input to a school board, assisted suicide, and students’ protests of military action. Also uses the number of responses of “can’t decide” to measure indecision on social/political/moral issues (Rest & Narvaez, 1998; Thoma & Dong, 2014).
Diverse Learning Environments (DLE) Survey (Core Survey Instrument) <sup>b</sup>	HERI	Likert-type; Yes/no	Web-based	Untimed (typically takes around 35 minutes)	52 items	Students in 2-year (after 24 credit hours) and 4-year college intuitions (2 <sup>nd</sup> or 3 <sup>rd</sup> year students)	Measures components of institutional climate, campus practices, and student learning outcomes. These include: civic action (6 items), social action engagement (6), and pluralistic orientation (5) (HERI, 2014b). Also values (social agency; 6 items), skills (self-ratings of perspective taking, negotiation, cooperation; 6), knowledge (integration of learning and applying concepts; 3) (Hurtado et al., 2012b).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
International Association for the Evaluation of Educational Achievement (IEA) Civic Education Study – CIVED Instrument including cognitive and attitudinal portions <sup>a,b</sup>	IEA & University of Maryland — many listed in Education Commission of the States (ECS) QNA compendium of items website	Multiple-choice; Likert-type	Paper-and-pencil	35 minutes (multiple-choice); Untimed (Likert-type)	38 – 40 multiple-choice items; 136 Likert-type items	14-year olds in 28 countries including the U.S.; 17- to 19-year-olds in 16 countries not including the U.S.	Measures four domains of civic education content: (a) democracy and its associated institutions (e.g., along with the rights and responsibilities of citizens); (b) national identity and international relations; (c) social cohesion and diversity; and (d) economics (only assessed with 17 – 19 year-olds) (Schulz & Sibberns, 2004). Multiple-choice items assess knowledge focused on democracy and citizenship, and cognitive civic skills. Likert-type items assess concepts of democracy and citizenship (40 items); attitudes of trust in government (12), toward immigrants and ethnic minorities, and women's rights (28), and expected civic and political actions (27); and effectiveness of specific actions (8 items given to 17- to 19-year-olds only) (Amadeo, Torney-Purta, Lehmann, Husfeldt, & Nikolova, 2002; Torney-Purta et al., 2001).



Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
International Civics and Citizenship Education Study (ICCS) — International Cognitive Test <sup>a</sup>	IEA Data Processing Center	Multiple-choice; Open-ended	Paper-and-pencil	45 minutes	80 items (74 multiple-choice; 6 open-ended, matrix sampled)	Students in Grade 8 if the average age is 13.5 and above, or Grade 9 if the average age is below 13.5 years of age	Measures the cognitive domains of knowing, reasoning, and analyzing across four content domains, including: civic society and systems, civic principles, civic participation, and civic identities. Items are embedded into four contexts including: wider community, schools and classrooms, home environments, and the individual (Schulz et al., 2008).
ICCS — International Student Questionnaire <sup>b</sup>	IEA Data Processing Center	Likert-type; Multiple-response; Categorical response; Open-ended	Paper-and-pencil	40 minutes	121 items	Students in Grade 8 if the average age is 13.5 and above, or Grade 9 if the average age is below 13.5 years of age	Measures these affective-behavioral domains: value beliefs, attitudes, behavioral intentions, and behaviors across the same four content domains and contexts used in the cognitive test (Schulz et al., 2008). Many items from CIVED were included.
Indiana University-Purdue University Indianapolis (IUPUI) Center for Service and Learning Measures of the Civic-Minded Graduate <sup>a,b</sup>	IUPUI	Likert-type; Written narrative; Interview with a problem scenario scored with rubrics	Pencil-and-paper and face-to-face	Various	37 Likert-type	College students	Measures self-perceptions of knowledge (volunteer opportunities, issues), skills (listening, diversity, consensus), dispositions (efficacy, valuing community engagement, social trustee of knowledge), and behavioral intentions. Rubrics for scoring written narrative and interviews measure civic identity, understanding, and being willing to address social issues (Steinberg & Norris, 2010; Steinberg et al., 2011).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
National Assessment of Educational Progress (NAEP) Civics <sup>a</sup>	National Center for Educational Statistics (NCES); U.S. Department of Education	Multiple-choice (60%); Short-answer (30%); Extended-response (10%)	Paper-and-pencil	25 minutes	Unknown	Grade 4, Grade 8, and Grade 12 students in the United States	Measures “civics knowledge, skills, and dispositions that are critical to the responsibilities of citizenship in America’s constitutional democracy” (NCES, 2011, para. 1). Civics knowledge includes: What are the civic life, politics, and government?, What are the foundations of the American political system?, How does the government established by the Constitution embody the purposes, values, and principles of American democracy?, What is the relationship of the United States to other nations and to world affairs?, and What are the roles of citizens in American democracy? (National Assessment Governing Board, 2010).
National Civic and Political Health Survey (CPHS) <sup>b</sup>	CIRCLE	Yes/no; Likert-type	Telephone and web-interviews	Untimed	19 items (some items have subitems)	Young people age 15–25; Adults 26+ in the continental United States	Measures 19 indicators of civic engagement divided into three main categories including: civic activities (e.g., volunteer service), electoral activities (e.g., voting), and political voice activities (e.g., writing to an elected official; Lopez et al., 2006).
National Survey of Student Engagement (NSSE) Topical Module: Civic Engagement <sup>b</sup>	NSSE	Likert-type; Open-ended	Paper-and-pencil	Untimed	14 items (13 Likert-type; 1 open-ended)	First-year and senior-year college students	Measures students’ self-perceptions of their conflict resolution skills and examines student engagement in local/campus and state/national/global issues. This module is complementary to the core NSSE survey’s questions regarding service learning, community service, and campus engagement (Trustees of Indiana University, 2013).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
Personal and Social Responsibility Inventory (PSRI) <sup>b</sup>	Research Institute for Studies in Education (RISE), Iowa State University (disseminated through AAC&U)	Likert-type, Open-ended	Computer-based (email)	Untimed	Varies	College students and university personnel	Measures the extent to which the respondent believes that the institution as a whole supports each of five dimensions, whether the dimension is and ought to be a focus of the institution, and the student's own behavior relative to that dimension. The dimensions are striving for excellence, cultivating academic integrity, contributing to a larger community, taking seriously the perspectives of others, and developing competence in ethical and moral reasoning and action (Ryder & Mitchell, 2013).
Political and Social Involvement Scale <sup>b</sup>	Wabash National Study	Likert-type	Paper-and-pencil	Untimed	11 items	College students	Measures "the importance students place on volunteering, promoting racial understanding, and influencing political structures" (Center of Inquiry in the Liberal Arts, 2013).
Political Engagement Project (PEP) Survey <sup>a,b</sup>	Carnegie Foundation for the Advancement of Teaching (and publications of Beaumont)	Likert-type; Multiple-choice; Open-ended	Paper-and-pencil (given online)	Untimed	200 Likert-type; 3 multiple-choice, 2 open-ended across 35 scales	College students	Measures knowledge/understanding; skills, identity/values, volunteerism, interest motivation; efficacy, action/involvement; subjective change (Beaumont, 2005; partial survey in Colby et al., 2007).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
Processes Influencing Democratic Ownership and Participation (PIDOP) <sup>a,b</sup>	University of Surrey Research Center; Martyn Barrett	Likert-type; Multiple-choice	Paper-and-pencil	Untimed (typically takes 60–90 minutes)	171 Likert and 3 knowledge items	Young adults aged 16 to 26 in Europe	Measures political interest (3 items); political attentiveness (3); past participation (15); effectiveness of participation (15); future participation (15); organizations (8); participation quality (8), private citizenship (4); participation motivation (6); participation barriers (4); efficacy (4); collective efficacy of youth, ethnic groups and gender (6); norms (8); trust (20); emotions about issues (10); well-being and sense of community (8); group identification (14); support minority rights (11); and political knowledge (3) (survey in Barrett & Zani, 2015). See also Barrett (2012).
Psychology Majors' Civic Engagement and Community Involvement <sup>a,b</sup>	Table of Assessment Instruments related to Ethical and Social Responsibility in a Diverse World Educational Commission of the States (ECS); National Center for Learning and Citizenship (NCLC now NCLCE)	Likert-type	Paper-and-pencil	Untimed	9 scales and surveys are listed, of varying lengths	College students	List of measures of knowledge (1 instrument); the remaining 8 measures focus on multiculturalism and diversity attitudes (APA, 2013).
School Citizenship Education Climate Assessment and Database of Knowledge, Skills and Dispositions Questions (QNA) <sup>a,b</sup>	Commission of the States (ECS); National Center for Learning and Citizenship (NCLC now NCLCE)	Likert-type; Short answer	Paper-and-pencil	Untimed	100 items (7 parts for school climate); QNA database includes more than 250 items.	Various groups in the school community including administrators, teachers, parents; QNA contains items for students K-12	Measures climate within a school: the impression, beliefs and expectations held by the members of the school community <sup>a</sup> (ECS, 2006). Also, database of juried items from other projects measuring civic knowledge, civic cognitive skills, civic participation skills, core civic dispositions, participation dispositions (ECS, 2015).

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
Service Learning (Compendium of Measures) <sup>a,b</sup>	<i>The Measure of Service Learning</i> (book)	Various	Paper-and-pencil	Untimed	Various numbers in the 41 different scales	College students, adults	A collection of measures presented to correspond to a conceptualization of civic attitudes, civic skills, and civic motives. Scales (described and with test characteristics) are grouped into chapters titled "Motives and Values," "Moral Development," "Self and Self-Concepts," "Student Development," "Attitudes," and "Critical Thinking" (Bringle, Phillips, & Hudson, 2004). Measures eight dimensions including: consciousness of self, congruence, commitment, collaboration, common purpose, controversy with civility, citizenship, and change. These eight dimensions are from Astin et al.'s <i>Social Change Model of Leadership Development</i> (Dugan & Komives, 2007). Measures within themes: "community action and active citizenship, democracy and identity; fairness and justice; and global issues and making a difference" (AQA, 2012, pp. 7 – 14). Revision proposed to measure knowledge and understanding of democracy and politics; citizen participation in democracy and society; rights the law and the legal system; UK relations with the wider world; identities and diversity in the UK; the economy, finance and money; citizenship skills processes and methods (Department for Education, 2014, <i>Citizenship Studies: Draft GCSE subject content</i> , pp. 4 – 10).
Socially Responsible Leadership Scale – Revised Version II (SRLS-R2) <sup>b</sup>	National Clearinghouse for Leadership Programs (NCLP)	Likert-type	Paper-and-pencil	Untimed (takes about 15 minutes)	68 items (6 – 9 items per scale)	College students	
UK General Certificate of Secondary Education (GCSE) Assessment <sup>a,b</sup>	Assessment Qualifications Alliance (AQA; the largest UK Examination Board)	Short answer; Essay; Project assessment	Primarily pencil-and-paper	Varies according to section of the exam	Varies according to section of the exam	14- to 16-year-old students in the UK seeking a GCSE qualification	

Table 2 Continued.

Measure	Source	Format	Delivery	Length	# Items	Target audience	Themes/topics assessed
U.S. Naturalization Exam <sup>a</sup>	U.S. Citizenship and Immigration Services	Open-ended (one or two-word correct answer)	Oral	Untimed	10 items (from a pool of 100 items)	Immigrants to the United States	Measures knowledge of the American government, history, and integrated civics. American government questions address principles of American democracy, systems of government, and rights and responsibilities. American history questions address colonial period and independence, 1800s, and recent American history and other important historical information. Integrated civics questions address geography, symbols, and holidays (U.S. Citizenship and Immigration Services, 2011).
Youth and Participatory Politics Survey <sup>b</sup>	MacArthur Foundation Research Network – Kahne	Likert-type	Paper-and-pencil	Untimed	About 70 in recent version	Late adolescents and early adults	Measures politics-driven, interest-driven, and friendship-driven dimensions of online participatory civic/political cultures. Also, democratic habits (attention/interest), commitments (ideology), and skills (expression) (Cohen & Kahne, 2011; Kahne et al., 2013, p. 3).
Zukin, Keeter, Andolina, Jenkins, & Delli Carpini (National Youth Civic Engagement Index Project) <sup>ab</sup>	<i>A New Civic Engagement: Political Participation, Civic Life, and the Changing American Citizen</i> (book)	Likert-type; scales; 2 open-ended knowledge items	Telephone surveys	Various	Varied	Individuals age 15 and older	Measures cognitive engagement in politics (including 2 knowledge items, attention to public affairs, talking with others), civic indicators (including community problem solving, volunteering, association membership, fundraising), political indicators (including voting, campaigning), indicators of public voice (including contacting officials or media, petitions, boycotting products) (Zukin et al., 2006, pp. 57–58).

<sup>a</sup>Measures civic competency. <sup>b</sup>Measures civic engagement.

engaged citizens (e.g., Adelman et al., 2011, 2014; Beaumont, 2005; Hurtado et al., 2012a, 2012b; National Task Force, 2012; Torney-Purta & Vermeer, 2006; U.S. Department of Education, 2012). Other efforts have used terms such as *civic knowledge, literacy, and awareness; civic and democratic engagement; critical consciousness and action; social agency; altruism and social activism; openness to diversity and pluralistic orientations; humanitarian/civic involvement values; and civic communication* (e.g., Hurtado & DeAngelo, 2012; Hurtado et al., 2012a, 2012b; National Task Force, 2012; Rhodes, 2010). Nearly all agree that civic learning is a construct of a multidimensional nature.

The AAC&U definitions are represented prominently in Table 1. In that National Task Force (2012) report, AAC&U took a comprehensive view and defined the civic learning process as the educational opportunities that colleges and universities offer their students to facilitate the learning of civic and democratic knowledge, skills, and dispositions through theory-based practice (U.S. Department of Education, 2012). The dimensions (in Table 1 under the first AAC&U entry) include civic literacy, civic inquiry, and civic action. Another iteration of these conceptualizations is found in AAC&U's Civic Engagement VALUE (Valid Assessment of Learning in Undergraduate Education) rubric (Rhodes, 2010). These concepts frame the assessment of learning—diversity of communities and cultures, analysis of knowledge, civic identity and commitment, civic communication and skills, civic action and reflection, and civic contexts/structures—and have been applied in 2-year as well as 4-year institutions (see Tables 1 and 2).

