

Skills for Today:

What We Know about Teaching and Assessing Social Responsibility



Written by

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Foreword

Social responsibility is broadly defined as taking responsibility to behave ethically and with sensitivity toward social, cultural, civic, and environmental issues. Primary and secondary schools have traditionally been charged with developing social responsibility through character education. Colleges have also taken up the call to help their graduates be responsible citizens, listing associated skills as key graduate outcomes. Following students' transition to the workplace, employers will expect them to maintain a high standard of ethical behavior, and, in our increasingly globalized society, workers of the future will need the skills to work effectively and respectfully with individuals from different cultural backgrounds. Throughout my time in school I participated in everything from pen-pal campaigns to volunteering in the community, all with the objective of understanding and helping people and communities different from my own. I find my workplace to be focused on how our actions impact the environment and the lives of people around the globe. We are encouraged and supported to do big and small things including dedicated days off to help students learn, paint a school, or financially support a cause.

Through a review of several frameworks for social responsibility, we have identified four key dimensions of competence: multicultural, ethical, civic, and environmental. Competence in these areas will support student success and is a crucial factor for developing ethical, just, and well-functioning societies. While educational institutions and employers emphasize the importance of social responsibility, research indicates

a need to further support students in their development of these skills. Our hope with this summary is to synthesize best practices for teaching and assessing social responsibility.

Research supports several effective strategies for enhancing social responsibility. We highlight a number of these strategies in this paper including problem-based learning, case-based instruction, interacting with diverse groups of people, and providing structured opportunities to practice and engage with real-world situations relevant to social responsibility. Reliable and valid assessments of social responsibility can also support teaching and learning. Self- and informant-report questionnaires are easily administered and interpreted. Rubrics and scenariobased measures are more complex but can also allow for more authentic assessment of social responsibility competencies.

This paper concludes a series of summaries around Pearson's Personal and Social Capabilities (PSCs), the competencies outside of academic knowledge that contribute to student success in school, work, and life. In collaboration with P21, Pearson released four papers detailing the skills of collaboration, critical thinking, communication, and creativity, along with separate papers focusing on the skills of self-management and leadership. We at Pearson are excited to provide educators, employers, and policy-makers with an overview of the best practices for developing these key PSCs.

Leah Jewell, Managing Director, Employability Solutions and Services



Introduction

Social responsibility occurs when an individual takes responsibility to behave ethically and with sensitivity toward social, cultural, civic, and environmental issues. Recent large-scale surveys demonstrate the importance employers place on social responsibility. A survey of 400 employers conducted on behalf of the Association of American Colleges and Universities (AAC&U; Hart Research Associates, 2015) found agreement among employers that social responsibility should be taught to college students, regardless of their field of study. Employers specifically cited the following aspects of social responsibility:

- knowing how to solve problems with people whose views are different than their own;
- building civic knowledge, skills, and judgment;
- gaining intercultural skills.

Regarding hiring decisions, 81 percent of employers rated "ethical judgment and decision-making" as very important, but only 30 percent thought recent college graduates were well prepared in this area. Likewise, 56 percent rated "the ability to analyze and solve problems with people from different backgrounds and cultures" as very important, but only 18 percent rated recent college graduates as well prepared.

Reviewing accreditation and professional competence guidelines indicates the emphasis professionals in many fields place on social responsibility. For example, the American Chemical Society's (ACS) Guidelines for Chemistry Programs in Two-Year and Community Colleges (ACS, 2015) details the importance of ethics to the academic and professional success of chemists. According to this framework, ethics in chemistry relates to responsible research conduct and awareness of the role of chemistry in contemporary societal and global issues. Likewise, the nursing profession requires a commitment to society, and this commitment is included in the code of ethics that regulate nursing activities in the United States (American Nurses Association, 2003) and globally in the International Council of Nurses Code of Ethics for Nurses (International Council of Nurses, 2012). More specifically, nurses "share with society the responsibility for initiating and supporting action to meet the health and social needs of the public" and "advocate for equity and social justice in resource allocation, access to health care and other social and economic services" (International Council of Nurses, 2012, p. 2).

Engaging in socially responsible behavior also appears to be directly beneficial to students, both in school and in life more generally. Students who participated in community service

in high school also had higher grades, fewer behavioral problems, and felt more confident in their ability to enact change in their communities (Schmidt, Shumow, & Kackar, 2007). Likewise, prosocial activities (including attending church and participating in volunteer or community-service activities) in Grade 10 were associated with better grades and less use of drugs and alcohol two years later (Eccles & Barber, 1999). Developing character strengths (including honesty, kindness, and fairness) through a school program was associated with increased life satisfaction and better relationships (Proctor et al., 2011; Wagner, Gander, Proyer, & Ruch, 2019).

Lastly, and perhaps most importantly, building a nation's social responsibility has the potential to create a more involved citizenry and more caring and just communities. For example, participating in community-service projects in high school predicted greater community and civic involvement in adulthood (Beane, Turner, Jones, & Lipka, 1981). Social responsibility learned and practiced in childhood and young adulthood appears to encourage more active civic engagement across the life span. Civic engagement is one precursor to building social capital (Hyman, 2002), which Putnam (1995, pp. 664–665) defines as "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives." Through the mechanism of increased social capital, increasing levels of social responsibility can help drive stronger communities that promote improved social welfare.

Definitions and Models

Social responsibility represents a complex and multifaceted competency, with different conceptualizations and frameworks emphasizing the different components to varying degrees. In this section, we provide an overview of several definitions of social responsibility. We then synthesize across these definitions to generate our own framework for social responsibility.

Association of American Colleges and Universities

The AAC&U, through their Core Commitments initiative (AAC&U, n.d.), proposes that colleges and universities should be instrumental in fostering students' personal and social responsibility skills. In the context of this work, they outline five dimensions of personal and social responsibility:

- Striving for excellence: Developing a strong work ethic and consciously doing one's very best in all aspects of college.
- Cultivating personal and academic integrity: Recognizing and acting on a sense of honor ranging from honesty in relationships to principled engagement with a formal academic honors code.
- **3.** Contributing to a larger community: Recognizing and acting on one's responsibility to the educational community and the wider society, locally, nationally, and globally.
- **4.** Taking seriously the perspectives of others: Recognizing and acting on the obligation to inform one's own judgment; engaging diverse and competing perspectives as a resource for learning, citizenship, and work.
- 5. Developing competence in ethical and moral reasoning and action: Developing ethical and moral reasoning in ways that incorporate the other four responsibilities; using such reasoning in learning and in life.

The AAC&U also addresses social responsibility through their Shared Futures project. In order to effectively practice social responsibility, students need to understand the interconnected nature of the world's human and natural systems. This can be accomplished through global learning, which AAC&U (n.d., p. 1) defines as "a critical analysis of and an engagement with complex, interdependent global systems and legacies (such as natural, physical, social, cultural, economic, and political) and their implications for people's lives and the earth's sustainability."

Council for the Advancement of Standards in Higher Education

In an effort to guide the work of educators in higher education, the Council for the Advancement of Standards in Higher Education (CAS; Stayhorn, Creamer, Miller, & Arminio, 2006) identified and developed standards for sixteen key learning and development domains. Social responsibility represents one of these domains, and the CAS focuses primarily on the civic and citizenship components of social responsibility: "Indicators of social responsibility include participating in service or volunteer activities and understanding relevant governance systems" (Stayhorn et al., 2006, p. 127). Examples of ways in which students demonstrate social responsibility include:

They understand and participate in relevant governance systems.

- They understand, abide by, and participate in the development, maintenance, and/or orderly change of community, social, and legal standards or norms.
- They appropriately challenge the unfair, unjust, or uncivil behavior of other individuals or groups.
- They participates in service and volunteer activities.

(Stayhorn et al., 2006, p. 3)

Assessment and Teaching of Twenty-First Century Skills

In 2009, Cisco, Intel, and Microsoft officially sponsored the international research project Assessment and Teaching of 21st Century Skills (ATC21S), which was led by the University of Melbourne in Australia and involved collaboration with the countries of Australia, Finland, Singapore, and the United States (Binkley et al., 2012). The goal of this partnership was to prepare students for the twenty-first century workforce by integrating employability skills into curricula through assessment. As part of this partnership, researchers consolidated existing literature and twenty-first century skills frameworks into a set of ten key skills, nested within four categories. Personal and social responsibility represents one of these skills, which is included within the "Living in the World" category. Their definition of personal and social responsibility includes:

- knowledge of the intercultural dimension in their own and other societies; awareness and understanding of national cultural identity in interaction with the cultural identity of the rest of the world;
- ability to see and understand the different viewpoints caused by diversity and contribute one's own views constructively;
- willingness to overcome stereotypes and prejudices;
- integrity.