Also relevant is Hurtado et al.'s (2012a, 2012b) examination of the multidimensional nature of civic learning using multiple measures, utilizing the AAC&U Civic Learning Spiral framework (Musil, 2009). The authors describe this framework for civic learning as integrating both content and pedagogy with civic learning outcomes in institutions of higher education. They consider civic learning as including the knowledge, skills, values, and capacities that students ought to possess to be actively and purposefully engaged in society. The civic learning outcomes highlighted in their model include understanding of self and others, civic awareness, integration of learning, pluralistic orientation, critical consciousness and action, social agency, civic engagement in public forums, political engagement, and knowledge of different cultures and sensitivity to the issues of racism. This scope is summarized in the social change model and includes collaboration, common purpose, and controversy with civility (under group process values) and citizenship and change toward a better society (under community and societal values; Higher Education Research Institute [HERI], 1996). A meta-analysis of diversity-oriented programs in higher education in relation to civic outcomes found that informal interpersonal interactions and approaches that incorporated intergroup dialogue had special value (Bowman, 2011).

Moving to another foundational project, PEP began in the early 2000s and involved research on 21 campuses nationwide (see Table 1). Its influence on the field has continued with the publication of two books (Colby, Ehrlich, Beaumont, & Stephens, 2003; Colby et al., 2007) and articles (Beaumont, 2005; Beaumont et al., 2006), the construction of a set of assessment guidelines for interviews, and a survey instrument for students (see Table 2). The effort was intended to influence both programs and assessments. PEP has been assumed by the AASCU and resulted in a further monograph, *Educating Students for Political Engagement: A Guide to Implementation and Assessment for Colleges and Universities* (Goldfinger & Presley, 2010). The project concentrated more than most on activities with some political (not only civic) content. One of the enduring achievements of this effort is the assessment instrument produced during the research-oriented first phase of PEP (Beaumont, 2003; Beaumont et al., 2006). It includes assessments of knowledge or understanding, skills, identity or values, volunteerism, interest/motivation, efficacy, and action/involvement, as well as students' reports of their program's or institution's activities (see Table 2).

The continuing programmatic efforts of AASCU are housed in the American Democracy Project, which has several components, each led by specific campuses that are members of the organization. These activities are described primarily in publications found on websites of AASCU (2014) and AASCU/National Conference on Citizenship (NCoC; 2012), and include the following initiatives: PEP (described in the previous paragraph), the Civic Agency Project, and the eCitizenship project (see Table 1). In addition, in collaboration with the NCoC, AASCU has worked on a Campus and Community Civic Health mapping initiative. The Democracy Commitment at the American Association of Community Colleges is a partner in the American Democracy Project (Ronan, 2012). All these projects are promoting knowledge that is both fundamental and applied to understanding current issues, as well as enhancing skills and motivation. There has been recent attention to online activities in the eCitizenship Project, which focuses on the use of social networks and policy tools for civic purposes (AASCU, 2014) and to a Global Engagement Initiative. An overall blueprint for these activities can be found in *Stepping Forward as Stewards of Place* (AASCU, 2002), which is intended to anchor institutions in the communities and regions in which they are located.

The Degree Qualifications Profile (DQP; Adelman et al., 2011, 2014; Jankowski, Hutchings, Ewell, Kinzie, & Kuh, 2013) supported by the Lumina Foundation, included civic learning as a student learning outcome with competences specified for associate's, bachelor's, and master's degree programs (see Table 1). The DQP describes civic and global learning as the effective preparation of students in institutions of higher education for responsible, interactive, and productive citizenship. In their view, students at the bachelor's level should be able to explain diverse positions on issues, develop and justify positions on a public issue, collaborate with others when developing and implementing an approach to a civic issue, and identify significant issues affecting people throughout the world (Adelman et al., 2014, p. 19). These students should also be able to apply skills to contribute to the good of a democratic society (Adelman et al., 2014). The National Task Force report (2012) pointed to the DQP as a rich resource that exemplifies the components of civic learning outcomes for institutions of higher education. These components of civic learning are further embedded within the other learning areas of the DQP such as broad, integrative knowledge, which includes global, intercultural, and democratic civic learning, and also intellectual skills, which includes engagement of diverse perspectives (Adelman et al., 2011; National Task Force, 2012). Use of the term *global* expands civic learning beyond the local and national levels. Additionally, possessing civic and global learning proficiencies prepares the student to respond to societal challenges in the micro and macro communities through activities that include service learning (Adelman et al., 2014).

### Selected Additional Frameworks of Civic Competency and Engagement in the United States

In addition to the three foundational projects reviewed above, several other conceptual frameworks are found in Table 1. For instance, HERI describes constructs of students' civic learning (Franke, Ruiz, Sharkness, DeAngelo, & Pryor, 2010) including civic awareness, which involves the comprehensive understanding of the local, national, and global communities and of related issues. Likewise, HERI uses the term *social agency* and considers the extent to which college students value social and political involvement as personal goals (e.g., staying up-to-date with political news, helping others, promoting racial cohesiveness). HERI administers the annual College Senior Survey (CSS; see Table 2) that connects academic, civic, and diversity outcomes with a comprehensive set of college experiences to make inferences about civic learning in college (Franke et al., 2010).

Another noteworthy framework was developed by CIRCLE, which issued and widely disseminated a paper on federal policy with the potential to enhance civic skills, including the ability to distinguish facts from opinions and to critically analyze political information (CIRCLE, 2010). The American Association of Community Colleges has also focused special attention on skills of inquiry, research, participation, and persuasion (Gottlieb & Robinson, 2006), stressing the importance of civic competency and engagement within 2-year institutions.

Indiana University–Purdue University Indianapolis (IUPUI), which has a Center for Service and Learning, is an institution where a particular segment of civic competency has been elaborated. It focuses on the integration of civic dimensions into knowledge obtained through study in a wide range of disciplines. The “civic-minded graduate” is someone with an understanding of “how knowledge and skills in at least one discipline are relevant to addressing issues in modern society” and the “complexity of those issues” (Steinberg et al., 2011, p. 22).

Additionally, organizations that focus on college student development, such as the National Association of Student Personnel (NASPA) and American College Personnel Association (ACPA; NASPA & ACPA, 2004), include civic engagement as one of seven suggested student outcomes in their report, *Learning Reconsidered*. In addition to student leadership, they focus on civic values (e.g., commitment to public life) and dispositions (e.g., sense of civic responsibility). Civic engagement, values, skills, and dispositions are also included in the APA Guidelines for the Undergraduate Psychology Major 2.0 (APA, 2013), endorsing ethical values that build community trust and social responsibility. In summary, a range of organizations suggests that civic engagement can be fostered by general education requirements, service-learning activities, and social and political organizational membership.

### Similarities Between Frameworks in the United States and Europe

Internationally, the IEA, an organization that conducts international large-scale assessments, has designed assessments of civic knowledge, skills, and engagement, which were administered in 1999 and 2009 (Amadeo et al., 2002; Schulz, Fraillon, Ainley, Losito, & Kerr, 2008; Torney-Purta, Lehmann, Oswald, & Schulz, 2001) and are to be repeated in 2016 (see Table 2). In addition, in the United Kingdom, the examination for the General Certificate of Secondary Education (GCSE)



at age 16 (i.e., QCA, *Citizenship Studies*) has developed assessments (QCA, 2007; Department for Education (UK), 2014; see Tables 1 and 2). A recent European Union-sponsored study that took place in eight countries (i.e., the Processes Influence Democratic Ownership and Participation Study [PIDOP]; see Table 1), included a few measures of civic competency (e.g., political citizenship knowledge and skills) and a wide range of measures of civic engagement, including values, dispositions, attitudes, behavioral intentions, behaviors, and aptitudes related to civics and the active citizenship capacities of students (see Table 2; Barrett, 2012; Barrett & Zani, 2015). Although the labeling of the components that make up civic competency and engagement differs somewhat across domestic and international contexts, the structure and even the content of the constructs is quite similar. Specifically, both groups include (a) civic or citizenship competency (i.e., knowledge and skills in analyzing political material) and (b) civic or citizenship engagement, including values, dispositions, behaviors, and self-assessed participatory skills; differences in emphasis exist between national and international entities (as well among organizations in each region).

### Existing Assessments and Measures of Civic-Related Constructs

Assessments in the area of civic learning are also gaining importance (see Table 2). Measures of cognitive and attitudinal outcomes have existed in the United States since at least the early 1970s (when the first NAEP Civics Assessment took place). Further, in the early 1980s Educational Testing Service (ETS), together with the Council on Learning, conducted the Global Understanding Survey (Barrows, 1981), including a variety of civic-related measures. Data were collected at more than 180 universities in the United States. Within the last few years, it has become possible to disaggregate voting turnout percentages for students, and these summary figures can be reported to institutions of higher education (CIRCLE, 2014). At the same time, assessment of students' civic outcomes at the institutional level has become feasible. For instance, NSSE established a civic engagement module in the 2013 survey administration (Kinzie, McCormick, & Stevens, 2014). A wide range of projects in the United States and Europe at the secondary and postsecondary levels have constructed objective knowledge and skills items. There are also numerous self-report Likert scales for attitudes, direct assessments, rubrics for assessing written materials, interviews, and peer ratings. Other assessments have been designed for program evaluations and especially for service learning or community engagement programs. Many of these were designed for a specific project and are not widely transferable (according to Deardorff, Hamann, & Ishiyama, 2009). Thus, this paper focuses on existing measures that have been widely used and on which research has been conducted to provide a starting point for developing a next-generation assessment.

### Multiple Themes of Assessments

The multidimensional nature of civic learning has led to assessments that can be classified under two major constructs: civic competency and civic engagement (see Table 2). Measures related to civic competency have focused on topics such as history, political science, economics, democracy, citizenship, civic principles, society, and government and include measures such as the U.S. Naturalization Exam (U.S. Citizenship and Immigration Services [USCIS], 2011), the Civic Literacy Assessment (Intercollegiate Studies Institute's National Civic Literacy Board, 2006, 2007, 2011), IEA Civic Education Study (CIVED) Test and Survey (Torney-Purta et al., 2001), and NAEP Civics (National Assessment Governing Board, 2010). To take one example, the conceptual framework of CIVED included four specific themes: the defining characteristics of democracy, citizenship rights/duties, national identity/international relations, and social cohesion/diversity.

Other assessments related to civic competency include the measures developed by Delli Carpini and Keeter (1993), who used existing items from the National Election Study surveys, which were delivered in telephone interviews to develop and validate a 5-item knowledge index. They framed their project with a well-known definition: "The democratic citizen is expected to know what the issues are, what their history is, what the relevant facts are, what alternatives are proposed, what each party stands for, what the likely consequences are" (Berelson, Lazarsfeld & McPhee, 1954, p. 308). In a subsequent book titled *What Americans Know about Politics and Why It Matters*, Delli Carpini and Keeter (1996) analyzed results from phone-based surveys that had included items from the National Election Surveys, the General Social Survey, and an additional survey that the authors conducted. They examined data on percentage answering correctly ranging over several decades. The book's appendix lists a wide variety of knowledge items.

Fewer assessments have focused on civic-related skills, although an association of university libraries (centered at Kent State) has developed a Standardized Assessment of Information Literacy Skills (SAILS; Radcliff, Salem, O'Connor, &

Gedeon, 2007). Even though this assessment focuses on the general information literacy of students, some skills that are assessed directly relate to civic learning, such as the skills in evaluating sources and in recognizing social or ethical issues.

Measures of civic engagement cover topics such as national identity, attitudes toward social cohesion and diversity, civic participation and activities, electoral and political activities, democratic values, beliefs about citizens' efficacy, dispositions, and behavioral intentions. Examples of assessments include the IEA CIVED Instrument (Schulz & Sibberns, 2004; Torney-Purta et al., 2001), the International Civic and Citizenship Education Study's (ICCS) International Student Questionnaire (Schulz et al., 2008), Political and Social Involvement Scale (Center of Inquiry in the Liberal Arts, 2013), School Citizenship and Climate Assessment (Education Commission of the States, 2006), NSSE Topical Module: Civic Engagement (Trustees of Indiana University, 2013), the scales from the New Civic Engagement Project (Zukin et al., 2006), and the Socially Responsible Leadership Scale-Revised Version II (SRLS-R2; Dugan & Komives, 2007). Additionally, two large-scale surveys developed by HERI (2014a, 2014b; i.e., CSS and the Diverse Learning Environments [DLE] Survey) measure aspects of the collegial climate, environment, and experiences and some aspects of student civic engagement along with sense of political agency (efficacy).

A number of these civic engagement measures have been used in major studies. For instance, the Political and Social Involvement Scale and the SRLS-R2 were used in the Wabash National Study, a large-scale longitudinal study investigating student learning outcomes at U.S. colleges and universities. Findings from the Wabash Study revealed that students' political and social involvement increased slightly by 0.12 standard deviations (SDs) after 4 years in college, and students' socially responsible leadership increased by 0.36 SDs (Blaich & Wise, 2011). Similarly, the National Civic and Political Health Survey (CPHS) and Flanagan, Syvertsen, and Stout's (2007) survey measures have been utilized by CIRCLE. The CPHS was used to evaluate how 1,700 young people (ages 15–25) and 550 adults (age 26 and over) participated in politics and community activities, as well as their attitudes toward government and current issues. Results from the 2006 administration of the CPHS revealed that young Americans are engaged and involved in many forms of political and civic activity, such as voting and volunteering; however, 17% of young Americans have not participated in any political activities in the past 12 months. Additionally, results revealed that many Americans are misinformed and lack political knowledge (Lopez et al., 2006). Other large-scale studies have used instruments such as the Youth and Participatory Politics Survey, which was administered to over 2,500 respondents ages 15–25. This survey aims to measure “interactive, peer-based acts through which individuals and groups seek to exert both voice and influence on issues of political concern.” Its findings revealed that 41% of young people engage in at least one of these types of participatory acts, and that 84% of respondents are concerned about the credibility of news obtained through social media (Cohen & Kahne, 2011, p. viii).

### ***Item and Test Administration Format***

The existing assessments measuring civic-related constructs use various item and test administration formats. A majority of the assessments employ selected-response items. Multiple-choice items are used in many of the assessments measuring civic competency, while Likert-type items are primarily used for measures of civic engagement. Yes/no items typically ask about the involvement of a respondent in various activities, such as whether a person voted in an election or signed a petition. Likert-type self-report items focus on respondents' levels of agreement, perceived importance, frequency of participation in certain activities (e.g., voting, petitions, political meetings, volunteering in the community), or satisfaction from participation in those activities. The Defining Issues Test-2 presents problem-based scenarios (several with political content) and asks students to rank (rather than rate) a series of issues that might be relevant to making a particular decision (Rest & Narvaez, 1998; Thoma & Dong, 2014). The IUPUI Center's measure of the Civic-Minded Graduate (Steinberg et al., 2011) also includes a problem-solving scenario along with Likert ratings and a written narrative from which both knowledge and engagement are assessed.

Open-ended items, such as short-answer and essay items, are less common among civic competency and engagement assessments but are used on the ICCS's International Cognitive Test (Schulz et al., 2008), NAEP Civics (National Assessment Governing Board, 2010), NSSE Topical Module: Civic Engagement (Trustees of Indiana University, 2013), and the IUPUI Center's assessment of the civic-minded graduate (Steinberg et al., 2011). Open-ended items can also be found on the United Kingdom's GCSE examination in Citizenship Studies (Department for Education (UK), 2014). The first part includes written short answers and an essay, while a second part is comprised of a controlled project assessment (completed by the examinee with teacher oversight; Brett, 2002). Both parts of the examination deal with applying cognitive skills as

well as factual or conceptual learning. Test administration also varies, with most assessments using a paper-and-pencil or web-based format and others using an oral format. For instance, the U.S. Naturalization Exam (USCIS, 2011) uses open-ended items with one- to two-word answers given orally. Other assessments have used an oral format through phone-based interviews such as the 2008 version of the Civic Literacy Assessment (Intercollegiate Studies Institute's National Civic Literacy Board, 2011) and the CPHS (Lopez et al., 2006). For several decades, public opinion organizations have administered knowledge items to adults in phone interviews; the focus is generally on current events knowledge (usually about national and foreign policy issues).

### **Test and Scale Reliability**

Reliability estimates range from .00 to 1.00, with .00 indicating that all of the variance in the score is due to measurement error and 1.00 indicating perfect reliability with no measurement error. Whether the internal reliability for an assessment is acceptable or not hinges on the testing purpose and the context of score use (Haertel, 2006). Typically higher reliabilities are required when higher stakes are involved in decision making based on the test scores (American Educational Research Association [AERA], APA, & National Council on Measurement in Education, 2014). For instance, assessments that are used for admission to an institution of higher education would require higher levels of reliability than assessments to compare groups of individuals. Frisbie (1988) noted that “experts in educational measurement have agreed informally that the reliability coefficient should be at least .85 if the scores will be used to make decisions about individuals *and* if the scores are the only available useful information” (p. 29). However, “the need for precision [i.e., reliability] increases as the consequences of decisions and interpretations grow in importance” (AERA et al., 2014, p. 33), meaning that the level of satisfactory reliability is dependent on the stakes of the assessment. A number of variables can impact an assessment's reliability, such as test length, item types, item quality, the group of examinees, and the conditions of test administration such as instructions and time limits (Traub & Rowley, 1991).

Given the multifaceted nature of civic-related constructs, many assessments include subscales and report subscores. The *Standards for Educational and Psychological Testing* (AERA et al., 2014) states that the decision to provide subscores should be made carefully, and that both the “distinctiveness and reliability of separate scores should be demonstrated” before reporting any subscores (p. 27). Many existing civic assessments have reported subscores with reliability estimates above .80 (e.g., ICCS's International Student Questionnaire, DLE survey, SRLS-R2, IEA CIVED Instrument, and the Political and Social Involvement Scale) despite the fact that some scales have relatively a small number of items. However, some existing measures have some subscores that have not met the criteria for satisfactory reliability. For instance, on the PEP instrument, four of the 30 scales showed lower internal consistency ranging from .65 to .69 (2–4 items; Colby et al., 2007). Similarly, for CIRCLE's scales, Flanagan et al. (2007) reported that the large majority yielded reliability estimates greater than .80; however, many of the subscales reported reliability estimates above .70, and a few subscales had reliability estimates between .65 and .70. This finding was likely related to only 3 or 4 items in those subscales. Depending on the stakes of these assessments, even these reliabilities could be considered adequate.

Although the subscores reported by many existing measures have demonstrated satisfactory reliabilities, there has been little evidence demonstrating subscore distinctiveness. Torney-Purta et al. (2001) evaluated the IEA CIVED instrument using confirmatory factor analysis to determine the appropriateness of using two subscores (i.e., knowledge of content and skills in interpretation of civic-related material). Although the subscores were highly correlated ( $r = .91$ ), the two-dimensional model showed a slightly better fit. The authors argued that it was valuable to report these subscores because it led to a “better understanding of the relative strengths and weaknesses of civic knowledge as developed in participating countries” (Torney-Purta et al., 2001, p. 63). Furthermore, in a secondary analysis of CIVED data from the United States using cognitive diagnostic modeling, Zhang, Torney-Purta, and Barber (2012) found differences between those respondents who excelled on civic skills and those who excelled on conceptual knowledge of civics in the extent to which they had received conceptually based teaching in their social studies classes.

For open-ended items, reliability is typically reported in the form of interrater reliability to evaluate the consistency between scores given by multiple raters. On NAEP Civics, interrater reliability estimates are computed by using the percent of exact agreement of two raters scoring responses to an open-ended item. These ranged from 77% to 94% for Grade 4 responses, 68% to 94% for Grade 8, and 66% to 97% for Grade 12 (U.S. Department of Education, 2011). Additionally, Winke (2011) examined the reliability of the U.S. Naturalization Exam, which uses oral, open-ended test items. This study

found reliability estimates around .71. The author also noted that 14 of the 100 test items were unreliable and recommended that they be removed from the assessment pool (Winke, 2011).

### **Validity Evidence**

Relatively limited validity evidence is reported in the literature for the existing assessments measuring civic-related constructs. Delli Carpini and Keeter (1993) addressed validation using expert judgments and correlation analyses. Other validation studies have focused on evidence based on internal structure (i.e., dimensionality) as discussed in the *Standards for Educational and Psychological Testing* (AERA et al., 2014). This type of validity evidence indicates whether the associations among test items correspond to one or several intended constructs (or dimensions) of the assessment (AERA et al., 2014). Confirmatory factor analysis (CFA) is one of the most frequently used methods to evaluate the internal structure of an assessment. CFA compares the hypothesized and observed test structures by examining how the test items relate to the intended theoretical constructs of the assessment (Brown, 2006; Rios & Wells, 2014). Indices of model fit are used to determine whether the assessment is measuring what it is intended to measure based on the structural relationship between the test items and the construct(s).

Hurtado, Arellano, Cuellar, and Guillermo-Wann (2011) used CFA to evaluate the internal structure across the three subscales of the DLE survey that targeted civic competency and engagement, including pluralistic orientation, civic action, and social action engagement. Results of model fit indices suggested that the items across each of the three subscales were adequately measuring the intended constructs. Similar analyses were conducted by Lott and Eagan (2011) to evaluate the internal structure of the civic values domain for the CSS. Using CFA, the authors confirmed that the eight items adequately measured the subdomain of interest.

Winke (2011) investigated the validity of the U.S. Naturalization Exam, an open-ended orally administered assessment. To administer the assessment, a USCIS officer selects 10 test items from a pool of 100 test items. The author found that this pool of 100 test items could be separated into approximately five distinct test forms of citizenship knowledge based on item difficulty. There is no documentation that indicates how or whether USCIS officers choose a selection of items of equal difficulty to administer to each applicant. If not, this would make the assessment unfair to some test takers. The author also found that of the 100 items, 23 possessed differential item functioning (DIF) with 10 items being easier for U.S. citizens and 13 items being easier for noncitizens.

Assessments that reported relevant evidence have in general demonstrated adequate construct validity. However, more evidence is needed to support the intended uses of test scores (AERA et al., 2014; Kane, 2013). For example, since many of the assessments report subscale scores, it is important to examine the multidimensionality of the underlying constructs. Furthermore, as previous research has shown differences in the level of civic competency and engagement by ethnicity and gender (Lott, 2013), future research should evaluate the extent to which these civic-related constructs are measured similarly across demographic groups (see the next section).

### **Challenges in Designing a Civic Competency and Engagement Assessment**

Common challenges exist when developing assessments, such as appropriately addressing content, task design, and scoring concerns, as well as adequately meeting validity and reliability requirements (Downing & Haladyna, 2006; Haladyna & Rodriguez, 2013). However, unique challenges specific to the measurement of civic competency and engagement can also be expected. For instance, respondents may have a desire to appear more civically engaged on a self-report measure of civic engagement (potentially resulting in distortion of responses). Second, there is the issue of reliability of subscores for multidimensional themes within civic knowledge and engagement. Next, we need to consider the setting or contextualization of the construct being measured, and finally, we need to consider subgroup differences.

### **Inauthentic Responding in Measures of Civic Engagement**

As self-reports are commonly used in assessments for civic engagement, the genuineness of these responses may be a concern, especially if high stakes are attached to the assessment. In fact, the tendency for individuals to report themselves as having socially desirable or valuable characteristics has long been a concern with self-report measures (Spencer, 1938). In other words, there appears to be a tendency for a respondent to either consciously or subconsciously provide inaccurate

responses to make himself or herself appear socially involved. In a review of 51 experimental studies, score differences due to this type of response (sometimes called faking) in Likert-type items on personality inventories ranged in absolute value from 0.48 to 3.34 SDs (Viswesvaran & Ones, 1999). As a result, there is a need to explore possible solutions to improve score-based inferences from self-ratings of civic engagement.

Researchers have experimented with innovative ways to assess constructs that typically rely on self-reports. These methods include the use of warnings and alternative item types (i.e., non-Likert-type items) to either identify or decrease the likelihood of the tendency to give socially desirable responses. Warnings have been found to have only a small impact on mitigating inauthentic responses when looking at the standardized mean difference (Cohen's  $d = 0.23$ ; Dwight & Donovan, 2003). This has led researchers to recommend two possibilities: internal and external techniques.

The first approach consists of including external measures (i.e., social desirability or bogus items) in an assessment. For example, researchers have taken previously developed social desirability Likert-type items (e.g., from Crowne & Marlowe, 1960) and inserted them into an unrelated assessment. In contrast, the bogus statement approach involves developing items that appear to be related to the construct, trait, skill, or task of interest, but where the objects or situations described in the items do not exist. Examples developed by Dwight and Donovan (2003) include: "How often do you access online chat rooms for the International Student Excellence Group?" or "How often do you utilize murray-web system to locate unpublished research articles?" where neither the International Student Excellence Group nor the murray-web system exists (p. 10). It is assumed that endorsing these items containing bogus statements indicates that the examinee has a tendency to provide untruthful responses.

The assumption underlying the use of external measures is that if respondents have high endorsement on both the external items and assessment of interest, their high score is likely contaminated with an attempt to "look good." However, social desirability items appear to be error-ridden indicators of inauthentic responding (Burns & Christiansen, 2011; Tett & Christiansen, 2007), whereas bogus items have been shown to have other difficulties (Dwight & Donovan, 2003). As a result of the limitations associated with the inclusion of external measures, there has been interest in other methods for reducing the extent to which respondents report attitudes or behaviors that are uncharacteristic for them (i.e., chosen in an attempt to portray themselves in a positive light).

The second approach uses internal methods to attempt to curtail respondents' attempts to make themselves appear socially adept by designing items in new formats. There have been two major advances: forced-choice items and situational judgment items. Forced-choice items require the respondent to choose one of two (or more) options that appear equally desirable with each option representing a different trait (Christiansen, Burns, & Montgomery, 2005). An example of a forced-choice item is demonstrated by Meade (2004, p. 535) is presented below:

Choose one of the following

Item 1: I am the life of the party (measures extraversion)

Item 2: I follow a schedule (measures conscientiousness)

In the example, both response options are assumed to be of approximately equal social desirability. However, each response option represents a distinct construct (i.e., extraversion and conscientiousness, respectively). A disadvantage is that a relatively large number of these paired items is typically required to obtain sufficient information on the examinee's standing on a construct. Furthermore, a number of psychometric scoring concerns are related to the ipsative nature (i.e., all response options sum to the same total) of this item type.

In contrast, in situational judgment items, a respondent is presented with a task-related situation, which can be written, video-based, or multimedia in format, and is asked to choose an appropriate response from a list of alternatives. The item does not require the respondent to report his or her behavior, but rather it can be viewed as a situational interview (Lievens, Peeters, & Schollaert, 2008). Peeters and Lievens (2005) developed the following situational judgment item for assessing college student success through various constructs such as student work habits:

You have so many assignments to complete and so much studying to accomplish, you feel you will never get caught up or accomplish anything. You are truly overwhelmed. What would you do?

- a Prioritize your activities, enumerate the steps to be accomplished for each activity, and systematically go through your work. (correct response)

- b Decide what you can accomplish reasonably and focus on getting that work done, and let [leave] the rest of the work unfinished.
- c Talk to your professors, explaining your situation, and ask for extensions on the due dates.
- d Take a break for a day and go out with your friends, then go back to working hard again. (p. 84)

Situational judgment items often present the examinee with a number of appealing response options; however, there are a number of different procedures for scoring that include (a) the test author or developer determining the correct answer, (b) a group of experts deciding on the best or most correct answer, (c) allocating a score to each option based on the percentage of people choosing that option, and (d) selecting the best response based on the strongest predictive validity to a criterion of interest (e.g., job or task performance; Strahan, Fogarty, & Machin, 2005). The latter scoring option is akin to that used in selection tests for employment (Arthur, Glaze, Jarrett, White, Schurig, & Taylor, 2014; Campion, Ployhart, & MacKenzie, 2014; Whetzel & McDaniel, 2009).

Although both of these item types show promise for reducing the tendency toward inaccurate reporting of one's socially desirable attitudes or behavior, greater emphasis has been placed on forced-choice items. For example, in comparing forced-choice and Likert-type items, Martin, Bowen, and Hunt (2002) found significantly higher mean scores attributable to creating a socially desirable impression for Likert-type items, but no such trend was observed for forced-choice items. Similarly, Jackson, Wroblewski, and Ashton (2000) found that faking on an employment test with Likert-type items resulted in a positive mean difference of approximately 1 SD. The use of forced-choice items reduced this to 0.32 SDs. These findings suggest that forced-choice items have the potential to mitigate inauthentic responding to self-report instruments and could be incorporated in civic engagement assessments to strengthen the validity of score-based inferences. However, relying primarily on forced-choice items would result in the need for an increased number of items.

### ***Establishing Reliable and Distinct Subscale Scores***

Frameworks and existing assessments of civic learning show that the construct is multidimensional, which necessitates the consideration of subscores. As we discussed in an earlier section (see "Test and Scale Reliability"), reporting subscores requires that the scores be reliable and distinctive from each other. In the case of this proposed framework, we plan to consider two subscores for civic competency and civic engagement.

Although subscores have the advantage of providing information about an examinee's strengths and weaknesses (Traub & Rowley, 1991), evidence needs to be collected to support the specifics of subscore uses (Kane, 2006). Inaccurate information provided through subscores can misinform score users when high-stakes decisions are made based on those scores (Sinharay, Haberman, & Puhan, 2007). A number of methods can be used to evaluate the appropriateness of subscores by evaluating the assessment dimensionality. Common methods include factor analysis or multidimensional item response theory (MIRT; Sinharay, Puhan, & Haberman, 2011). Additionally, research has demonstrated alternative approaches for reporting subscores such as reporting weighted averages (e.g., Sinharay, 2010) or augmented subscores (i.e., creating subscores by borrowing information from other portions of the test such as other sets of items; Wainer, Sheehan, & Wang, 1998). That said, although these alternative reporting approaches have the potential to provide accurate diagnostic information, they may be difficult to explain to the general public or test users (Sinharay et al., 2011).