(Binkley et al., 2012, p. 58)

The ATC21S working group includes citizenship—local and global—as another skill within the "Living in the World" category. Their conceptualization of citizenship includes:

- knowledge of civil rights and the constitution of the home country, the scope of its government;
- understanding of the roles and responsibilities of institutions relevant to the policy-making process at local, regional, national, and international level;
- knowledge of the main events, trends, and agents of change in national and world history;
- participation in community and neighborhood activities as well as in decision-making at national and international levels;
- voting in elections;
- ability to interface effectively with institutions in the public domain;
- disposition to volunteer and to participate in civic activities and support for social diversity and social cohesion.

(Binkley et al., 2012, p. 55)

While not a part of social responsibility within the ATC21S model, these aspects of citizenship are common to other conceptualizations of social responsibility.

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The socially responsible person cares about others, uses ethical standards in making judgments, is open to the viewpoints of others, responsive to the needs of others, altruistic, politically conscious, informed and involved, concerned about the welfare of the community, and acts with integrity.

Social Consciousness and Social Responsibility

Sheldon Berman, a teacher, superintendent, and education researcher, has written extensively about social responsibility. His conceptualization of social responsibility "focuses on the nature of a person's relationship with others and with the larger social and political world . . . the personal investment in the well-being of others and the planet" (Berman, 1997, p. 12). The socially responsible person "cares about others, uses ethical standards in making judgments, is open to the viewpoints of others, responsive to the needs of others, altruistic, politically conscious, informed and involved, concerned about the welfare of the community, and acts with integrity" (p. 12). According to Berman, social responsibility is driven by a sense of connectedness, understanding that the "individual is rooted within a larger social network, within interlocking communities that range from the local to the global" (p. 12). From this understanding comes a concern for others, which leads to engagement with civic structures that can improve the well-being of one's communities. Environmental stewardship and sustainability is also included in Berman's conceptualization of social responsibility.

Pearson Social Responsibility Framework

While each of the models and definitions listed above takes a slightly different perspective on social responsibility, there are several common themes. In particular, we have identified four key components of social responsibility, which we have termed "dimensions of competence" (see Table 1). In the following section, we provide a description of our framework of social responsibility.

Dimension of Competence	Definition	Example Behaviors
Multicultural	 Is knowledgeable about different cultural identities and sensitive toward cultural differences 	 Seeks out opportunities to work with people having different backgrounds and perspectives Recognizes one's own biases and actively works to counter them
Ethical	 Demonstrates knowledge and awareness of ethical standards and issues Applies ethical reasoning and standards to make decisions in ethically ambiguous situations 	 Is knowledgeable about relevant ethical standards within one's field (i.e. responsible research conduct) Can recognize ethical aspects of a situation Applies ethical standards and reasoning to determine the most ethical course of action in a given situation
Civic	 Is an informed and active citizen at the local, national, and global level Understands and acts on issues of local, national, and global significance 	 Votes Participates in community organizations Attends town halls addressing local issues Researches and forms a reasoned opinion about an international conflict

Dimension of Competence	Definition	Example Behaviors
Environmental	 Is knowledgeable about current issues of environmental significance Is concerned about the wellbeing of the planet and engages in sustainable behaviors 	 Practices sustainable behaviors Starts an initiative to reduce the carbon footprint of one's workplace Can identify how current environmental issues are relevant to one's field

Table 1 Pearson Social Responsibility Framework with example behaviors.

Multicultural Competence

Multicultural competence refers to being knowledgeable about different cultural identities and sensitive toward cultural differences. Included in this competency is consideration for a wide variety of cultural identities. Deardorff (2006, p. 247) describes this competency as "the awareness, valuing, and understanding of cultural differences" along with "self-awareness of one's own culture." Cultural identity can be derived from many different factors. The American Psychological Association (APA) lists age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status, as several examples (APA, 2003, "General Principles," para 6). National origin can also influence cultural values and can interact with other cultural dimensions to create even more complex cultural identities (Lowman, 2013). In an increasingly globalized world, socially responsible individuals will need to understand the particular cultural dynamics of their own country as well as how those dynamics differ and interact with the cultures of other countries.

While multicultural competence begins with knowledge, it also manifests in a particular set of behaviors. The APA describes examples of multiculturally competent behavior which, while directed toward psychologists, are still relevant for individuals across a variety of settings and professions and provide a useful illustration of behaviors consistent with our multicultural dimension of competence. These include:

Be aware of and respect cultural, individual and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language and socioeconomic status and consider these factors when working with members of such groups.

(APA, 2003, "General Principles," para 6)

Try to eliminate the effect on their work of biases based on those factors, and do not knowingly participate in or condone activities of others based upon such prejudices.

(APA, 2003, "General Principles," para 6)

Recognize and understand that as cultural beings they hold attitudes and beliefs that can influence their perceptions of and interactions with others . . . As such, [they] strive to move beyond conceptualizations rooted in categorical assumptions, biases, and/or formulations based on limited knowledge about individuals and communities.

(APA, 2017, p. 4)

Ethical Competence

Several definitions of social responsibility highlight the need to act in an ethical or

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moral way. We define this dimension of competence as demonstrating knowledge and awareness of ethical standards and issues and applying ethical reasoning and standards to make decisions in ethically ambiguous situations. Also, as a note on terminology, much research on this topic uses the terms "ethical" and "moral" interchangeably. For the sake of consistency, we will exclusively use the term "ethical" in this paper.

There are a variety of indicators of ethical competence, including knowledge of relevant ethical standards, the ability to recognize when a situation requires ethical considerations, engaging in ethical reasoning, and applying ethical standards and reasoning to make an ethical decision. A common topic in this research literature involves ethical codes or standards that are specific to a given field. For example, many scientific fields have ethical guidelines regarding the responsible conduct of research. An individual could indicate varying levels of ethical competence in the following ways:

- by demonstrating knowledge of the principles of responsible conduct of research in their field (Goodman, Dias, & Stafford, 2010);
- by identifying ethical issues that relate to the responsible conduct of research when considering research scenarios (Clarkeburn, 2002);
- by making decisions in complex research scenarios that uphold principles of responsible conduct of research (Mumford et al., 2006).

Another strand of research has focused on ethical reasoning or how individuals make and justify their decisions in ethically ambiguous situations. Kohlberg (1976; 1981) is one of the most well-known researchers on ethical reasoning. Kohlberg would present students with ethical dilemmas (i.e. should a man steal medicine to save his dying wife?) then examine the justification students provided for their choice. Kohlberg suggests that children initially provide egocentric, or self-focused, justifications. For example, an action might be considered wrong because it would result in negative consequences. As ethical reasoning develops, responses become increasingly complex, referencing social rules or expectations. Kohlberg considers abstract reasoning based on universal ethical principles to be the most advanced form of ethical reasoning.

Lastly, other conceptualizations of ethical competence suggest that individuals are ethical in the sense that they demonstrate certain universal virtues. These virtues could be considered as ethical standards of behavior, but they are often more general and applicable to a wider variety of situations than field-based ethical standards. Peterson and Seligman (2004) examined many historical and current ethical traditions and found evidence for six core virtues, which are consistently consider "good" across a variety of cultures:

- **1.** Justice: "broadly interpersonal, relevant to the optimal interaction between the individual and the group or the community" (p. 357);
- **2.** Humanity: "include positive traits manifest in caring relationships with others" (p. 293);
- **3.** Wisdom: "positive traits related to the acquisition and use of information in the service of the good life" (p. 95);
- **4.** Courage: "entail[s] the exercise of will to accomplish goals in the face of opposition, either external or internal" (p. 199);
- **5.** Temperance: "positive traits that protect us from excess" (p. 431);
- **6.** Transcendence: "allows individuals to forge connections to the larger universe and thereby provide meaning to their lives" (p. 519).

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These virtues are further broken down into twenty-four character strengths which are the routes or pathways for demonstrating the virtues. For example, displaying love ("reciprocated relationship(s) with another person," p. 293) or kindness ("the pervasive tendency to be nice to other people—to be compassionate and concerned about their welfare, to do favors for them, to perform good deeds, and to take care of them," p. 296), indicates the presence of the virtue of Humanity. Peterson and Seligman's framework represents one way in which ethical competence can be defined by practicing character strengths and virtues across a variety of life situations.

Civic Competence

The civic dimension of social responsibility involves being an informed and active citizen at the local, national, and global level. It involves understanding and acting on issues of local, national, and global significance and includes both knowledge and behavioral components. In order to demonstrate civic competence, an individual first needs to understand how governments function and be informed about the rights and duties of citizens as well as current political issues and problems (Althof & Berkowitz, 2006; Stokamer, 2011; Youniss et al., 2002). In addition, an individual needs to actually practice civic engagement, which involves participating in political systems or other civic organizations.

Environmental Competence

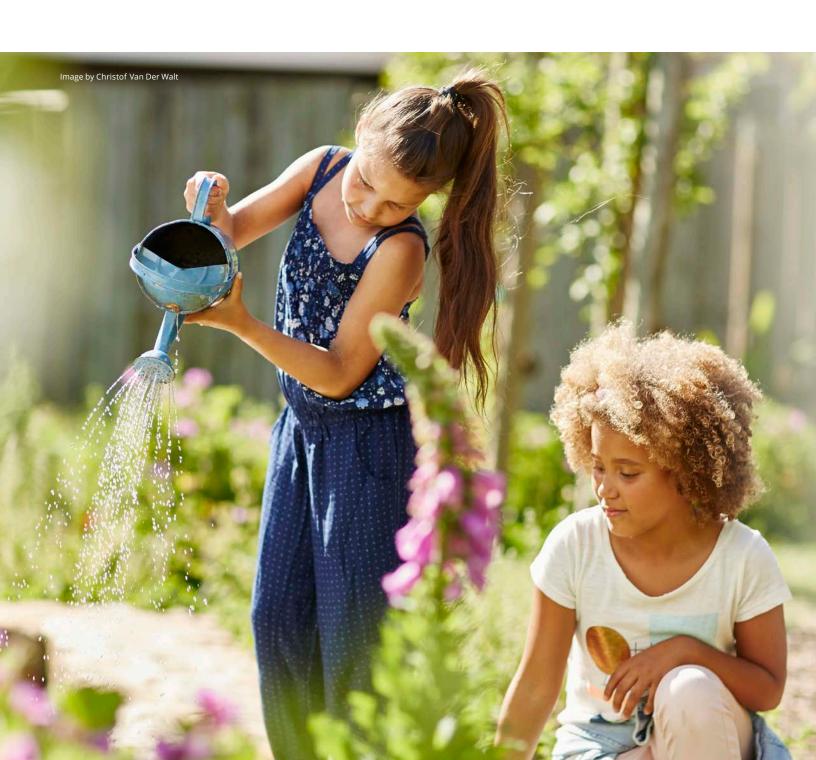
Lastly, environmental competence is indicated through caring about the well-being of the planet, knowledge about current issues of environmental significance, and the practice of environmentally sustainable behaviors. This area of competence is particularly important when taking a global perspective of social responsibility. The Council of Chief State School Officers, in partnership with the Asia Society, discuss how current world trends will require students to increasingly grapple with "matters of global significance" (Mansilla & Jackson, 2011, p. 9). They particularly focus on climate instability and environmental stewardship, stating that "an important job for the next generations will be that of managing the consequences of climate change and devising effective solutions for mitigation and adaptation" (p. 11). This is inherently a global issue because effectively combating climate change and other environmental issues will require a concerted, worldwide effort. Additionally, the well-being of the environment and the well-being of the world's peoples are firmly intertwined, so a desire to practice socially responsible behaviors includes a concern for the environment.

Values and Dispositions That Contribute to Social Responsibility

Our framework primarily focuses on the knowledge and behaviors that are indicative of social responsibility. Current conceptualizations of social responsibility sometimes include values or dispositions as well. These can be thought of as patterns of belief that motivate socially responsible behavior. For example, Althof and Berkowitz's definition of civic competence incorporates dispositions, which they define as "values and attitudes that create an inclination toward action, in this case, an inclination toward civic engagement, including the appreciation of diversity, equality, social justice, and attitudes such as political opinions or feelings about civic participation generally" (2006, p. 16). Likewise, Lickona (1989, p. 51) stated that "good character consists of knowing the good, desiring the good, and doing the good." Desiring the good represents a disposition toward wanting to behave in a good or ethical way. While these dispositions are not explicitly part of our framework, we wish to provide a discussion, since some interventions or assessments may target dispositions as a method for developing social responsibility.

Values and attitudes that create an inclination toward action, in this case, an inclination toward civic engagement, including the appreciation of diversity, equality, social justice, and attitudes such as political opinions or feelings about civic participation generally.

The relationships between values/dispositions and behavior is complex. There is some evidence that values do help drive patterns of behavior. For example, adolescent values about civic responsibility predict civic behavior in adulthood (Finlay, Wray-Lake, Warren, & Maggs, 2015). Other research suggests that social-activism values are precursors to charitable behaviors, and that these values are needed to maintain charitable behaviors and civic engagement over time (Bryant, Gayles, & Davis, 2012). However, other research has found that values are not perfect predictors of behavior (Bardi & Schwartz, 2003). For example, valuing benevolence only explained 9 percent of the variability in self-reported caring behavior, suggesting that other factors are also relevant predictors of these behaviors. Bardi and Schwartz (2003) suggest that social norms might be relevant. If there is strong social pressure to act in a caring way, then someone may act this way without actually valuing this behavior. Overall, while values do not completely explain social responsibility, they may represent one important avenue through which social responsibility can be developed.



Teaching Social Responsibility

Development of Prerequisite Skills and Competencies

Several dimensions of social responsibility require an ability to understand the perspectives of others. While social responsibility represents a more advanced competency, instructors may wish to help students practice perspective-taking and related skills in order to support future development of social responsibility skills. Meta-analyses (statistical reviews of research) suggest that social competence training with children aged three to fifteen has a moderately strong positive effect on perspective-taking and a variety of other social cognitive skills (Beelmann, Pfingsten, & Lösel, 1994). The most effective training programs focused on social problemsolving skills or a combination of social problem-solving, behavioral strategies, and self-control. Likewise, training also has a moderately strong positive impact on the related concept of Theory of Mind (ToM), which "refers to knowledge and awareness of mental states, (perceptions, emotions and thoughts) in oneself and others" (Hofmann et al., 2016, p. 200). One effective program involved engaging students in conversations about the mental states of characters in stories (Lecce, Bianco, Devine, Hughes, & Banerjee, 2014). In particular, each story involved a discrepancy in the beliefs or knowledge held by the characters, which presented problems for the main character to solve. This program had a positive impact on ToM as measured by students' ability to make inferences about the mental states of characters in a story (i.e. the Strange Stories task; Happé, 1994; White, Hill, Happé, & Frith, 2009).

While most interventions addressing perspective-taking and related skills focus on younger children, there is evidence that training in these skills is effective for college students as well. One meta-analysis found a large positive effect for empathy training with college students (van Berkhout & Malouff, 2016). In this study, empathy was defined as "understanding the emotions another person is feeling, feeling the same emotions another person is feeling, or commenting accurately on the emotions another person is feeling" (p. 33). Training programs that included the four components of behavioral-skills training (instruction, modeling, practice, and feedback) were found to be slightly more effective than programs that did not include these components.

Multicultural Competence

Primary and Secondary School

One method for supporting multicultural competence among primary- and secondary-school-aged children is to reduce prejudice or other negative attitudes toward other groups of individuals. In a meta-analysis of eighty-one research studies (published between 1958 and 2010), Beelmann and Heinemann (2014) found a low to moderate intervention effect. Interventions were most effective at reducing negative stereotypes or beliefs about other groups. Most of the interventions focused on views around other ethnicity groups while some addressed views on individuals with disabilities and the elderly. Results indicated that interventions had a stronger impact on reducing negative beliefs about individuals with disabilities compared to individuals of other ethnicities. Interventions were also most effective when they incorporated direct contact between individuals of different social groups or when they addressed empathy and perspective-taking. While only a small subset (ten studies) included follow-up data, these results were promising as the effect sizes tended to be similar at follow-up (average of four months).

Other research has examined the impact of multicultural education within primary and secondary schools. In one meta-analysis, Okoye-Johnson (2011, p. 1256) defines multicultural education as "programs and curricula dealing with racial and cultural diversity" that seek to address prejudice and racism while also helping students from diverse backgrounds experience educational equity. Multicultural education activities include reading and discussing stories about individuals from a variety of cultural groups as well as lectures and discussions about cultural identities and values. Okoye-Johnson (2011) found a moderately strong effect for multicultural education on reducing negative racial attitudes, with interventions integrated into the school curriculum being particularly effective. Additionally, these interventions were slightly more effective for older students (ages nine to sixteen) than for younger students (ages three to eight).

Facing History and Ourselves represents one particular curriculum for middle-school-and high-school-aged students addressing aspects of multicultural competence. This curriculum engages students in readings and discussions about the Holocaust, with a particular focus on the consequences of racism, violence, and antisemitism (Strom, Sleeper, & Johnson, 1992). Research suggests that Facing History and Ourselves results in decreases in racist attitudes (Schultz, Barr, & Selman, 2001) along with increases in tolerance of different political preferences and stronger awareness of the experience of prejudice and discrimination by different cultural groups (Bouley et al., 2011).