In addition to evaluating the reliability and distinctiveness of subscores, researchers have also argued that it is important to determine whether subscores have added value over total scores (e.g., Sinharay, 2013; Sinharay et al., 2007; Sinharay et al., 2011), meaning the subscore should not be too highly correlated with the total score. Strong relationships between the subscore and total score would suggest that the two scores are measuring the same underlying skill and that the subscore does not provide any additional information apart from the total score (Sinharay et al., 2011). Sinharay (2010) conducted a simulation study and found that for subscores to have added value, they should be based on roughly 20 items and should be sufficiently distinct from each other, with correlations less than .85.

### ***Context and Its Impact on Assessments of Civic Competency and Engagement***

Various issues have been raised regarding the context or setting focus in both the educational process and the assessment of civic competency and engagement. This includes discussions about the contextualization of the constructs

(i.e., campus, local community, workplace, national, or global focus) and the impact of the focus chosen on the assessment of students from diverse social, cultural, and nationality backgrounds (Davies, 2006; Haste, 2010; Kerr & Cleaver, 2004).

First, there are differences among the institutions where assessments might be employed (Ostrander, 2004). Two-year colleges often have many students who are part-time, commuters, or studying primarily online, providing a different context than most 4-year or residential campuses. There may be a historic commitment to public benefit or humanitarian goals, such as that found in some land-grant or religiously based higher education institutions. The political jurisdictions in which institutions are located vary a great deal—providing a context in which college students are welcomed or discouraged to participate politically, a context with more or less politically competitive elections, or a context where there are stronger or weaker civil society organizations. The economic conditions in neighborhoods surrounding some institutions may give urgency to projects in the local community. Some of these challenges are important to discuss, although there is not sufficient evidence to deal with many of them.

Second, terms such as *globalization*, *multiculturalism*, *cosmopolitanism*, and *pluralistic orientation*, among others, are used in the literature to highlight another focus that a civically competent and engaged college student should develop. Burgeoning social media outlets have provided a platform for citizens around the globe to plead, organize, and fight for freedom from oppression as well as to practice effective political consumerism (Anduiza, Jensen, & Jorba, 2012; Banaji & Buckingham, 2013; Barrett & Zani, 2015; Kahne, Lee, & Feezell, 2013). A relatively recent focus on citizenship with a global perspective is seen by many as the vanguard of both education and the assessment of civic competency or engagement and is valued by key stakeholders and researchers, including the U.S. Department of Education (National Task Force, 2012) as well as more broadly (Osler & Starkey, 2006). Many employers also believe that awareness of international processes and cultural practices is an essential component of preparation for success in the workplace (e.g., Hart Research Associates, 2015). As a result, context, especially globalization, should be considered when developing an assessment of civic competency and engagement.

### ***Fairness With Regard to Subgroups of Respondents***

Another challenge when developing an assessment of civic competency and engagement is possible subgroup differences. Haste (2010) delineated some contested education and assessment practices to consider when measuring the civic competency and engagement of students who differ in ethnicity or cultural background, with a special focus on international or immigrant students. For instance, differing views of government social welfare programs exist among individuals from the United States and from Europe. Civic engagement norms also vary. For example, there is evidence that purposeful volunteering, often cited as a desirable civic engagement behavior, is valued differently by individuals from the United States than by individuals from former communist nations. Lastly, it is essential to take into consideration that the democratic lived experiences of individuals vary between countries because of distinctive histories of democracy (Haste, 2010). Furthermore, immigrants are likely to be especially interested in political issues that have a potential impact on their countries of origin.

On the topic of gender, Delli Carpini and Keeter (1996) found that adult males excelled on political and civic knowledge items when the topics dealt with war and the exercise of political power (which predominated in most surveys of adults that they examined). Females performed better when the political topics related to social welfare policy or education. Dolan (2011) obtained similar results showing males outperforming females on political knowledge; however, on questions about political knowledge focusing on the status of women in American politics, the gender disadvantage disappeared. That said, Torney-Purta et al. (2001) found that only one country out of 28 in the IEA CIVED study showed significant gender differences in knowledge scores. Under civic engagement, some argue that volunteering is more likely to be engaged in by females (e.g., Bureau of Labor Statistics, 2015; Einolf, 2011). In this area, males may be disadvantaged. Reason and Hemer (2015) in their literature review concluded that “women seem to have higher scores [on civic engagement], but that isn’t universal” (p. 30). To the extent possible, the profile of issues and topics should be balanced in relation to both genders in the assessment.

Racial differences should also be considered. Results on Grade 12 NAEP Civics showed that from 1998 to 2010 the performance gap between White and Hispanic students has narrowed but has stayed the same between White and Black students (National Center for Educational Statistics, 2011). White students outperformed Black, Hispanic, and American Indian/Alaskan Native peers, which is consistent with prior research indicating that White students are more likely to

have opportunities to engage in various civic activities that are considered interactive, such as debates, mock trials, and discussions of social issues, when compared to Hispanic/Latino and African American students (Kahne & Middaugh, 2008; Kawashima-Ginsberg, 2013). Several projects (including some mentioned in the text and in Table 1) have given attention to racial diversity (Cohen, 2010; HERI, 2014b). Reason and Hemer (2015) found mixed results by racial group in their review.

In addition to the consideration of international/ethnic, gender, and racial differences, it is also important to examine how the courses a student has taken or a college major could impact performance on an assessment of civic capacity and learning. Delli Carpini and Keeter (1996) found that adult respondents who reported having taken civic education classes in high schools demonstrated more knowledge about civic topics typically included in those classes, while adults who reported regular reading of the newspaper had more knowledge on the topics of political parties and leaders. Similar results have been found on Grade 12 NAEP Civics, with students who reported studying civics or government in high school scoring higher than those who did not (National Center for Educational Statistics, 2011). These results suggest that civic-related courses have the potential to impact civic competency and engagement. As another example, students in a political science major may be more likely to participate in institutional activities related to civic engagement than students majoring in English. Factoring in these considerations, assessments should be broad enough to integrate disciplinary studies and also have crosscutting proficiencies that college graduates need for continued learning in complex and changing environments (Adelman *et al.*, 2014).

### **A Proposed Assessment Framework for a Next-Generation Civic Competency and Engagement Assessment**

Based on a review and synthesis of the existing frameworks, definitions, and assessments, we propose an assessment framework based on the higher-level construct of civic learning containing two domains: civic competency and civic engagement (see Table 3).

#### **Civic Competency**

In this framework, civic competency is composed of three components: (a) civic knowledge (conceptual as well as factual knowledge), (b) analytic skills, and (c) participatory or involvement skills. Many of the frameworks and assessments reviewed include this competency component in some form (see Tables 1 and 2). Civic competency is a critical component because both institutions of higher education and employers expect the acquisition of knowledge and skills to be an important aspect of civic-related learning in higher education. Materials covered during instruction in the social sciences (e.g., introductory courses in political science, economics, sociology, and history) transmit part of the content to be assessed under civic competency, but other aspects of the college experience also contribute (e.g., leadership experience in campus organizations, experience in dealing with complex social issues during community service, and participation in online communications).

#### **Civic Knowledge**

Possessing knowledge is important in itself as a part of civic competency. It also allows individuals to understand current events (particularly as they are presented in print or online) and make reasoned judgments about their own participation in political discussion and actions on the campus, in the community, or online (dealing with national and international events). It is hard to imagine an adult feeling efficacious or prepared to take political action in the absence of civic knowledge—conceptual as well as factual, historical as well as contemporary. In short, we posit that a minimum level of knowledge is essential for civic competency.

To give some examples relevant for students in the United States, these are components of the knowledge portion of civic competency:

- knowledge about fundamental concepts and principles (for example, the rule of law and civil rights) and the history of democratic institutions (especially in the United States);
- knowledge about political institutions as well as major political and social issues; also the complexity of social problems and their solution;



**Table 3** Assessment Framework for Civic Competency and Engagement

Construct domain	Definition	Examples of assessment topics (based on themes from Tables 1 and 2)
Civic competency domain Civic knowledge	Civic knowledge deals with facts, concepts and principles. Knowledge questions can be contextualized in a local setting, a national setting, or an international setting. They can be contextualized in the present or past.	<ul style="list-style-type: none"> <li>● Possession of:                             <ul style="list-style-type: none"> <li>◦ Foundational and conceptual knowledge of government structures and processes enabling attentive and effective civic/political participation</li> <li>◦ Factual information about and understanding of institutions and processes of government, major political, economic, and social conditions or issues, stands of political parties</li> </ul> </li> <li>● Ability to:                             <ul style="list-style-type: none"> <li>◦ Relate national practices and events to a global or international perspective</li> <li>◦ Relate historical events to the current political scene, such as major social and political movements and conflicts</li> </ul> </li> <li>● Understanding of:                             <ul style="list-style-type: none"> <li>◦ Fundamental principles of democratic processes, human and civil rights, and rule of law</li> <li>◦ Legal aspects of citizenship, voting, and representation</li> </ul> </li> </ul>
Analytic skills	Application of knowledge of political and civic issues in order to interpret political debates and decision making, identify contrasting perspectives, recognize potential solutions to problems, and respond to hypothetical situations presented in case studies of issues or texts from media sources (in print or online).	<ul style="list-style-type: none"> <li>● Ability to:                             <ul style="list-style-type: none"> <li>◦ Evaluate an issue in light of evidence (in light of the reliability of different sources)</li> <li>◦ Track issues in the media</li> <li>◦ Describe public debates, identify and evaluate potential solutions, or see impact of different choices on issues of concern</li> <li>◦ Recognize potential effects of laws or policies on different communities or groups and understand their perspectives</li> <li>◦ Distinguish evidence-backed facts from unsubstantiated opinions</li> <li>◦ Engage in analysis of political information and write accurately, coherently and persuasively about it</li> <li>◦ Write/justify responses to political, social, environmental, and economic challenges at local, national, and global levels</li> <li>◦ Explain diverse positions on democratic values or practices; take a position and defend it</li> <li>◦ Recognize justifications for a position on political and social issues (including those involving diverse communities)</li> <li>◦ Evaluate strengths and weaknesses of potential approaches to civic and political problems and be reflective about decisions and actions</li> <li>◦ Be reflective about the potentials and challenges of social media in politics</li> </ul> </li> </ul>

Table 3 Continued.

Construct domain	Definition	Examples of assessment topics (based on themes from Tables 1 and 2)
Participatory and involvement skills	Ability to make reasoned judgments about situations of group involvement or political problem solving in a community or other setting.	<ul style="list-style-type: none"> <li>• Understanding of:                             <ul style="list-style-type: none"> <li>◦The dimensions of complex social issues or policies and ability to apply core ethical and democratic principles, as well as examine the perspectives offered by different disciplines or groups or sources</li> <li>◦Cultural and human differences that frequently bear on political activities and related perspective taking</li> </ul> </li> <li>• Media and information literacy relating to political and social issues. (considering use of social media, journalistic, and scholarly sources, and including graphic presentations)</li> <li>• Ability to:                             <ul style="list-style-type: none"> <li>◦Apply political skills in articulating arguments for different audiences and reaching compromises</li> <li>◦Identify pressure points in a given context</li> <li>◦Analyze social or political systems to plan processes of problem solving and public action</li> <li>◦Identify how civic and democratic dimensions can be integrated into various disciplines and contexts; how knowledge can be employed for public purposes</li> <li>◦Apply ethical standards to evaluate political decision-making practices, processes, and outcomes and to understand principled dissent and effective leadership</li> </ul> </li> </ul>
Civic engagement domain Motivations, attitudes, and efficacy	Interest, involvement, or engagement in attending to political information; the capacity to understand a political situation or undertake successful civic action (using online activity as appropriate).	<ul style="list-style-type: none"> <li>• Understanding of:                             <ul style="list-style-type: none"> <li>◦How to choose the most effective mode of participation</li> <li>◦How to participate respectfully and constructively, both individually and in collaboration with diverse others</li> <li>◦The importance of listening and deliberating in collective decision making; the productive use of conflict</li> <li>◦Organizational leadership and group skills: modes of enhancing cooperation in groups, building cohesiveness, avoiding the premature closing of discussion</li> <li>◦Distinctions between personal and group goals</li> </ul> </li> <li>• Interest in being informed about and attentive to civic and political information from a variety of sources</li> <li>• A sense of concern about social issues (that may involve emotional responses)</li> <li>• Willingness to practice participatory, involvement, and analytic skills (see previous categories)</li> <li>• Sense of individual and collective civic or political efficacy, competence, or agency</li> <li>• Persistence in the face of challenges</li> </ul>

Table 3 Continued.

Construct domain	Definition	Examples of assessment topics (based on themes from Tables 1 and 2)
Democratic norms and values	Belief in basic principles of democratic and diverse society, with a sense of responsibility to take civic action.	<ul style="list-style-type: none"> <li>● Respect for the historical principles of American democracy</li> <li>● Attitudes toward participation in diverse groups                             <ul style="list-style-type: none"> <li>◦ Positive attitudes toward pluralism</li> <li>◦ Comfort with and respect for diverse perspectives</li> </ul> </li> <li>● Valuing civic engagement and a sense of personal responsibility in a community                             <ul style="list-style-type: none"> <li>◦ Willingness to make an effort to further the public good (locally, nationally, and in the global community)</li> <li>◦ Sense of social and civic responsibility and commitment to the public good</li> <li>◦ Values with the potential to build community cohesion at local, national, and global levels</li> <li>◦ Sense of a politically engaged identity (civic-mindedness)</li> <li>◦ Sense of community or solidarity with diverse groups or constituencies</li> <li>◦ Recognizing the background of one's own attitudes and civic engagement</li> <li>◦ Concern about persistent social injustice and other public problems</li> </ul> </li> </ul>
Participation and activities	Civic and political behavior and actions. These behaviors and actions can be contextualized in face-to-face setting (on campus or in the community, nation, or global setting) or in online contexts.	<ul style="list-style-type: none"> <li>● Vote, voice an opinion, protest, take consumer-oriented action, join or originate petitions</li> <li>● Take actions with the potential to make a difference in their communities or more broadly</li> <li>● Participate in deliberative and collaborative groups with friends and community members</li> <li>● Civic participation and volunteering/service learning</li> <li>● Political participation (during and between political campaigns)</li> <li>● Participate in activities of personal and public concern that are personally enriching and socially beneficial</li> <li>● Develop a sense of one's own political voice</li> </ul>

- knowledge of the legal aspects of citizenship, the right to vote, and what political representation entails; and
- knowledge of how practices and events in the local community or the nation relate to a global perspective.