Creativity Compass is another school-based program (designed for children aged six to twelve years) that can support multicultural competence (Dziedziewicz, Gajda, & Karwowski, 2014). This program helps students simultaneously develop creativity and multicultural competence through activities where the class hypothetically travels to different countries. Students engage in open-ended discussions about cultural themes including history, myths and legends, and traditions while employing strategies such as analogy, imagination, and abstraction that stimulate creative thought. One study with Polish schoolchildren found that Creativity Compass increased cultural sensitivity and self-awareness compared to students in a control group (Dziedziewicz et al., 2014). The cultural sensitivity and self-awareness measure focused on national cultural identity.

Higher Education

One meta-analysis by Denson (2009) examined the impact of curricular and cocurricular diversity activities on the racial bias of college students. These activities included multicultural coursework, diversity workshops and trainings, and peer-led interventions. Overall, Denson (2009) found that across the sixteen studies reviewed, diversity activities had a moderately strong effect on reducing racial bias. Activities were most effective when they combined enlightenment (i.e. increasing the knowledge people have of other groups or changing people's perspective of their relations with other groups) with cross-racial interaction (having interactions with people of other races). Notably, many of the studies surveyed lacked random assignment, and activities were less effective in studies where possible confounds were controlled for, indicating that some of the effectiveness of these interventions may be attributable to study design. Other meta-analyses suggest that similar interventions (specifically enlightenment, contact/interaction, and the combination of enlightenment and interaction) also have a positive impact on attitudes, emotions, and behavioral intentions toward homosexual and bisexual individuals (Bartos, Berger, & Hegarty, 2014; Smith, Axelton, & Saucier, 2009).

College coursework can also support multicultural competence. Eisenberg and colleagues (2013) examined the impact of a cross-cultural management (CCM) course for business graduate students. This course emphasized experiential

Social Responsibility in Practice

In 2006, the Association of American Colleges and Universities (AAC&U) began their Core Commitments initiative, a program to help colleges support student development of personal and social responsibility.

They formed a research collaborative examining what specific educational practices enable students to learn these skills and capabilities. Finding from this collaborative, published in the Promising Practices for Personal and Social Responsibility: Findings from a National Research Collaborative report (O'Neill, 2012), highlight three key educational activities and seven specific recommendations for campus practice, which are summarized below:

Diversity and perspective-taking experiences represents the first educational activity that was associated with student growth in personal and social responsibility. This activity involves having frank, substantive, and purposeful conversations with diverse peers about race/ethnic relations, social justice, gender, and other intellectual issues. These conversations can be accomplished within college classes (including coursework explicitly dedicated to diversity topics) or in extracurricular settings (such as campus wide discussion series).

Service learning and volunteering is the second educational activity. These experiences often involve connecting course content with hands-on experience solving real world problems within the community. The importance of giving back to the community is highlighted, and students are often asked to reflect on their experiences. These activities can integrated within service learning courses or can be supported by campus-wide organizations.

Lastly, several other **engaged learning practices** were identified. These practices include "talking about course content with students outside of class and communicating with professors outside of class; active and collaborative learning; challenging academic classes and high expectations; and integrative learning" (O'Neill, 2012, p. 44).

learning (i.e. case studies, simulations, and exercises) and addressed the following learning objectives:

- common body of knowledge on CCM;
- create awareness of one's culture;
- foster appreciation of diverse cultural backgrounds;
- increase competence in interacting with different cultures;
- build a global leadership competence.

Students in this study were enrolled in a master's in international management program in one of several European countries (Ireland, Spain, Finland, United Kingdom, Poland, or Austria). Students in a control group who did not take the course were enrolled in a master's in international business administration program. Across the course of a semester, the group who participated in the CCM course experienced gains in several aspects of multicultural competence, while no change was observed in the control group. In particular, the course had an impact on awareness of cultural values, consciousness of applying cultural knowledge in cross-cultural situations, and motivation to engage with people from different cultures, with culture being primarily defined by national origin. It is important to note that the two groups compared in this study were based on program participation, not random assignment, so we cannot be certain whether the two groups were equivalent.

In addition to coursework, there is evidence that a habit-breaking intervention can help reduce biases for college students (Devine, Forscher, Austin, & Cox, 2012). The intervention consisted of a single, 45-minute instructional session. During the session, students received information about implicit biases and how they were formed as well as training in five strategies for reducing implicit biases. These strategies were drawn from the habit-breaking literature and included:

- Stereotype replacement: "Recognizing stereotypic responses within oneself and society, labeling them, and replacing them with non-stereotypic responses."
- Counter-stereotypic imaging: "Imagining examples of outgroup members who counter popularly held stereotypes."
- Individuation: "Viewing others according to their personal, rather than stereotypic, characteristics."
- Perspective-taking: "Adopting the perspective in the first person of a member of a stigmatized group."
- Contact: "Increasing exposure to out-group members."

(Devine et al., 2012, p. 1270)

Students were provided with examples of everyday situations where the strategies could be used and were asked to generate their own examples. Students were encouraged to practice the strategies after the intervention session. Compared to a control group, the intervention decreased implicit racial bias, which was

The report concludes by offering colleges and universities seven recommendations for campus practice:

- "Take stock of existing opportunities for students to engage in personal and social responsibility-related practices"
- **2.** "Determine who participates in these practices, how often, and why, as well as who does not and why"
- **3.** "Align existing courses, programs, and cocurricular activities with institutional learning goals around personal and social responsibility"
- 4. "Seed personal and social responsibility practices diversity and perspective-taking, service learning and volunteering, and other engaged learning practices—where gaps currently exist"
- **5.** "Integrate the different instances of these positive practices and sequence them developmentally for students"
- **6.** "Assess students along the way"
- "Examine the institutional structures and climate for educating for personal and social responsibility"

(O'Neill, 2012, p. 63)

Nancy O'Neill, Promising Practices for Personal and Social Responsibility: Findings from a National Research Collaborative maintained at an eight-week follow-up. The intervention also increased participants' concern about discrimination and their awareness of their personal biases. A similar habit-breaking intervention increased gender-bias awareness among university science faculty and showed a trend toward increasing the hiring rate of new female faculty (Carnes et al., 2015; Devine et al., 2017).

The Workshop Activity for Gender Equity Simulation (WAGES) represents an experiential learning activity targeting sexism. In this activity, two teams compete in a game to advance in one's academic career. One team is provided with a series of small and ostensibly harmless advantages that mimic the advantages men experience in the workplace. These advantages add up by the end of the game, and participants engage in a structured discussion about the activity after the game concludes. One study found that WAGES increased recognition of the harmful nature of everyday sexism and behavioral intentions to learn more about gender inequality (Cundiff, Zawadzki, Danube, & Shields, 2014).

Acceptance and Commitment Training (ACT) is another technique that evidence suggests can improve multicultural competence (Lillis & Hayes, 2007). ACT includes discussion and experiential exercises designed to help students notice prejudicial thoughts, feelings, and reactions; to accept these as a natural result of living in a prejudiced society; and to recognize that these thoughts do not have to lead to negative actions. A key component of ACT is focusing on changing behavior to better align with one's values rather than trying to change one's thought patterns and reactions. Outcomes for students receiving ACT were compared to students receiving a standard prejudice-awareness educational intervention. Following ACT, students expressed stronger intentions to seek out diversity experiences compared to the prejudice-awareness intervention. Other research suggests that ACT may help reduce stigma against certain groups, including those with mental illness (Hayes et al., 2004; Masuda et al., 2007).

Lastly, multicultural competence is particularly emphasized within the field of mental health and counseling. Smith and colleagues (2006) conducted a meta-analysis of forty-five studies of multicultural education programs within this field and found a strong positive effect on multicultural competence. While some studies focused on counseling professionals, a majority of the participants were graduate and undergraduate students. The interventions appear to have an equally strong impact on general measures of multicultural competence (i.e. racial prejudice and racial identity) as well as measures specific to multicultural competence in a counseling context. Both long-term interventions (semester-long course) and short-term interventions (workshops that lasted less than two weeks) were similarly effective, and interventions that were explicitly based on a theoretical perspective were more effective.

Ethical Competence

Primary and Secondary School

Development of ethical competence in primary and secondary school most often falls under the purview of character education. Character education refers to the movement

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within schools to foster "ethical, responsible, and caring young people by modeling and teaching good character through emphasis on universal values" (Character Education Partnership, 2010, para 1). As such, the goal of character education is to enhance aspects of ethical competence, particularly behaving in a way that is aligned with general ethical values such as justice, integrity, and respect. Within the United States, there is a particularly strong national interest in character-education programs, as evidenced by the inclusion of character education as a feature of the No Child Left Behind Act (2001).

In a trial with elementary-school students in Hawaii, the Positive Action program decreased negative social behaviors (Beets et al., 2009). The Positive Action program represents a schoolwide curriculum designed to improve academics, student behaviors, and character. In a typical school year, students spend thirty-five hours on program lessons, which include topics like self-concept, getting along with others, and self-improvement. The program was intended to be interactive, encouraging exchanges with teachers and other students through activities such as games, role-playing, and skills practice. Principals were also encouraged to promote elements of the program through their schools' climate. The study by Beets and colleagues (2009) compared social outcomes between students who had participated in the program through their school from Grades 1 or 2 through Grade 5 with students in schools that did not implement the program. Students who participated in the Positive Action program demonstrated fewer violent behaviors (as reported by students and their teachers) and reported less substance use.

The Child Development Project (CDP) represents a school reform model for elementary schools designed to teach social and ethical skills and promote academic achievement by creating caring school communities (Battistich, Watson, Solomon, Schaps, & Solomon, 1991). In particular, the CDP emphasized three key classroom components:

- **1.** cooperative learning, where students collaborated on work and took an active role in the classroom;
- **2.** developmental discipline where classroom and behavior management was achieved through teaching and problem-solving rather than rewards and punishment;
- **3.** literature-based reading and language arts that focused on using literature to encourage empathy and understanding of others.

Compared to students in matched control schools, students in schools participating in the CDP reported stronger levels of caring for others (Muñoz & Vanderhaar, 2006). The CDP also appeared to have a small positive effect on academic achievement.

The Smart Character Choices (SCC; Vance & Stockwell, 2002) program is designed to help students manage behavior by linking behavior to individual wants and needs. The program incorporated progression development and implementation support for faculty and focused on an American History curriculum emphasizing positive historical role models. Students were also taught specific classroom and schoolwide social protocols with the goal of "assist[ing] students in developing effective character traits (e.g., kindness, optimism, respect, responsibility, and work ethic) that help them to interact with others positively and meet basic needs" (Parker, Nelson, & Burns, 2010, p. 820). Compared to students in schools assigned to a control condition, students in SCC schools demonstrated fewer negative social behaviors (classroom disruptions and verbal and physical aggression), as measured by an independent observer (Parker et al., 2010).

A study by Leming (2001) demonstrates the influence of an ethical decision-making curriculum with integrated community service on ethical competence among high-

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school students. This study utilized the Building Decisions Skills curriculum (Born & Mirk, 1997). Students learned about ethical issues and how to apply different decisions paradigms to ethical dilemmas. The curriculum included instruction and practice. At the same time, students also engaged in community service. Outcomes for students in this group were compared to two other preexisting groups: students participating in community service without explicit instruction and a control group. Students in both community-service groups reported a stronger sense of social responsibility within their school than students in the control groups. Students in the community service with integrated ethical decision-making instruction group generally outperformed students in the other two groups on measures of ethical competence, including sensitivity to ethical issues and willingness to accept ethical responsibility (as measured by examining ethical dilemmas). Results suggest that while community-service participation can support some aspects of social responsibility, explicit instruction in ethical decision-making is needed to drive strong gains in ethical competence. It should be noted that because the groups were based on existing classes and not random assignment, it is unclear whether the groups could be considered equivalent, although researchers attempted to control for potential group differences.

Storytelling curricula represent another avenue for teaching younger children about character and ethics. Leming (2000) evaluated the Heartwood Institute's (1992) "An Ethics Curriculum for Children," an approach to teaching children in Grades 1-6 ethical values and character attributes utilizing a read-aloud literature program. While the program improved students' ethical understanding (i.e. their knowledge about the six ethical values), the program's impact on ethical decision-making and behavior was inconsistent. LifeStories for Kids represents another program that utilizes storytelling techniques to help elementary-school-aged students understand character choices in complex social situations (Brightwood & DeRosier, 2007). Students listen to stories that highlight several character traits including integrity, kindness, fairness, and acceptance. After students listen to the stories, teachers can pick from a variety of follow-up activities that build on the stories' lessons. These activities include role-plays, art activities, creative storytelling, and writing activities linking the story to students' lives. A study by DeRosier and Mercer (2007) examined the impact of a semester-long implementation of this program for students in Grades K-2 and 3-5. For students in Grades K-2, the program resulted in decreased aggressive behavior and increased prosocial behavior (i.e. demonstrating empathy and caring for others). Among students in Grades 3-5, the program resulted in decreased aggressive behavior and immature or impulsive behavior.

Higher Education

Watts and colleagues (2017) conducted a meta-analysis summarizing the results from 150 studies of ethics training programs in the sciences. Overall, they found a moderately strong positive effect (ES = 0.48) of training on a variety of ethical competence outcomes. Effects were strongest on the following outcomes:

- ethical knowledge;
- perceptions of self;
- ethical decision-making;
- metacognitive strategies.

Ethical reasoning was a common outcome in these studies, most often measured using the Moral Judgment Test or the Defining Issues Test, which are general measures of ethical reasoning. Effectiveness for these outcomes were generally weaker, while



interventions were strongly effective when the Defining Issues Test was adapted to a particular field. Shorter programs (less than eight hours) tended to be more effective, and format (i.e. integrated vs. stand-alone) did not strongly influence effectiveness.

Programs targeting the following content areas demonstrated the largest effects: sexual harassment, the Nuremberg code, personal integrity, financial compliance, group biases, data integrity, and field differences. In contrast, the weakest effects were observed for the following topics: appropriate statistical analysis, power differentials, diversity, organizational values, peer review, and lab safety. Purely group- or teambased approaches tended to generate smaller effect sizes. The largest effect sizes were observed for courses including humor, note-taking, workbooks, debates, and current events, while games, mentoring, and service learning were associated with smaller effect sizes. Active participation, case-based instruction, and opportunities for practice were other features of more effective programs. Notably, participants in these studies included undergraduate students, graduate/medical students, and professionals/residents. Generally the effectiveness of ethics-training problems was similar across groups, with the strongest effects for mixed groups of participants.

A similar meta-analysis was conducted regarding ethics instruction in the field of business (Medeiros et al., 2017). A small effect (ES = 0.30) was found overall, but moderate to large effects were found on the outcomes of ethical decision-making and ethical behavior. The following instructional content produced larger effect sizes on ethical decision-making and behavior: decision-making strategies, general compliance, complexity of ethical dilemmas, coverage of stakeholders, and moral philosophy. Active participation, problem-based learning, and debates were other features of programs with stronger effects. Notably, participants in these studies included undergraduate students, graduate students (i.e. MBA), and working adults, with stronger effects being found for working adults.

Civic Competence

Primary and Secondary School

The Student Voices program is a high-school civics curriculum that teaches students about political systems by exploring problems in the students' communities and making connections between these problems and decisions made in state and local government (Feldman, Pasek, Romer, & Jamieson, 2007). The program also encourages active classroom discussions about political and social issues along with engagement with media coverage of politics. One study found that program participation was associated with short-term gains in political interest, efficacy for political engagement, and knowledge of state and local government (Feldman et al., 2007). A follow-up study conducted over a year after students finished the program (during which time a presidential election occurred) showed that students retained gains in efficacy for political engagement, political attentiveness, and knowledge regarding presidential candidates (Pasek, Feldman, Romer, & Jamieson, 2008). It should be noted that class assignment in these studies was determined by self- or administrator selection, so we cannot be certain that the two groups being compared were equivalent. Another study that incorporated random assignment, and that included 1,670 high-school students, found that Student Voices had a positive impact on "students' self-reported ability to cast an informed vote, knowledge of the voter registration process, belief that their vote matters, communication with others about politics, sense of civic obligation, and media use and analysis" compared to a standard civic curriculum (Syvertsen et al., 2009, p. 33).

The Madison County Youth in Public Service program integrated small-group community engagement into high-school government courses (Westheimer & Kahne, 2004). Students, in small groups, partnered with government agencies on community-based projects, such as developing a plan for curbside recycling. Compared to a group of control students, participating in the program resulted in significant growth in personal responsibility to help others, confidence that they could make a positive change in their communities, and intention to read the news (Kahne & Westheimer, 2006; Westheimer & Kahne, 2004). It is important to note that the groups were based on existing class structure, not random assignment, so we cannot be certain that the groups are equivalent.