Further details about these aspects of knowledge can be found in Delli Carpini and Keeter (1996), National Assessment Governing Board (2010), Intercollegiate Studies Institute's National Civic Literacy Board (2011), National Task Force (2012), and Torney-Purta et al. (2001).

The knowledge that is assessed should be nontechnical and accessible to students from a range of majors (not limited to political science, history, economics, or sociology). In many cases, students' civic knowledge will have been acquired in general studies courses in college (or in high school courses), in cocurricular activities (including service-learning experiences), through reading of national and international news (online or in print), or during discussion with others who are members of the faculty, their peer groups, community groups, their families, or online (e.g., in blogs or tweets). Some believe that this knowledge should focus on the history of the U.S. political institutions and the Constitution (Intercollegiate Studies Institute's National Civic Literacy Board, 2011), as well as the ability to comprehend terms relevant to national political institutions and their processes, for example, caucus, checks and balances, or due process of law (Hirsch, Kett, & Trefil, 2002). Others such as Hatcher (2011), believe that students' knowledge should also include information about the distribution of power in society and the accomplishments of major social movements that took action on contested political issues. The sample topics listed under civic knowledge in the assessment framework found in Table 3 were distilled from the conceptual frameworks in Table 1 and the measures in Table 2.

### **Analytic Skills**

The analytic skills component of civic competency focuses on the ability to systematically analyze written material from charts and graphic material, texts (including but not limited to those that might appear in the media), or political cartoons. The National Task Force (2012) and the VALUE rubrics (Rhodes, 2010) considered the importance of critical analysis and reasoning relying on multiple sources of evidence or multiple points of view; the DQP included intellectual skills in its model (Adelman et al., 2014; Jankowski et al., 2013). The Asia Society (2015) has prepared rubrics for educators to use in assessing students' academic work in learning about global issues (including specifications of performance levels up to grade 12). The analytic skills elaborated in these rubrics include identifying evidence from different sources to address specific questions, integrating information from several sources into a coherent statement, and identifying counterarguments to a position. These rubrics form the basis of the Graduate Performance System (GPS). The guidelines set forth by the American Association of Community Colleges also describe intellectual skills such as identifying criteria for making judgments, evaluating and then defending a position on an issue, and judging the reliability of information sources (Gottlieb & Robinson, 2006).

Analytic skills make a contribution to civic competency, particularly to the ability to understand and communicate to others about current civic and political conditions or events (as they are presented in publications or raised in discussions with others). Many of these analytic skills can be assessed by the presentation of written text, or political cartoons and graphic materials modeled on what appears in news media (in print or online), or in hypothetical scenarios, followed by appropriate questions. Additional examples of analytic skills can be found in Table 3. Many of these skills deal with seeing social and political problems with a realistic sense of their complexity. Among these skills is the individual's ability to judge whether a statement is factual and based on evidence or a matter of opinion. The ability to track, evaluate, and compose arguments for and against a position is important. These skills also include perspective taking, or the ability to see positions on an issue from several points of view (including those of diverse groups). Finally, many disciplines are built upon skills that incorporate useful approaches to understanding and communicating about political and civic issues. The sample topics listed under analytic skills in the assessment framework found in Table 3 were distilled from the conceptual frameworks in Table 1 and the measures in Table 2.

### **Participatory and Involvement Skills**

The participatory and involvement skills component of civic competency focuses on the ability to identify the most promising action in a group situation or in solving a social or civic problem. They include effective ways to listen to others'

points of view and to mobilize others to take a public stand. Deliberation across difference as well as collaborative modes of decision making is emphasized by the National Task Force (2012). Soland, Hamilton, and Stecher (2013) in a Rand Corporation report on assessment, gave considerable attention to interpersonal skills, such as weighing other individuals' perspectives and communicating effectively during collaboration. Likewise, the Asia Society's GPS for Grade 12 includes rubrics for educators to judge students' ability to collaborate across diverse groups, recognize alternative points of view, and tailor communications to specific audiences (Asia Society, 2015). The extent to which respondents have the knowledge of group process and the skills necessary to be an effective political and civic participant and leader in deliberative discussions across differences in culture and opinion should be assessed. These aspects of skills have been included in definitions of civic competency relatively infrequently. However, the proliferation of service-learning experiences in higher education has been based, in part, on the belief that participating in activities involving members of the community can build students' participatory and involvement skills. Possessing skills in participation and involving oneself in collective activities also contributes to the ability to be respectful and effective as a member of a campus group, a community group, or in a wider context. Understanding the real-life application of ethical principles forms an essential part of participatory and involvement skills. Individuals can also acquire skill in bringing the perspectives of disciplines that they have studied to bear on solving social problems.

The rarity of measures of participatory and involvement skills as part of the assessment of civic competency can be traced in part to concerns about how to measure them. Self-ratings of such skills are limited in value (and subject to social desirability bias). Next-generation assessments present feasible options for more valid assessment of these skills. For example, many participatory and involvement skills could be assessed by the presentation of a scenario of group participation or of involvement with a community issue, followed by questions that ask the respondent to choose (and perhaps justify) the most effective strategies or actions (e.g., situational judgment items). More detailed examples of these skills and directions for assessment can be found in Table 3.

## **Civic Engagement**

The second domain of the civic learning construct is civic engagement, which has three components: (a) motivations, attitudes, and efficacy, (b) democratic norms and values, and (c) participation and activities (see Table 3). Most of the constructs (Table 1) and assessments (Table 2) in this domain can be placed into these categories. Civic engagement can be described as active and informed practice or participation in democratic life (e.g., politically related behaviors, voter participation, volunteerism or service-learning, engagement in public action; Colby *et al.*, 2007).

### ***Motivations, Attitudes, and Efficacy***

The first component of civic engagement—motivation, attitudes, and efficacy—refers to interest, involvement, or engagement in attending to political information along with the sense that one has the capacity to understand a political situation or undertake a successful civic or political action. The large majority of entries in Tables 1 and 2 mention this aspect of engagement. For example, the AAC&U VALUE rubric discusses the role of motivation and attitudes such as political efficacy as driving behaviors (political and nonpolitical) that promote the creation of change with the goal of improving an individual's own civic life and the civic life of fellow community members (Rhodes, 2010). Other specific examples of motivations, attitudes, and efficacy can be found in Table 3.

### ***Democratic Norms and Values***

Democratic norms and values refers to the belief in basic principles of democracy (grounded historically and in the present) and to actions to foster a sense of respect in a diverse society. Important components are a sense of responsibility to engage in certain types of civic action and to avoid a sense of apathy. Although these beliefs are formulated differently across frameworks, Table 3 provides a number of examples. NASPA and ACPA (2004) identify both civic values and dispositions as important components of civic engagement. Likewise, HERI includes civic values as part of its recommended student learning outcomes, using self-reported ratings of importance to measure the extent to which college students value political and social involvement as personal goals (e.g., helping others, promoting racial cohesiveness; Franke *et al.*, 2010). The Council for the Advancement of Standards in Higher Education (CAS) also includes social responsibility as

a dimension of humanitarianism and civic engagement, one of their six student learning and development outcomes (CAS, 2008). There are many other examples, especially associated with participation in service learning (e.g., IUPUI's assessments).

### ***Participation and Activities***

Finally, relating to the third component of civic engagement, participation and activities refers to civic and political behavior and actions contextualized in a variety of settings. These range from face-to-face (on campus or in the community) to the national or global setting, and include online contexts (see Table 3 for specific examples). Existing frameworks and definitions have identified various civic activities such as volunteering or service learning, attentiveness to political news and respectful participation in political discussions, involvement in public action, participation in demonstrations, electoral involvement as a voter and/or as a campaign volunteer, actions demonstrating collective efficacy and facilitation of others' civic engagement, community-based research and learning, involvement in organizations, online activism, and helping others in need (CAS, 2008; Franke et al., 2010; NASPA & ACPA, 2004; National Task Force, 2012; Rhodes, 2010).

### **Assessment Design and Structure**

This section discusses item formats, task types, contexts, and accessibility considerations when designing a next-generation civic competency and engagement assessment.

#### ***Item Formats***

Considering the multidimensional nature of civic learning, items in multiple formats should be employed for an adequate coverage of the two domains (see Table 4). A next-generation assessment of civic competency should consider a range of options. Multiple-choice items can be used to measure a wide range of factual and conceptual civic knowledge as well as the attainment of civic skills. Additionally, a variety of multiple choice and situational judgment items could be used to measure analytic and participatory and involvement skills. Situational judgment items can be enhanced through the use of technology. For instance, instead of reading a scenario, an examinee could watch a video of a scenario and then choose the appropriate response from the list of alternatives.

Open-ended items allow for flexibility, allowing examinees to provide written or oral responses in their own words (e.g., Rhodes, 2010; Steinberg et al., 2011). Trained raters could score for quality of response such as accuracy/extent of problem definition, number of distinct actions or actors who could take action, understanding the role and limitations of institutions, ability to see constraints on solutions, and ability to tailor a solution to a context. These rubrics could also be the basis for computer-based scoring. This approach could be especially useful in assessing the extent to which students see social and political problems and their solutions in a realistic and complex way. See Bernstein (2010), Perrin (2006), and Torney-Purta (1992) for research examples. It is important to note, however, that open-ended items take longer for an examinee to complete and require the development of a scoring rubric. With restricted testing time and costs, it will be important to consider how many open-ended items would be feasible.

Measuring an examinee's level of civic engagement is different from assessing his or her level of civic competence and usually depends on self-report measures. The most common format for these measures is Likert-type items. These items can measure a variety of domains such as values (social responsibility), attitudes (toward specific issues such as diversity or participation), motivation (efficacy), perceived skill levels, perceived achievement, or competency and behaviors. With Likert-type items, it is important to consider respondents' tendency to give responses that conform to perceived social norms. A recent study by Rios and Anguiano-Carrasco (2014) investigated the effect on scores on a low-stakes civic assessment of respondents' not providing truthful answers (i.e., which they referred to as faking). The distortion was about 0.27 to 0.50 SDs; this is less than the distortion reported earlier for personality or employment tests but is still of concern. These results point to the need to consider respondents' tendency to provide a socially desirable answer on some Likert-type items. The issue may be of more concern when the stakes for the assessment results are high. One way to address this issue would be to require respondents to provide written justification in the form of examples illustrating or

**Table 4** Examples of Item Formats to Assess Civic Competency and Engagement

Item type	Description	Civic competency			Civic engagement		
		Civic knowledge	Analytic skills	Participatory & involvement skills	Motivation, attitudes, & efficacy	Democratic norms & values	Participation & activities
Drop-down menu <sup>a</sup>	Examinee selects one answer choice via a drop-down menu						X
Forced choice <sup>a</sup>	Examinee chooses one of two options that appear equally desirable, with each option representing a different trait or motivation				X	X	X
Likert-type <sup>a,c</sup>	Examinee responds to a statement on a scale according to subjective or objective criteria				X	X	X
Multiple-selection multiple-choice <sup>a</sup>	Examinee selects one or more answer choices from those provided	X	X	X	X	X	X
Single-selection multiple-choice <sup>a</sup>	Examinee selects one answer choice from those provided	X	X	X			
Situational judgment <sup>a</sup>	Examinee responds to a task-related situation presented in written or graphic form by choosing an appropriate response from a list of alternatives	X	X	X			
Short answer <sup>b</sup>	Examinee provides a written response to a prompt in his/her own words	X	X	X	X	X	X
Two-tier item pair (selected-response + open-ended) <sup>a,b,c</sup>	Examinee responds to a selected-response item, then provides a written/oral response to support his/her answer	X	X	X	X	X	X
Video interview/think-aloud <sup>b</sup>	Examinee provides an oral response in his/her own words to a prompt			X	X	X	X

<sup>a</sup>Selected-response items. <sup>b</sup>Open-ended items. <sup>c</sup>Self-report.

**Table 5** Examples of Task Types for Assessing Civic Competency

Task type	Description
Analyze a document/argument	Examinee reviews an existing document, argument, or graphic before answering a question
Conflict resolution <sup>a</sup>	Examinee provides information about alternative ways to solve a conflict in various contexts
Draw conclusions	Examinee draws inferences from information provided or extrapolates additional likely consequences
Deliberation <sup>a</sup>	Examinee provides information about how to intervene/deliberate in a political debate or discussion in a way that furthers productive discussion
Fact checker/recognize bias	Examinee reviews and analyzes facts and opinions, recognizing misleading information and facts from opinions (or whether a statement is biased against certain groups)
Generating critical questions <sup>a</sup>	Examinee develops or evaluates queries to elicit information to evaluate an argument or claim
Identify compelling evidence	Examinee recognizes evidence statements with the conclusions they support or undermine
Justification (based on response to a self-report item) <sup>a</sup>	Examinee provides rationale for a previous response to a self-report item (e.g., Likert-type or short answer)
Perspective taking <sup>a</sup>	Examinee role plays, takes perspectives, or chooses which response is the best choice for particular “participants” or stakeholders with contrasting resources and/or goals
Using the past to predict/inform the present	Examinee uses historical/previous information to provide justification for a response to a stimulus
Knowledge application	Examinee analyzes knowledge presented in a table or graph (or other source) to answer a question or solve a problem

<sup>a</sup>These tasks could also be used in measuring civic engagement.

validating their responses to some of the Likert-type questions. Even if no rubrics were developed for scoring this open-ended material, respondents should be less likely to inaccurately report socially desirable activities if they knew they might be asked to provide specific examples or elaborations. Additionally, alternative item formats, such as forced-choice items, could potentially mitigate respondents’ tendencies to respond in a way that makes them appear more civically engaged than they actually are.

### **Task Types**

A number of task types can be used to assess civic competency (see Table 5). For instance, tasks could include recognizing the most compelling evidence regarding a civic problem solution, recognizing inconsistency and bias in political media reports, generating critical questions to ask based on a scenario, or analyzing an argument in a mock media report (based on Table 6 in Liu, Frankel, & Roohr, 2014; Torney-Purta et al., 2001). Tasks can be constructed using adaptations of published media reports, graphs, or cartoons. Another task could include the ability to take the perspectives of different individuals in a situation or a problem-solving scenario item about group participatory skills where students were presented with more and less democratic approaches to arriving at a decision in a group, alternative ways to arrive at consensus, or alternative ways to productively engage in disagreement.

In addition to measuring civic competency, certain tasks can also be used to measure civic engagement (see Table 5). When using tasks such as these to measure civic engagement, it is critical to think about the combination of the task and the item format. An item format and task combination that could be used to measure civic engagement is a self-report item (e.g., Likert-type or short answer) with an open-ended justification. The open-ended format could give an examinee the opportunity to justify a previous response to a self-report item. For instance, if an examinee reported participating in five civic-related activities, the justification would be listing several of those activities.