Kids Voting USA is a civics curriculum implemented during election years that supports civic engagement (Battistoni et al., 2003). In addition to classroom lectures, students gain hands-on experience with the electoral process through activities like participating in Get Out the Vote efforts and analyzing political advertisements. The program encourages peer-collaboration activities for students and parental participation. One study found that participating in Kids Voting USA was associated with increased media use, political knowledge, and civic and political discussions with parents and friends (McDevitt & Kiousis, 2006), effects which were retained at a one-year follow-up. Participating in Kids Voting USA was also related to increased volunteering and campus activism one and two years following the program. Assignment to condition in this study was based on whether a school was participating in Kids Voting USA, and analyses suggested that the two groups were similar on relevant demographic and background variables.

CityWorks is a civics curriculum developed by the Constitutional Rights Foundation that teaches academic topics of citizenship (i.e. how government functions) with the aim of making connections to issues that are personally relevant and engaging to students (Kahne, Chi, & Middaugh, 2006). This curriculum utilized several active-learning strategies including participating in a simulated city government, meeting with actual community leaders, and completing service learning projects. Compared to students taking standards civics courses, students in the CityWorks program demonstrated significant gains in their commitment to different models of citizenship (Kahne et al., 2006). More specifically, students in the CityWorks program reported greater commitment to being active participants in civic affairs and community life and more willingness to engage with social, political, and economic structures to address causes of injustice. Of note, the two groups compared in this study were based on existing class structures, not random assignment, so we cannot be certain whether the two groups were equivalent.

An analysis of a longitudinal dataset following American high-school students from 1988 to 2006 found that a year of coursework in American Government and Civics increased students' likelihood of voting after high school (Bachner, 2010). This effect was particularly strong for students whose families were not politically active. Another longitudinal study, conducted with Chicago high-school students, found that discussing civic and political issues with one's parents, participating in extracurricular activities other than sports, and living in a civically responsive neighborhood appear to meaningfully support student commitment to civic participation (Kahne & Sporte, 2008).

Higher Education

College appears to play an important role in developing civic competence among young people. Increased education predicts political engagement, such as voting (Marcelo, 2007), as well as more general community engagement, such as active participation in community groups or organizations (Huang, van den Brink, & Groot, 2009). Service



learning is often proposed as one of the college experiences that supports civic competence. Research supports this supposition. One meta-analysis of twenty-eight studies found that participation in service learning predicted civic engagement, which included outcomes that impacted the community such as altruism, civic responsibility, and current and future voting behaviors (Celio, Durlak, & Dymnicki, 2011). Another meta-analysis found that participation in community service was associated with increases in active involvement in community improvement as well as justice-oriented citizenship (i.e. addressing societal structures and injustice; Conway, Amel, & Gerwien, 2009).

Other theorists suggest that diversity experiences can drive civic engagement by making students more aware of issues of difference and inequality. This awareness prompts civic action as a strategy for addressing injustice. One meta-analysis found that diversity experiences in college were related to increased civic outcomes (attitudes or skills, behaviors, or behavioral intentions), with a small- to medium-sized effect (Bowman, 2011). Diversity experiences could include interpersonal interactions with diverse peers, diversity coursework, or diversity experiences outside of the classroom. Of these experiences, interpersonal interactions had the strongest impact on civic outcomes. Gains reported in the studies in this meta-analysis could be based on self-report or differences in scores between assessments made at different times (longitudinal design), with the latter reflecting a more rigorous design. While diversity experiences still had a significant effect in longitudinal studies, the effects were significantly stronger when based on self-reported gains, suggesting that the overall effect size may be an overestimation.

In addition to more general college experiences, college courses and interventions have been shown to support civic competence. Active Citizenship through Technology is a three-day pre-orientation for pre-college students designed to encourage civic engagement. During the program, students engaged with a 3D virtual world called Zora (Bers & Chau, 2006) where they collaboratively designed a "campus of the future" and engaged in simulated civic activities. One study found that students who participated in the Active Citizenship through Technology program reported increased participation in activities expressing their political voice or social viewpoint (i.e. writing to an official or protesting) during their freshman year compared to students who completed other preorientation programs (Bers & Chau, 2010). While participation in different pre-orientation programs was based on self-selection rather than random assignment, results indicated that the groups did not differ on measures of civic engagement at baseline.

Krings and colleagues (Krings, Austic, Gutiérrez, & Dirksen 2015) examined the impact of different social justice education courses. Of the courses compared, one included a two-hour per week service learning internship, one focused on intergroup dialogue, and one addressed social justice topics using a lecture style. These courses were compared to a control, Introduction to Psychology course. Compared to the control condition, students in the social justice courses demonstrated greater gains in self-reported political participation, civic engagement, and multicultural activism. When examining the three social justice courses independently, students in the intergroup dialogue course demonstrated gains in all three outcomes, and students in the lecture-based course demonstrated gains in political participation and multicultural activism. Somewhat surprisingly, students in the service learning course did not experience gains in any of the outcomes, but this group had the highest levels of outcomes prior to beginning the course, which may have contributed to these findings. Notably, participation in these courses was based on self-selection, not random assignment, which may have impacted the results.

Environmental Competence

Primary and Secondary School

Among primary- and secondary-school students, environmental education generally involves providing students with hands-on experience with nature. Ernst and Theimer examined the impact of seven environmental education programs on students' connectedness to nature, a measure of the extent to which "people experientially view themselves as egalitarian members of the broader natural community; feel a sense of kinship with it; view themselves as belonging to the natural world as much as it belongs to them; and view their welfare as related to the welfare of the natural world" (Ernst & Theimer, 2011, quoting Mayer & Frantz, 2004, p. 505). Two of the seven programs had a positive impact on connectedness to nature when compared to a control group, although group membership was not determined by random assignment:

- **1.** A voluntary summer day program (c. thirty hours) for students in Grades 3–5 that involved environmental observation and exploration, ecology games, and environmental service learning.
- **2.** A series of three field trips to natural sites for students in Grades 3–6 that focused on the topics of watershed, food webs, native plants, geology, and wildlife.

At the "Green Classroom," an experiential learning forum at the University of Ulm in Germany, students interact with small animals in their natural environment (Drissner, Haase, & Hille, 2010). This experience is designed to teach students about the connection between animals and their habitats and to develop an emotional connection with the animals. After spending a morning at the "Green Classroom," Grade 4 and 5 students were less inclined to support the utilization of nature solely for humans' benefit, while no change was observed in a control group of students. Additionally, after engaging with the "Green Classroom," students reported stronger motivation for and enjoyment of learning about small animals. It should be noted that the groups compared in this study were not determined by random assignment.

Exploring Environmental Issues: Focus on Risk is an environmental education program developed by Project Learning Tree designed to let students explore human environmental health risk and ecological risk through classroom activities (Project Learning Tree, 1998). Topics include understanding how environmental risk assessments are conducted (i.e. considering the placement of a hazardous waste facility) and examining current ecological risks to coral reefs and mangrove swamps. One study found that the program, when administered to students in Grades 7–12, increased knowledge of risk concepts as measured by a multiple-choice test (Covitt, Gomez-Schmidt, & Zint, 2005). The program was also associated with self-reported change in attitudes regarding risk perception, communication, assessment, and management. It should be noted that the groups compared in this study were determined by existing class structure and not random assignment.

Higher Education

Research with undergraduate students suggests that setting implementation intentions can support the practice of sustainable behavior. Implementation intentions are "if-then plans that connect good opportunities to act with cognitive and behavioral responses that are effective in accomplishing one's goals" (Gollwitzer & Sheeran, 2006, p. 82). Implementation intentions specify the timing, setting, and processes that will support goal achievement. In one study, setting an implementation intention increased student likelihood of trying a new bus route and purchasing organically produced food (Bamberg, 2002). Implementation intentions were set by specifying a date, time, or situation

when they could participate in the focal activity. Another study examined the impact of mental contrasting plus implementation intentions on decreasing meat consumption (Loy, Wieber, Gollwitzer, & Oettingen, 2016). The mental contrasting component of the intervention involved setting a goal around meat consumption, imagining completing the goal and associated positive outcomes, then contrasting that image with current obstacles that might prevent goal achievement. This intervention helped students convert the intention to reduce meat consumption into behavioral change.

Osbaldiston and Schott (2012) conducted a meta-analysis on several behavioral interventions designed to increase pro-environmental behavior. This meta-analysis is notable in that the outcomes in these studies were observed behaviors rather than self-reported behaviors or behavioral intentions. The outcomes included behaviors like recycling and conserving energy, water, and gasoline. The authors also excluded interventions conducted in formal classroom settings. The most effective interventions included:

- cognitive dissonance: "accessed preexisting beliefs or attitudes and attempted to make participants behave in ways that were consistent with those beliefs to reduce the dissonance" (Osbaldiston and Schott, 2012, p. 273);
- goal-setting: "process of asking participants to aim for a predetermined goal, like reducing their electricity consumption by 20%" (p. 273);
- social modeling: "any kind of passing of information via demonstration or discussion in which the initiators indicate that they personally engage in the behavior" (p. 272);
- prompts: "noninformational reminders that focused only on when to perform the next specific action, like 'turn off lights when leaving room' or 'put recyclables out tomorrow'" (p. 272).