The United Kingdom's GCSE tests in citizenship studies have a number of tasks that could be considered as prototypes or extensions appropriate for a next-generation civic competency and engagement assessment. Some of these would be short essays scored with rubrics, but others could correspond to the "monitored exercise" in which students engage in projects that are supervised by a teacher. In the United States, a number of disciplines (e.g., psychology, political science, sociology, and economics) are requiring the documentation of capstone experiences by college seniors. Some scholars are suggesting using this documentation for both examining individual learning and at institutional levels of evaluation (Hauhart & Grahe, 2012; Reason, 2011; Sum & Light, 2010). This could be an extension attractive to some institutions.

### **Scoring Considerations**

In addition to suggesting item formats and task types, it is also important to identify how items could be scored. For an assessment measuring civic competency and engagement, an important distinction exists between providing a score for a civic competency versus providing a score for civic engagement. A large proportion of the item types used to measure civic competency could be scored for a correct answer. When administered on a computer, scores could be derived automatically. For open-ended questions, there is potential to score them using automated scoring tools. For example, automated scoring has been used to score science content (Liu, Brew, et al., 2014), mathematics content (Sandene, Horkay, Bennett, Braswell, & Oranje, 2005), writing quality (Burststein & Marcu, 2003), and speech (Higgins, Zechner, Xi, & Williamson, 2011). However, to our knowledge, such applications have not been extended to scoring an assessment of civic competency. More empirical evidence is required to determine the accuracy of using automated engines to score items with civic content.

Items used to measure civic engagement are typically self-report and would in almost all cases not be scored as right or wrong. As a result, a "score" for civic engagement would be someone's level of behaviors or attitudes associated with engagement (which could be compared to averages developed from groups of students). Future research should consider evaluating the association between the scores in the two domains.

### **Contexts**

When developing a next-generation civic competency and engagement assessment, it is important to consider the context or situation in which the tasks are embedded. Contexts can be divided into two main areas: level and setting. Level refers to whether the context of those items is at the campus, local community, national, or global level. As previously discussed, specifying the setting of the assessment is a challenge when developing a next-generation civic competency and engagement assessment suitable for all types of higher education institutions. It is recommended that the national and global contexts include contemporary or historical assessment tasks and that the local community context focus on contemporary issues.

The next important contextual area is the setting, which includes the workplace, institution (i.e., a campus organization), community/neighborhood (e.g., volunteering or service learning organization), and political organizations or institutions. Diversity within these various settings is important to consider (and may differ between residential and commuter institutions). Online or virtual settings are also critical to consider, given globalization (including the growing number of international corporations and the expansion of communication media). For example, major technological advances such as smartphones and tablets have substantially increased information exchange. Individuals' mobility has also increased. These changes have propelled major initiatives that involve international, intercultural, and multinational awareness, competence, and cooperation, as well as conflict (Coelen, 2013). It is also the case that online civic-related communication can be of different types; for example, according to Kahne et al. (2013), communication may be driven by one's personal political ideology, by interest in a particular social or political issue (either expressing an opinion or seeking information), or by a desire to initiate or maintain a relationship with someone who reads the communication. The *Crucible* report and actions of the National Task Force (2012) also recognized these trends.

### **Delivery Modes and Accessibility**

According to the *Standards for Educational and Psychological Testing*, "standardized tests should be designed to facilitate accessibility and minimize construct-irrelevant barriers for all test takers in the target population, as far as practicable"

(AERA et al., 2014, p. 57). Given the changing demographics in higher education, a next-generation assessment of civic competency and engagement should aim to provide access for all students, including those with disabilities and English learners (ELs), through a universal design. Universal design refers to the “design of products and environments to be useable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (Measured Progress/ETS Collaborative, 2012, p. 4). This means all students in the intended testing population, “regardless of characteristics such as gender, age, language background, culture, socioeconomic status, or disability” (AERA et al., 2014, p. 57). In the case of a next-generation civic competency and engagement assessment, universal design means designing tasks for a broad range of students and providing item adaptations for students with special access needs. Ideally, if universal design is appropriately applied, a minimal number of item adaptations are needed (Measured Progress/ETS Collaborative, 2012). For instance, although political cartoons could serve as stimulus material for test questions, an assessment developer would need to make sure that the cartoon would be accompanied by a detailed description to be used with visually impaired students. It may be possible to develop separate test forms that are accessible. Additionally, for ELs, it is important to reduce the number of complex English phrases that could result in construct-irrelevant variance.

Even when universal design is applied to assessment development, there are still situations where the instrument might not be appropriate for all students, and as a result, test adaptations would need to be made (AERA et al., 2014). Although paper-and-pencil tests are one method of delivery, computer-based assessments allow for more flexibility in item-level adaptations. For instance, a screen-reader could be put in place for visually impaired students. Additionally, a computer-based assessment could allow for on-demand font magnification. While technology could help to improve accessibility for all students taking an assessment, we must also make sure that technological literacy does not become a source of construct-irrelevant variance, especially for students who may not have extensive experience with technology. This means providing tutorials about how to navigate through the computerized test administration to make sure the examinees are familiar with the layout and item formats.

### **Potential Advantages of the Proposed Framework and Assessment Considerations**

Several distinguishing features of this proposed framework and the associated assessment considerations provide advantages over previous approaches. First, the proposed framework distinguishes between two important civic learning domains: civic competency and civic engagement. These two domains are defined based on a review and synthesis of existing frameworks, definitions, and assessments of civic learning, and both domains could be incorporated in an assessment. A framework that captures both civic competency and civic engagement as part of civic learning is rare in higher education. Second, this framework would be useful for a range of institutions from community colleges to 4-year institutions of various types (e.g., public or private institutions). It would also be of interest to several disciplines as well as to groups that foster interdisciplinary collaboration. Third, this framework has been designed taking into account psychometric considerations and suggesting next-generation assessment approaches. Assessments could be carefully designed to assess the multidimensional constructs of civic competency and engagement, employing alternative item formats such as forced-choice or situational judgment items. In addition to item formats, we also discussed a classification of task types that could be used to guide assessment development. The specification of these assessment considerations helps to clarify how the proposed framework can be translated into a next-generation assessment. Lastly, this framework also recognizes the importance of universal design and the use of technology to make an assessment accessible for students with disabilities or ELs.

### **Conclusion**

It is an excellent time to explore the development of an assessment of civic competency and engagement for college and university students. A variety of higher education associations and institutions are taking steps in this direction (e.g., developing frameworks, institutionalizing conceptualizations, and thinking about the need for assessments and ways to recognize students’ achievements as well as shortfalls in this area). There are approximately 30 entries in Tables 1 and 2 that discuss projects relevant to higher education involving civic-related constructs. New test development

technologies (e.g., online and with video links) and methodologies make this effort much more feasible than was once the case.

A variety of stakeholders extending beyond universities and their accrediting agencies, such as leaders in the workforce community, have an interest in this topic and are potential sources of support for such an effort. Many institutions want to demonstrate that they are preparing students for the workplace and citizenship. Students themselves want to have validation and recognition for their civic-related activities taking place in settings such as campuses, local communities, the workplace, national organizations, political structures, international or global contexts, and online. This area will be of interest for all college majors, including students in STEM majors. Many employers are likely to have an interest in ways to assess the civic-related capacities of their future workers. This includes abilities to take the perspective of other people, to understand diverse groups, and to formulate workable solutions to complex social issues. Administrators of colleges and universities want to give information about students' achievement to faculty members in a way likely to improve programs. A project in this area may have special utility because civic learning does not neatly fit into a disciplinary category. Finally, a next-generation assessment of civic competency and engagement could be more informative than counting how many students are participating in service learning or voter registration drives. And to the extent that this overall effort simulates further engagement in the local community, it is likely to be welcomed as a way to integrate college students during and after their postsecondary studies.

### Affiliations and Acknowledgments

Judith Torney-Purta is a professor emerita at the University of Maryland, College Park. The coauthors are currently or have been members of the ETS professional staff. The authors would like to thank Elizabeth Beaumont (Department of Political Science, University of Minnesota), whose expertise in research on political engagement played an important role in the development of the background, the definitions, and the contexts for the proposed framework. We would also like to thank Peter Levine (Jonathan Tisch College of Citizenship and Public Service, Tufts University) for his insightful feedback to an earlier draft of this paper. We are also grateful to Robert Hunter and Thomas Van Essen (ETS) for their consultation. Robert's expertise about assessment development in the context of history, government, and political science contributed to the sections on assessment design and structure, and Thomas contributed to the project's coordination as well as its substance. We would also like to acknowledge Sarah Eason (University of Maryland) and Jennifer Bochenek (ETS) for assistance in formatting and checking the tables and references.

### References

- Adelman, C., Ewell, P., Gaston, P., & Schneider, C. G. (2011). *The Degree Qualifications Profile. Defining degrees: A new direction for American higher education to be tested and developed in partnership with faculty, students, leaders, and stakeholders*. Indianapolis, IN: Lumina Foundation for Education. Retrieved from ERIC database (ED515302).
- Adelman, C., Ewell, P., Gaston, P., & Schneider, C. G. (2014). *The Degree Qualifications Profile: A learning-centered framework for what college students should know and be able to do to earn the associate, bachelor's or master's degree*. Indianapolis, IN: Lumina Foundation for Education.
- Amadeo, J., Torney-Purta, J., Lehmann, R., Husfeldt, V., & Nikolova, R. (2002). *Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement.
- American Association of State Colleges and Universities. (2002). *Stepping forward as stewards of place: A guide for leading public engagement at state colleges and universities*. Retrieved from <http://www.aascu.org/WorkArea/DownloadAsset.aspx?id=5458>
- American Association of State Colleges and Universities. (2014). *eCitizenship: New tools, new strategies, new spaces*. Retrieved from <http://www.aascu.org/programs/adp/eCitizenship/>
- American Association of State Colleges and Universities/National Conference on Citizenship. (2012). *Campus and community civic health initiative matrix*. Retrieved from <http://www.aascu.org/programs/adp/civichealth/>
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- American National Election Studies. (2015). *Data center*. Retrieved from [http://electionstudies.org/studypages/download/datacenter\\_all\\_NoData.php](http://electionstudies.org/studypages/download/datacenter_all_NoData.php)

- American Psychological Association. (2013). *The APA guidelines for the undergraduate psychology major* (Version 2.0). Retrieved from <http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf>
- Anduiza, E., Jensen, M. J., & Jorba, L. (Eds.). (2012). *Digital media and political engagement worldwide: A comparative study*. New York, NY: Cambridge University Press.
- Arthur, W., Jr., Glaze, R., Jarrett, S., White, C., Schurig, I., & Taylor, J. (2014). Comparative evaluation of three situational judgment test responses formats in terms of construct-related validity, subgroup differences, and susceptibility to response distortion. *Journal of Applied Psychology*, 99, 335–343.
- Asia Society. (2015). *Global leadership rubric: Grade 12 (Global Performance System)*. Retrieved from <http://asiasociety.org/files/uploads/486files/AS-GPS-Leadership-12-Rubric-2.pdf>
- Assessment Qualifications Alliance. (2012). *GCSE specification: Citizenship studies (for exams June 2014 onwards)*. Retrieved from <http://filestore.aqa.org.uk/subjects/AQA-4105-W-SP-14.PDF>
- Association of American Colleges and Universities. (2011). *The LEAP vision for learning: Outcomes, practices, impact, and employers' view*. Washington, DC: Author.
- Banaji, S., & Buckingham, D. (2013). *The civic web: Young people, the Internet, and civic participation*. Cambridge, MA: MIT Press.
- Barrett, M. (2012). *The PIDOP project: An overview*. Retrieved from [http://epubs.surrey.ac.uk/775796/1/Barrett%20\(2012\).pdf](http://epubs.surrey.ac.uk/775796/1/Barrett%20(2012).pdf)
- Barrett, M., & Zani, B. (Eds.). (2015). *Political and civic engagement: Multidisciplinary perspectives*. London, UK: Routledge.
- Barrows, T. (1981). *College students' knowledge and beliefs: A survey of global understanding*. New Rochelle, NY: Change Magazine Press.
- Beaumont, E. (2003, November). *Political engagement in young adults: A preliminary conceptual framework*. Paper presented at the International Civic Education Conference, New Orleans, LA.
- Beaumont, E. (2005). The challenge of assessing civic engagement: What we know and what we still need to learn about civic education in college. *Journal of Public Affairs Education*, 11(4), 287–303.
- Beaumont, E., Colby, A., Ehrlich, T., & Torney-Purta, J. (2006). Promoting political competence and engagement in college students. *Journal of Political Science Education*, 2, 249–270.
- Bennion, E. A., & Dill, H. (2013). Civic engagement research in political science journals: An overview of assessment techniques. In A. R. M. McCartney, E. A. Bennion, & D. Simpson (Eds.), *Teaching civic engagement: From student to active citizen* (pp. 423–435). Washington, DC: American Political Science Association.
- Berelson, B., Lazarsfeld, P., & McPhee, W. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago, IL: University of Chicago Press.
- Bernstein, J. (2010). Using “think-alouds” to understand variations in political thinking. *Journal of Political Science Education*, 6, 49–69.
- Blaich, C. F., & Wise, K. S. (2011). *From gathering to using assessment results: Lessons from the Wabash National Study* (NILOA Occasional Paper No. 8). Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment.
- Bowman, N. (2011). Promoting participation in a diverse democracy: A meta-analysis of college diversity experiences and civic engagement. *Review of Educational Research*, 81, 29–68.
- Brett, P. (Ed.). (2002). *Folens GCSE citizenship studies*. Dunstable, UK: Folens.
- Bringler, R. G., Phillips, M., & Hudson, M. (2004). *The measure of service learning: Research scales to assess student experiences*. Washington, DC: American Psychological Association.
- Bringler, R., & Steinberg, K. (2010). Educating for informed community involvement. *American Journal of Community Psychology*, 46, 428–441.
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. New York, NY: The Guilford Press.
- Bureau of Labor Statistics. (2015). *Volunteering in the United States-2014*. Washington, DC: United States Department of Labor. Retrieved from <http://www.bls.gov/news.release/pdf/volun.pdf>
- Burns, G. N., & Christiansen, N. D. (2011). Methods of measuring faking behavior. *Human Performance*, 24(4), 358–372.
- Burstein, J., & Marcu, D. (2003). Automated evaluation of discourse structure in student essays. In M. D. Shermis & J. Burstein (Eds.), *Automated essay scoring: A cross-disciplinary perspective* (pp. 200–219). Mahwah, NJ: Lawrence Erlbaum.
- Butin, D. W., & Seider, S. (Eds.). (2012). *Engaged campus: Certificates, minors and majors as the new community engagement*. Gordonsville, VA: Palgrave Macmillan.
- Campion, M., Ployhart, R., & MacKenzie, W. I., Jr. (2014). The state of research on situational judgment tests: A content analysis and directions for future research. *Human Performance*, 27, 283–310.
- Carnegie Foundation for the Advancement of Teaching & Center for Information and Research on Civic Learning and Engagement. (2006). *Higher education: Civic mission and civic effects*. Stanford, CA: Carnegie Foundation for the Advancement of Teaching.
- Casner-Lotto, J., & Barrington, L. (2006). *Are they really ready to work? Employers' perspectives on the basic knowledge and applied skills of new entrants to the 21st century U.S. workforce*. Retrieved from [http://www.p21.org/storage/documents/FINAL\\_REPORT\\_PDF09-29-06.pdf](http://www.p21.org/storage/documents/FINAL_REPORT_PDF09-29-06.pdf)
- Center for Information and Research on Civic Learning and Engagement. (2010). *Civic skills and federal policy (Fact sheet)*. Medford, MA: CIRCLE.

- Center for Information and Research on Civic Learning and Engagement. (2014). *National study of learning, voting and engagement*. Retrieved from <http://www.civicyouth.org/nslve/>
- Center of Inquiry in the Liberal Arts. (2013). *Wabash national study 2006–2012: Outcomes and experiences measures*. Retrieved from <http://www.liberalarts.wabash.edu/study-instruments/>
- Checkoway, B. (2014). Civic minded professors. In J. Reich (Ed.), *Civic engagement, civic development, and higher education* (pp. 77–79). Washington, DC: Bringing Theory to Practice.
- Christiansen, N. D., Burns, G. N., & Montgomery, G. E. (2005). Reconsidering forced-choice item formats for applicant personality assessment. *Human Performance, 18*(3), 267–307.
- Coelen, R. J. (2013). *The internationalisation of higher education, 2.0*. Retrieved from [https://www.stenden.com/fileadmin/user\\_upload/documenten/research/Inauguration\\_Speech\\_Robert\\_J.\\_Coelen.pdf](https://www.stenden.com/fileadmin/user_upload/documenten/research/Inauguration_Speech_Robert_J._Coelen.pdf)
- Cohen, C. (2010). *Democracy remixed: Black youth and the future of American politics*. New York, NY: Oxford University Press.
- Cohen, C., & Kahne, J. (2011). *Youth participatory political survey*. Retrieved from <http://ypp.dmlcentral.net/content/ypp-survey-project-2011-data>
- Colby, A., Beaumont, E., Ehrlich, T., & Corngold, J. (2007). *Educating for democracy: Preparing undergraduates for responsible political engagement*. San Francisco, CA: Jossey-Bass.
- Colby, A., Ehrlich, T., Beaumont, E., & Stephens, J. (2003). *Educating citizens: Preparing America's undergraduates for lives of moral and civic responsibility*. San Francisco, CA: Jossey-Bass.
- Conant, B. J. (1945). *General education in a free society: Report of the Harvard Committee*. Cambridge, MA: Harvard University Press. Retrieved from <http://isites.harvard.edu/fs/docs/icb.topic996234.files/generaleducation032440mbp.pdf>
- Corning, A. F., & Myers, D. (2002). Individual orientations toward engagement in social action. *Political Psychology, 23*(4), 703–729.
- Council for the Advancement of Standards in Higher Education. (2008). *Council for the advancement of standards learning and development outcomes. Contextual statement*. Retrieved from <http://standards.cas.edu/getpdf.cfm?PDF=D87A29DC-D1D6-D014-83AA8667902C480B>
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4), 349–354.
- Davies, L. (2006). Global citizenship: Abstraction or framework for action? *Educational Review, 58*(1), 5–25.
- Deardorff, M., Hamann, K., & Ishiyama, J. (Eds.). (2009). *Assessment in political science*. Washington, DC: American Political Science Association.
- Delli Carpini, M. X., & Keeter, S. (1993). Measuring political knowledge: Putting first things first. *American Journal of Political Science, 37*, 1179–1206.
- Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. New Haven, CN: Yale University Press.
- Department for Education (UK). (2014). *Citizenship studies: Draft GCSE subject content (DFE-00582-2014)*. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/358272/Draft\\_Citizenship\\_Content.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/358272/Draft_Citizenship_Content.pdf)
- Dewey, J. (1916). *Democracy and education. An introduction to the philosophy of education*. New York, NY: The Macmillan Company. Retrieved from <https://ia600400.us.archive.org/2/items/democracyeducati1916dewe/democracyeducati1916dewe.pdf>
- Dolan, K. (2011). Do women and men know different things? Measuring gender differences in political knowledge. *Journal of Politics, 73*(1), 97–107.
- Downing, S. M., & Haladyna, T. M. (2006). *Handbook of test development*. Mahwah, NJ: Lawrence Erlbaum.
- Dugan, J. P., & Komives, S. R. (2007). *Developing leadership capacity in college students: Findings from a national study*. College Park, MD: National Clearinghouse for Leadership Programs.
- Dwight, S. A., & Donovan, J. J. (2003). Do warnings not to fake reduce faking? *Human Performance, 16*, 1–23.
- Education Commission of the States. (2006). *School citizenship education climate assessment*. Denver, CO: Author.
- Education Commission of the States. (2015). *QNA civics assessment database*. Retrieved from <http://www.ecs.org/QNA/default2.asp>
- Ehrlich, T. (1997). Civic learning: Democracy and education revisited. *Educational Record, 78*(3/4), 56–65.
- Einolf, C. J. (2011). Gender differences in the correlates of volunteering and charitable giving. *Nonprofit and Voluntary Sector Quarterly, 40*(6), 1092–1112.
- Finley, A. (2011). *Civic learning and democratic engagements: A review of the literature on civic engagement in post-secondary education*. Washington, DC: Association of American Colleges and Universities.
- Finley, A. (2012). Civic perspective narrative. In D. W. Harvard (Ed.), *Civic provocations* (pp. XVI–XVII). Washington, DC: Bringing Theory to Practice.
- Flanagan, C., Syvertsen, A., & Stout, M. (2007). *Civic measurement models: Tapping adolescents' civic engagement* (CIRCLE Working Paper No. 55). Medford, MA: The Center for Information and Research on Civic Learning and Engagement.
- Franke, R., Ruiz, S., Sharkness, J., DeAngelo, L., & Pryor, J. P. (2010). *Findings from the 2009 administration of the College Senior Survey (CSS): National aggregates*. Retrieved from [http://www.heri.ucla.edu/PDFs/pubs/Reports/2009\\_CSS\\_Report.pdf](http://www.heri.ucla.edu/PDFs/pubs/Reports/2009_CSS_Report.pdf)

- Frisbie, D. A. (1988). Reliability of scores from teacher-made tests. *Educational Measurement: Issues and Practice*, 7(1), 25–35.
- Gans, H. (2009). A sociology for public sociology: Some needed disciplinary changes for creating public sociology. In V. Jeffries (Ed.), *Handbook of public sociology* (pp. 123–134). Lanham, MD: Rowman & Littlefield.
- Goldfinger, J., & Presley, J. (2010). *Educating students for political engagement: A guide to implementation and assessment for colleges and universities*. Washington, DC: American Association of State Colleges and Universities.
- Gottlieb, K., & Robinson, G. (Eds.). (2006). *A practical guide for integrating civic responsibility into the curriculum* (2nd ed.). Washington, DC: Community College Press.
- Gould, J. (Ed.). (2011). *Guardian of democracy: The civic mission of schools*. Washington, DC: National Conference on Citizenship. Retrieved from <http://www.ncoc.net/guardianofdemocracy>
- Grobman, L., & Rosenberg, R. (Eds.). (2015). *Service learning and literacy studies in English*. New York, NY: Modern Language Association of America.
- Haertel, E. H. (2006). Reliability. In R. L. Brennan (Ed.), *Educational measurement* (4th, ed. pp. 65–111). Westport, CT: American Council on Education and Praeger.
- Haladyna, T. M., & Rodriguez, M. C. (2013). *Developing and validating test items*. New York, NY: Routledge.
- Hart Research Associates. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn*. Washington, DC: Association of American Colleges and Universities.
- Hart Research Associates. (2013). *It takes more than a major: Employer priorities for college learning and student success*. Washington, DC: Association of American Colleges and Universities.
- Hart Research Associates. (2015). *Falling short? College learning and career success*. Washington, DC: Association of American Colleges and Universities.
- Harward, D. (2013). Introduction and framing essay. In D. Harward (Ed.), *Civic values, civic practices* (pp. x–xxi). Washington, DC: Bringing Theory to Practice.
- Haste, H. (2010). Citizenship education: A critical look at a contested field. In L. Sherrod, J. Torney-Purta, & C. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 161–192). New York, NY: John Wiley.
- Hatcher, S. (2011). Assessing civic knowledge and engagement. *New Directions for Institutional Research*, 2011(149), 81–92.
- Hauhart, R. C., & Grahe, J. (2012). A national survey of American higher education capstone practices in sociology and psychology. *Teaching Sociology*, 40, 227–241.
- Higgins, D., Zechner, K., Xi, X., & Williamson, D. (2011). A three-stage approach to the automated scoring of spontaneous spoken responses. *Computer Speech and Language*, 25, 282–306.
- Higher Education Research Institute. (1996). *A social change model of leadership development*. Los Angeles, CA: Higher Education Research Institute, UCLA.
- Higher Education Research Institute. (2014a). *College senior survey*. Retrieved from <http://www.heri.ucla.edu/cssoverview.php>
- Higher Education Research Institute. (2014b). *Diverse learning environments survey*. Retrieved from <http://www.heri.ucla.edu/dleoverview.php>
- Hirsch, E. D., Kett, J. F., & Trefil, J. (2002). *The new dictionary of cultural literacy*. Boston, MA: Houghton Mifflin.
- Holland, B. (2014). Strategies for understanding the impact of civic learning and teaching. In A. Finley (Ed.), *Civic learning and teaching* (pp. 19–32). Washington, DC: Bringing Theory to Practice.
- Hurtado, S., Arellano, L., Cuellar, M., & Guillermo-Wann, C. (2011). *Diverse Learning Environments Survey instrument: Introduction and select factors*. Los Angeles, CA: Higher Education Research Institute.
- Hurtado, S., & DeAngelo, L. (2012). Linking diversity and civic-minded practices with student outcomes. *Liberal Education*, 98(2), 14–23.
- Hurtado, S., Ruiz, A., & Whang, H. (2012a). Advancing and assessing civic learning: New results from the diverse learning environments survey. *Diversity and Democracy*, 15(3), 10–12.
- Hurtado, S., Ruiz, A., & Whang, H. (2012b, June). *Assessing students' social responsibility and civic learning*. Paper presented at the Annual Forum of the Association for Institutional Research, New Orleans, LA. Retrieved from <http://heri.ucla.edu/pub/AssessCivicLearning.pdf>
- Intercollegiate Studies Institute's National Civic Literacy Board. (2006). *The coming crisis in citizenship: Higher education's failure to teach America's history and institutions*. Wilmington, DE: Intercollegiate Studies Institute. Retrieved from <http://www.americancivilliteracy.org/2006/summary.html>
- Intercollegiate Studies Institute's National Civic Literacy Board. (2007). *Failing our students, failing America: Holding colleges accountable for teaching America's history and institutions*. Retrieved from [http://www.americancivilliteracy.org/2007/summary\\_summary.html](http://www.americancivilliteracy.org/2007/summary_summary.html)
- Intercollegiate Studies Institute's National Civic Literacy Board. (2011). *Enlightened citizenship: How civic knowledge trumps a college degree in promoting active civic engagement*. Retrieved from [http://www.americancivilliteracy.org/report/pdf/02-22-11/civic\\_literacy\\_report\\_11.pdf](http://www.americancivilliteracy.org/report/pdf/02-22-11/civic_literacy_report_11.pdf)

- Jackson, D. N., Wroblewski, V. R., & Ashton, M. C. (2000). The impact of faking on employment tests: Does forced choice offer a solution? *Human Performance, 13*(4), 371–388.
- James Madison University. (2015). *Civic engagement—Student courses*. Retrieved from <http://www.jmu.edu/universitystudies/civicengagement/studentcourses.shtml>
- Jankowski, N., Hutchings, P., Ewell, P., Kinzie, J., & Kuh, G. (2013). The Degree Qualifications Profile: What it is and why we need it now. *Change: The Magazine of Higher Learning, 45*(6), 6–15.
- Jeffries, V. (Ed.). (2009). *Handbook of public sociology*. Lanham, MD: Rowman & Littlefield.
- Kahne, J., Lee, N. J., & Feezell, J. (2013). The civic and political significance of online participatory cultures among youth transitioning to adulthood. *Journal of Information Technology and Politics, 10*, 1–20.
- Kahne, J., & Middaugh, E. (2008). *Democracy for some: The civic opportunity gap in high school* (CIRCLE Working Paper No. 59). Medford, MA: The Center for Information and Research on Civic Learning and Engagement.
- Kane, M. T. (2006). Content-related validity evidence in test development. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development* (pp. 131–154). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kane, M. (2013). The argument approach to validation. *School Psychology Review, 42*, 448–457.
- Kawashima-Ginsberg, K. (2013). *Do discussion, debate, and simulations boost NAEP civics performance?* Medford, MA: The Center for Information and Research on Civic Learning and Engagement.
- Kerr, D., & Cleaver, E. (2004). *Citizenship education longitudinal study: Literature review -Citizenship education one year on – What does it mean? Emerging definitions and approaches in the first year of national curriculum citizenship in England* (DfES Research Report 532). Retrieved from <http://dera.ioe.ac.uk/5430/1/RR532.pdf>
- Kinzie, J., McCormick, A., & Stevens, M. (2014, January). *Civic learning and effective educational practice: A focus on service-learning and civic engagement*. Presentation at the Association of American Colleges and Universities Annual Meeting, Washington, DC.
- Korgen, K. O., & White, J. (2010). *The engaged sociologist: Connecting the classroom to the community* (3rd ed.). Los Angeles, CA: SAGE/Pine Forge.
- Levine, P., & Higgins-D'Alessandro, A. (2010). Youth civic engagement: Normative issues. In L. Sherrod, J. Torney-Purta, & C. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 115–138). Hoboken, NJ: Wiley.
- Lievens, F., Peeters, H., & Schollaert, E. (2008). Situational judgment tests: A review of recent research. *Personnel Review, 37*(4), 426–441.
- Liu, O. L., Brew, C., Blackmore, J., Gerard, L., Madhok, J., & Linn, M. C. (2014). Automated scoring of constructed-response science items: Prospects and obstacles. *Educational Measurement: Issues and Practice, 33*, 19–28.
- Liu, O. L., Frankel, L., & Roohr, K. C. (2014). *Assessing critical thinking in higher education: Current state and directions for next-generation assessment* (Research Report No. RR-14-10). Princeton, NJ: Educational Testing Service. <http://dx.doi.org/10.1002/ets2.12009>
- Lopez, M. H., Levine, P., Both, D., Kiesa, A., Kirby, E., & Marcelo, K. (2006). *The 2006 civic and political health of the nation: A detailed look at how youth participate in politics and communities*. College Park, MD: The Center for Information and Research on Civic Learning and Engagement.
- Lott, J. L., III. (2013). Predictors of civic values: Understanding student-level and institutional-level effects. *Journal of College Student Development, 54*(1), 1–16.
- Lott, J. L., III, & Eagan, M. K., Jr. (2011). Assessing the psychometric properties of civic values. *Journal of Student Affairs Research and Practice, 48*(3), 333–347.
- Markle, R., Breneman, M., Jackson, T., Burrus, J., & Robbins, S. B. (2013). *Synthesizing frameworks of higher education student learning outcomes* (Research Report No. RR-13-22). Princeton, NJ: Educational Testing Service. <http://dx.doi.org/10.1002/j.2333-8504.2013.tb02329.x>
- Martin, B. A., Bowen, C. C., & Hunt, S. T. (2002). How effective are people at faking on personality questionnaires? *Personality and Individual Differences, 32*, 247–256.
- Meade, A. W. (2004). Psychometric problems and issues involved with creating and using ipsative measures for selection. *Journal of Occupational and Organizational Psychology, 77*, 531–552.
- Measured Progress/ETS Collaborative. (2012). *Smarter balanced assessment consortium: General accessibility guidelines*. Retrieved from <http://www.smarterbalanced.org/wordpress/wp-content/uploads/2012/05/TaskItemSpecifications/Guidelines/AccessibilityandAccommodations/GeneralAccessibilityGuidelines.pdf>
- Musil, C. M. (2009). Educating students for personal and social responsibility: The civic learning spiral. In B. Jacoby (Ed.), *Civic engagement in higher education* (pp. 49–68). San Francisco, CA: Jossey-Bass.
- National Assessment Governing Board. (2010). *Civics framework for the 2010 National Assessment of Educational Progress*. Washington, DC: U.S. Department of Education.
- National Association of Student Personnel Administrators and the American College Personnel Association. (2004). *Learning reconsidered: A campus-wide focus on the student experience*. Washington, DC: Author.