Of note, participants in the studies cited in this meta-analysis included individuals of all ages, although some studies focused specifically on university students.

Summary of Teaching Social Responsibility

This review identified several research-supported strategies for helping students develop social responsibility. Regarding multicultural competence, support was found for multicultural coursework, diversity workshops and trainings, and peer-led interventions, with interactions with diverse peers and learning about diversity being key features of effective programs. Cognitive and behavioral interventions like teaching habit-breaking strategies and ACT can also support multicultural competence. We found evidence for several different school-based character-education programs for primary- and secondary-school students. For college students, ethical competence training appeared most effective for supporting field-specific ethical behavior and decision-making as opposed to more general ethical reasoning. In particular, active participation, case-based instruction, and opportunities for practice support effective ethical training.

When teaching civic and environmental competence to primary- and secondary-school students, allowing them the opportunity to meaningfully engage with relevant topics is important. For civic competence, this often means civic coursework that integrates opportunities for practical civic engagement such as participating in elections, service learning, and meeting with community leaders. Hands-on experience with nature appears to support environmental competence. For college students, service learning, diversity experiences, and social justice coursework were all associated with civics competence. Strategies around goal-setting (including setting implementation intentions) and other cognitive and behavioral strategies (including social modeling and prompts) can help college students develop environmental competence.

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Assessing Social Responsibility

Representative Measures

Dimension of Competence

To support the development of social responsibility, it is also important to have reliable and valid measures of these skills. Accurate assessment helps to document whether social responsibility interventions have a meaningful impact and can also serve as a tool when teaching social responsibility. Instructors can use social responsibility assessments to identify where students are in their development of this skill, which can inform the type and level of intervention that is needed. Assessments also support students' self-reflection by providing them with feedback regarding their practice of social responsibility. Table 2 presents several measures relevant to social responsibility, along with their alignment to our specific dimensions of competence. We review many of these measures in more detail in later sections. We will first provide an overview of evidence-centered design (ECD), which is the framework we use for our discussion about assessing social responsibility.

Cultural Intelligence (Ang et al., 2007) Intended Behavior Measure (Cameron, Rutland, Brown, & Douch, 2006) • Educational Testing Service (ETS) HEIghten Intercultural Competency & Diversity Assessment (Griffith, Wolfeld, Armon, Rios, & Liu, 2016; Liu, Roohr, & Rios, 2018) Multicultural Intercultural Knowledge and Competence VALUE rubric (AAC&U, 2009c) Multicultural Personality Questionnaire (van der Zee & van Oudenhoven, 2000) Preschool Racial Attitude Measure II (PRAM II; Williams, Best, Boswell, Mattson, & Graves, 1975) • Scale of Ethnocultural Empathy (Wang et al., 2003) • Defining Issues Test (DIT-2; Rest, Narvaez, Thoma, & Bebeau, 1999) • Engineering and Science Issues Test (ESIT; Borenstein, Drake, Kirkman, & Swann, 2010) Ethical Ethical Reasoning VALUE rubric (AAC&U, 2009b) Values in Action Survey of Character Strengths (Peterson & Park, 2009) CIRCLE measures of civic engagement and civic knowledge (Flanagan, Syvertsen, & Stout, 2007) Civic Competence Composite Indicator 2 (CCCI-2; Hoskins, Villalba, & Saisana, 2012) Civic Engagement—Local and Global VALUE rubric (AAC&U, 2009a) Civic College Senior Survey—Civic Values (Lott & Eagan, 2011) • ETS HEIghten Civic Competency and Engagement Assessment (Liu et al., 2018; Torney-Purta, Cabrera, Roohr, Liu, & Rios, 2015)

 National Assessment for Education Progression—Civic (National Assessment Governing Board, 2014)

Dimension of Competence

Representative Measures

Environmental

- Children's Environmental Attitude and Knowledge Scale (Leeming, Dwyer, & Bracken, 1995)
- Environmental Scale (2-MEV; Bogner & Wiseman, 2006)
- Global Learning VALUE Rubric (AAC&U, 2014)
- New Ecological Paradigm Scale for Children (Manoli, Johnson, & Dunlap, 2007)

Table 2 Pearson Social Responsibility Framework with representative measures.

Evidence-Centered Design

ECD provides a systematic framework for developing assessment tasks to elicit targeted skills (Mislevy, Steinberg, & Almond, 2003). ECD is particularly useful when applied to complex skills like social responsibility because it supports the development of more authentic activity types.

The ECD framework consists of three models:

- 1. The Student Model defines the claims to be made about learners' competencies.
- 2. The Evidence Model establishes what constitutes valid evidence of the claim.
- **3.** The Task Model determines the nature and form of tasks that will elicit that evidence.

Within the ECD framework, the targeted competencies and skills are defined within the Student Model. Our framework of social responsibility competences represents the Student Model. Next, the assessment designer identifies what evidence, typically some sort of student behavior, would be a valid indicator of a given competency. This set of evidence represents the Evidence Model. Lastly, specific activities (the Task Model) are identified or designed that will elicit components of the Evidence Model. Crucial to the ECD framework is a thread linking activity features, evidence elicited from these activities, and claims made about student competencies.

Assessment Task Models

Self-Report and Informant Report

Many measures of social responsibility involve self-report and informant-report questionnaires that ask individuals to report on their own or others' characteristics and behavior. These questionnaires include several items (e.g., "I am interested in politics," "I change my actions when a cross-cultural interaction requires it," or "I can be trusted to keep my promises"), and respondents rate the extent to which each item is true for them, typically on a Likert scale. Individuals can also complete a questionnaire as an informant, meaning that they comment on how true an item is for someone else (such as a teacher rating the behavior or disposition of a student).

Self-report and informant-report measures are particularly useful when assessing social responsibility attitudes and values. Student can easily report the degree to which aspects of social responsibility, such as participating in civic activities, are important to them. There are concerns that self-report measures of personal qualities may be susceptible to the social-desirability bias or "faking" (Gonyea, 2005; Bowman & Seifert,

2011; Spencer, 1938). Many aspects of social responsibility (i.e. behaving ethically) are clearly socially favorable, so the individual taking a self-report assessment may offer inaccurate responses to appear a good person. In later sections, we will discuss more authentic assessment tasks that can help address concerns around social desirability.

Scenario-Based and Dilemma-Based Tasks

Another common task model used in the assessment of social responsibility involves presenting individuals with a hypothetical scenario followed by questions about possible responses to that scenario. Individuals may be asked to indicate the best response, to evaluate the response of an actor in the scenario, or to explain their reasoning behind their selection of a response. While not completely authentic, these types of tasks mimic real-life situations and provide evidence about how students would behave if placed in that situation.

Ethical Competence Evidence Models

The Defining Issues Test (DIT-2; Rest, Narvaez, Thoma, & Bebeau, 1999) represents a dilemma-based assessment of ethical competence, particularly the aspect of ethical reasoning. Students read several ethical dilemmas, each of which presents a difficult choice for the main actor within the dilemma (i.e. "A father contemplates stealing food for his starving family from the warehouse of a rich man hoarding food" (Rest et al., 1999, p. 649)). Then students read through several issues which could be considered when deciding the best course of action (twelve per dilemma) and rank the importance of each issue in making their decision. The issues are aligned to different aspects of moral reasoning and include questions like how other people might respond to the behavior or whether the behavior would break any laws. Students are also asked to rank the four most important issues for making a decision.

Rest and colleagues developed scoring protocols that combine the rankings into the following indices (Rest & Narvaez, 1998):

- Personal Interest Schema Score: Proportion of items selected as most important that appeal to personal interest considerations.
- Maintaining Norms Score: Proportion of items selected as most important that appeal to the maintenance of social norms such as the legal system or organizational structures.
- Post-conventional Schema Score/P-Score: Proportion of items selected as most important that appeal to post-conventional considerations such as building consensus and appealing to universally valued ideals (i.e. majority vote, due process, maintaining basic rights).
- N2 Score: Combines information from the P-Score with the degree to which items representing more sophisticated moral reasoning are rater higher than items representing less sophisticated reasoning.