- National Center for Educational Statistics. (2011). *What does the NAEP civics assessment measure?* Retrieved from <http://nces.ed.gov/nationsreportcard/civics/whatmeasure.aspx>
- National Task Force on Civic Learning and Democratic Engagement. (2012). *A crucible moment: College learning and democracy's future*. Washington, DC: Association of American Colleges and Universities. Retrieved from [http://www.aacu.org/civic\\_learning/crucible/documents/crucible\\_508F.pdf](http://www.aacu.org/civic_learning/crucible/documents/crucible_508F.pdf)
- Office for Standards in Education. (2003). *National curriculum citizenship: Planning and implementation 2002/03*. Manchester, United Kingdom: Author. Retrieved from <http://webarchive.nationalarchives.gov.uk/20141107082130/http://www.ofsted.gov.uk/resources/national-curriculum-citizenship-planning-and-implementation-200203>
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Osler, A., & Starkey, H. (2006). Education for democratic citizenship: A review of research, policy and practice 1995–2005. *Research Papers in Education*, 21, 433–466.
- Ostrander, S. (2004). Democracy, civic participation and the university: A comparative study of civic engagement on five campuses. *Nonprofit and Voluntary Sector Quarterly*, 33(1), 74–93.
- Peeters, H., & Lievens, F. (2005). Situational judgment tests and their predictiveness of college students' success: The influence of faking. *Educational and Psychological Measurement*, 65(1), 70–89.
- Perrin, A. J. (2006). *Citizen speak: The democratic imagination in American life*. Chicago, IL: University of Chicago Press.
- Peter D. Hart Research Associates. (2006). *How should colleges prepare students to succeed in today's global economy?* Washington, DC: Association of American Colleges and Universities.
- Peter D. Hart Research Associates. (2008). *How should colleges assess and improve student learning? Employers' views on the accountability challenge*. Washington, DC: Association of American Colleges and Universities.
- Podsakoff, N., Whiting, S., Podsakoff, P., & Blume, B. (2009). Individual- and organizational-level consequences of organizational citizenship behavior: A meta-analysis. *Journal of Applied Psychology*, 94, 122–141.
- Pollack, S. S. (2013). Critical civic literacy: Knowledge at the intersection of career and community. *The Journal of General Education*, 62(4), 223–237.
- Qualifications and Curriculum Authority. (1998). *Education for citizenship and the teaching of democracy in schools: Final report of the advisory group on citizenship*. Retrieved from <http://dera.ioe.ac.uk/4385/1/crickreport1998.pdf>
- Qualifications and Curriculum Authority. (2007). *Citizenship: Programme of study for key stage 4*. Retrieved from <http://media.education.gov.uk/assets/files/pdf/q/citizenship%202007%20programme%20of%20study%20for%20key%20stage%204.pdf>
- Quality Improvement Agency for Lifelong Learning. (2007). *Post-16 citizenship in colleges. An introduction to effective practice*. Retrieved from <http://files.eric.ed.gov/fulltext/ED498608.pdf>
- Radcliff, C. J., Salem, J. A., O'Connor, L. G., & Gedeon, J. A. (2007). *Project SAILS skill sets*. Retrieved from <https://www.projectsails.org/SkillSets>
- Reason, R. D. (Ed.). (2011). *Developing and assessing personal and social responsibility in college* (New Directions for Higher Education Report No. 164). San Francisco, CA: Jossey-Bass.
- Reason, R. D., & Hemer, K. M. (2015). *Civic learning and engagement: A review of the literature on civic learning, assessment and instruments*. Retrieved from <http://www.aacu.org/sites/default/files/files/qc/CivicLearningLiteratureReviewRev1-26-15.pdf>
- Rest, J., & Narvaez, D. (1998). *DIT-2: Defining Issues Test, version 3.0*. Retrieved from <http://www.liberalarts.wabash.edu/storage/assessment-instruments/dit2.pdf>
- Rhodes, T. L. (2010). *Assessing outcomes and improving achievement: Tips and tools for using rubrics*. Washington, DC: Association of American Colleges and Universities. Retrieved from <http://www.aacu.org/value/rubrics/civicengagement.cfm>
- Rios, J. A., & Anguiano-Carrasco, C. (2014). *Faking behavior in non-cognitive low-stakes assessments: Should we be concerned?* Manuscript submitted for publication.
- Rios, J. A., & Wells, C. S. (2014). Validity evidence based on internal structure. *Psicothema*, 26(1), 108–116.
- Ronan, B. (2012). Community colleges and the work of democracy. In D. Barker & M. Gilmore (Eds.), *Connections: Educating for democracy* (pp. 31–33). Dayton, OH: Kettering Foundation.
- Ryder, R. R., & Mitchell, J. J. (2013). Measuring campus climate for personal and social responsibility. In R. D. Reason (Ed.), *Developing and assessing personal and social responsibility in college* (New Directions for Higher Education Report No. 164, pp. 31–48). San Francisco, CA: Jossey-Bass.
- Saltmarsh, J. (2005). The civic promise of service learning. *Liberal Education*, 91(2), 50–55.
- Sandene, B., Horkay, N., Bennett, R., Braswell, J., & Oranje, A. (2005). *Online assessment in mathematics and writing: Reports from the NAEP Technology-based Assessment Project, Research and Development series* (NCES Report No. 2005-457). Washington, DC: U.S. Government Printing Office.
- Schulz, W., Fraillon, J., Ainley, J., Losito, B., & Kerr, D. (2008). *International civic and citizenship education study*. Retrieved from [http://www.iea.nl/fileadmin/user\\_upload/Publications/Electronic\\_versions/ICCS\\_2009\\_Framework.pdf](http://www.iea.nl/fileadmin/user_upload/Publications/Electronic_versions/ICCS_2009_Framework.pdf)



- Schulz, W., & Sibberns, H. (Eds.). (2004). *IEA civic education study technical report*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement.
- Scobey, D. (2012). Why now? Because this is a Copernican moment. In D. W. Harward (Ed.), *Civic provocations* (pp. 3–6). Washington, DC: Bringing Theory to Practice.
- Sinharay, S. (2010). How often do subscores have added value? Results from operational and simulated data. *Journal of Educational Measurement*, 47, 150–174.
- Sinharay, S. (2013). A note on assessing the added value of subscores. *Educational Measurement: Issues and Practice*, 32(4), 38–42.
- Sinharay, S., Haberman, S., & Puhan, G. (2007). Subscores based on classical test theory: To report or not to report. *Educational Measurement: Issues and Practice*, 26(4), 21–28.
- Sinharay, S., Puhan, G., & Haberman, S. J. (2011). An NCME instructional module on subscores. *Educational Measurement: Issues and Practice*, 30(3), 29–40.
- Soland, J., Hamilton, L. S., & Stecher, B. M. (2013). *Measuring 21st century competencies: Guidance for educators*. Santa Monica, CA: Rand Corporation.
- Spencer, D. (1938). The frankness of subjects on personality measures. *Journal of Educational Psychology*, 29, 26–35.
- Steinberg, K., Hatcher, J., & Bringle, R. (2011). Civic-minded graduate: A north star. *Michigan Journal of Community Service Learning*, 18, 19–33.
- Steinberg, K., & Norris, K. (2010). Assessing civic mindedness. *Diversity & Democracy*, 14(3), 12–14.
- Strahan, J., Fogarty, G. J., & Machin, A. M. (2005). Predicting performance on a situational judgment test: The role of communication skills, listening skills, and expertise. In M. Katsikitis (Ed.), *Proceedings of the 40th annual conference of the Australian Psychological Society* (pp. 323–327). Melbourne, Australia: The Australian Psychological Society Ltd.
- Sullivan, F. (2013). *New and alternative assessments, digital badges and civics: An overview of emerging themes and promising directions* (CIRCLE Working Paper No. 77). Medford, MA: Center for Information and Research on Civic Learning and Engagement.
- Sum, P. E., & Light, S. A. (2010). Assessing student learning outcomes and documenting success through a capstone course. *PS: Political Science & Politics*, 43, 523–531.
- Tett, R. P., & Christiansen, N. D. (2007). Personality tests at the crossroads: A reply to Morgeson, Campion, Dipboye, Hollenbeck, Murphy, and Schmitt. *Personnel Psychology*, 60, 967–993.
- Thoma, S., & Dong, Y. (2014). The defining issues test of moral judgment development. *Behavioral Development Bulletin*, 19(3), 55–61.
- Torney-Purta, J. (1992). Cognitive representations of the political and economic systems in adolescents. In H. Haste & J. Torney-Purta (Eds.), *The development of political understanding* (pp. 11–25). San Francisco, CA: Jossey-Bass.
- Torney-Purta, J., Lehmann, R., Oswald, H., & Schulz, W. (2001). *Citizenship and education in twenty-eight countries: Civic knowledge and engagement at age fourteen*. Amsterdam, The Netherlands: International Association for the Evaluation of Educational Achievement.
- Torney-Purta, J., & Vermeer, S. (2006). *Developing citizenship competencies from kindergarten through grade 12: A background paper for policymakers and educators*. Denver, CO: Education Commission of the States. Retrieved from <http://files.eric.ed.gov/fulltext/ED493710.pdf>
- Tosh, J. (2014). Public history, civic engagement and the historical profession in Britain. *History*, 99(335), 191–212.
- Traub, R. E., & Rowley, G. L. (1991). Understanding reliability. *Educational Measurement: Issues and Practice*, 10(1), 37–45.
- Trustees of Indiana University. (2013). *National Survey of Student Engagement topical module: Civic engagement*. Retrieved from <http://nsse.iub.edu/pdf/modules/2014/NSSE%202014%20Civic%20Engagement%20Module.pdf>
- U.S. Citizenship and Immigration Services. (2011). *Civics (history and government) questions for the naturalization test*. Washington, DC: Author. Retrieved from <http://www.uscis.gov/sites/default/files/USCIS/Office%20of%20Citizenship/Citizenship%20Resource%20Center%20Site/Publications/100q.pdf>
- U.S. Department of Education. (2011). *Constructed-response interrater reliability*. Retrieved from [https://nces.ed.gov/nationsreportcard/tdw/analysis/initial\\_itemscore.aspx](https://nces.ed.gov/nationsreportcard/tdw/analysis/initial_itemscore.aspx)
- U.S. Department of Education. (2012). *Advancing civic learning and engagement in democracy: A road map and call to action*. Retrieved from <http://www.ed.gov/sites/default/files/road-map-call-to-action.pdf>
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
- Viswesvaran, C., & Ones, D. S. (1999). Meta-analysis of fakability estimates: Implications for personality measurement. *Educational and Psychological Measurement*, 59, 197–210.
- Wainer, H., Sheehan, K., & Wang, X. (1998). *Some paths toward making PRAXIS scores more useful* (Research Report No. RR-98-44). Princeton, NJ: Educational Testing Service. <http://dx.doi.org/10.1002/j.2333-8504.1998.tb01793.x>
- Weerts, D. J., Cabrera, A. F., & Perez Mejfas, P. P. (2014). Uncovering categories of civically engaged college students: A latent class analysis. *The Review of Higher Education*, 37, 141–168.
- Westheimer, J., & Kahne, J. (2004). What kind of citizen? Politics of educating for citizenship. *American Educational Research Journal*, 41, 237–269.

- Whetzel, D., & McDaniel, M. (2009). Situational judgment tests: An overview of current research. *Human Resources Management, 19*, 188–202.
- Winke, P. (2011). Investigating the reliability of the civics component of the U.S. Naturalization Test. *Language Assessment Quarterly, 8*(4), 317–341.
- Zhang, T., Torney-Purta, J., & Barber, C. (2012). Students' conceptual knowledge and process skills in civic education: Identifying cognitive profiles and classroom correlates. *Theory and Research in Social Education, 40*, 1–34.
- Zukin, C., Keeter, S., Andolina, M., Jenkins, K., & Delli Carpini, M. (2006). *A new engagement: Political participation, civic life, and the changing American citizen*. New York, NY: Oxford University Press.

### **Suggested citation:**

Torney-Purta, J., Cabrera, J. C., Roohr, K. C., Liu, O. L., & Rios, J. A. (2015). *Assessing civic competency and engagement in higher education: Research background, frameworks, and directions for next-generation assessment* (Research Report No. RR-15-34). Princeton, NJ: Educational Testing Service. <http://dx.doi.org/10.1002/ets2.12081>

**Action Editor:** Heather Buzick

**Reviewers:** Michael Kane and James Hunter

ETS, the ETS logo, and MEASURING THE POWER OF LEARNING. are registered trademarks of Educational Testing Service (ETS). All other trademarks are property of their respective owners.

Find other ETS-published reports by searching the ETS RESEARCHER database at <http://search.ets.org/researcher/>