Borenstein, Drake, Kirkman, & Swann (2010) adapted the DIT-2 to include dilemmas and issues specific to the fields of engineering and science (the Engineering and Science Issues Test; ESIT). The ESIT followed the same format of the DIT-2, including the presentation of a dilemma and ranking of issues relevant to making a decision. One dilemma focuses on an engineer who must select a vendor to stop working with, and she owns stock in the company of one of the potential vendors. Example issues include, "Will [the engineer's] decision potentially cause harm to the public?" (Borenstein et al., 2010, p. 392). The ratings and rankings were combined into indices analogous to the P-Score and N2 Score of the DIT-2.

An employer you work for has identified new sustainability measures to reduce environmental and social impacts as a result of the business' practice. These changes require you to develop new knowledge and make small changes to your work procedures. How are you most likely to respond?

Mumford and colleagues (2006) applied scenario-based tasks to measure ethical decision-making. Scenarios were written that reflected the day-to-day work of researchers and incorporated both ethical and technical issues. After reading the scenario, students were asked to assume the role of the primary actor in the scenario and to choose which of two response options would best resolve the situation. Response options were actions that could be taken in the scenario. Each response option had been labeled by the assessment developers as either highly ethical, moderately ethical, or unethical, based on ethical principles outlined in professional codes of conduct. Scoring occurred by assigning a points weight to each of the two response options selected for each scenario (3 = highly ethical, 2 = moderately ethical, and 1 = unethical). The scenarios fell in separate domains (data management, study conduct, professional practices, and business practices), and students were assigned an ethical decision-making score for each domain. One example scenario involved a situation where one researcher in a lab (Reynolds) uses a modified version of another researcher's (Moss's) ideas in a grant proposal. The scenario asked the student to assume the role of the lab director and choose the best action to take from options like: "Apologize to Moss and indicate that the proposal must go out as is to meet the deadline" and "Acknowledge Moss in the grant proposal because the ideas were hers originally" (Mumford et al., 2006, p. 344).

Environmental Competence Evidence Models

Researchers at the RMIT University in Australia developed scenario- or vignette-based tasks to assess the "environmentally aware and responsible" attribute for university graduates (Holdsworth, Thomas, & Sandri, 2018). This is one of several generic graduate attributes that RMIT University wants all students to develop, regardless of the student's particular major or discipline. Each vignette presented students with a scenario. For example, the first vignette stated, "An employer you work for has identified new sustainability measures to reduce environmental and social impacts as a result of the business' practice. These changes require you to develop new knowledge and make small changes to your work procedures. How are you most likely to respond?" (Holdsworth et al., 2018, p. 129).

Students were given several response options and asked to select which one they would be most likely to choose. Each response was associated with a different level of attainment of the "environmentally aware and responsible" attribute, which ranged from lacking the attribute, to awareness, then responsibility, with leadership being the highest level. Table 3 depicts the alignment between the response options, levels of attainment, and descriptors of each level. Students were assigned a level of attribute attainment based on their response selection.

Response Option	Level of Attribute Attainment	Level of Attribute Attainment Descriptor
Do not consider your workplace to negatively impact the environment	Attribute lacking	Does not recognize social and environmental impacts of practice or human activity
Be aware of the impacts but do not take any action and continue with current practice	Awareness 1	Recognizes social and environmental impacts of practice or human activity; however, does not believe change is necessary
Be aware of the impacts and let others take responsibility for reducing impacts	Awareness 2	Recognizes social and environmental impacts of practice or human activity and sees that some level of change may be necessary; however, leaves it to others to take responsibility

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Response Option	Level of Attribute Attainment	Level of Attribute Attainment Descriptor
Make the minimum required changes that the workplace requires	Responsibility 1	Recognizes social and environmental impacts of practice or human activity and takes minimum action to make changes to practice
Support change through actively adjusting your practice in every aspect necessary to bring about change	Responsibility 2	Recognizes social and environmental impacts of practice or human activity and takes active responsibility for taking action to reduce these impacts
Learn more about the impacts and measures so that you can take the changes further, and encourage and support others in your workplace to implement changes also	Leadership 1	Recognizes social and environmental impacts of practice or human activity and makes changes and supports others to do the same
Develop your own strategy for reducing environmental and social impacts of practice and actively support others in your workplace to implement or contribute to this	Leadership 2	Recognizes social and environmental impacts of practice or human activity and creates and implements change projects that influence others in community or workplace

Table 3 Alignment between vignettes' response options and level of attribute attainment (adapted from Holdsworth, Thomas, & Sandri, 2018, p. 127 and p. 130).

Multicultural Competence Evidence Models

Assessment developers at the Educational Testing Service (ETS) utilize scenario-based tasks in their HEighten Intercultural Competence and Diversity assessment (Liu, Roohr, & Rois, 2018). In this assessment, students are presented with various cross-cultural scenarios along with several related questions. Students are asked to select which responses to the scenario will best create or maintain positive cross-cultural relationships. Scenarios fall into one of the following domains: studying, teaching, or traveling abroad; international collaboration; guests from other cultures; and subcultures within the United States. The following sample question and answer choices illustrates the implementation and scoring of this assessment:

"A group of students from another country is going to visit your university, and each student will be placed with a local family during the stay. Select the options for the blanks that, taken together, would produce the best direction for encouraging a positive cultural exchange. The university should take care to [Blank1] in order to make sure that [Blank2]."

(ETS, 2017, Q3)

Blank 1 options:

- introduce each student to their homestay family in advance;
- arrange an appropriate meal plan for each student;
- provide transportation to and from the university.

Blank 2 options:

- the family does not have to adjust their lifestyle in any way.
- the family has some information about the students' background.
- the family includes the student in housekeeping chores.

Answer keys for the scenario-based items were determined by consulting with content experts. For this sample item, the correct answers are "introduce each student to their homestay family in advance" and "the family has some information about the students' background" for Blank 1 and 2 respectively. Choosing those answers indicates an understanding of what behavior, and underlying motivation for the behavior, will best facilitate a positive cultural exchange. Items are scored as correct or incorrect based on the answer key.

Performance-Based Tasks

Assessments of social responsibility can also be based on direct observation of behavior during an activity that requires social responsibility. These tasks can involve knowledge assessments, role-playing activities or naturally occurring scenarios. Answer keys and rubrics represent evidence models often applied to performance-based tasks.

Evidence Model: Answer Key

Most of our dimensions of social responsibility involve certain types of knowledge. In particular, civic competence involves understanding civic institutions and political systems and being aware of current civic issues. As a result, several measures of civic competence presented in Table 2 incorporate knowledge assessments, including the CCCI-2 (Hoskins, Villalba, & Saisana, 2012), ETS's HEIghten Civic Competency and Engagement assessment (Liu et al., 2018), and the National Assessment of Educational Progress: Civics assessment (National Assessment Governing Board, 2014). These assessments involve either multiple-choice questions or free-response questions, which are graded against an answer key.

Evidence Model: Rubric

The AAC&U has published several VALUE rubrics that align to each of our social responsibility dimensions of competence (Rhodes, 2010; AAC&U, 2009a, 2009b, 2009c, 2014). For example, the "Civic Engagement, Local and Global" rubric can be used to assess the degree to which a student "is working to make a difference in the civic life of our communities [and] promoting the quality of life in a community, through both political and non-political processes" (AAC&U, 2009a). The rubric is meant to be applied to a student work sample, or a collection of work samples. An example of relevant work for the Civic Engagement rubric includes "creat[ing] and manag[ing] a service program that engages others (such as youth or members of a neighborhood) in learning about and taking action on an issue they care about" (AAC&U, 2009a). There are several dimensions within the Civic Engagement rubric, each of which can be rated on a scale of 1 to 4, ranging from Benchmark to Capstone. Table 4 depicts the four descriptors that align to each level within the dimension of "Civic Actions and Reflections."

	Descripto.
Benchmark	Has experimented with some civic activities but shows little internalized understanding of their aims or effects and little commitment to future action
Milantana	Has clearly participated in civically focused actions and begins to reflect or describe how these actions may benefit individual(s) or communities
Milestone	Demonstrates independent experience and team leadership of civic action, with reflective insights or analysis about the aims and accomplishments of one's actions
Capstone	Demonstrates independent experience and shows initiative in team leadership of complex or multiple civic-engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.

Descriptor

Table 4 AAC&U VALUE rubric descriptions for Civic Actions and Reflections (AAC&U, 2009a).

Level of Performance

The AAC&U has also developed VALUE rubrics for the skills of "Intercultural Knowledge and Competence" (AAC&U, 2009c), "Ethical Reasoning" (AAC&U, 2009b), and "Global Learning" (AAC&U, 2014), each of which have elements that align to our multicultural, ethical, and environmental dimensions respectively.

Summary of Assessing Social Responsibility

Many measures of social responsibility involve self-report or informant-report scales. Given that these types of measures are often susceptible to "faking good," it is important to include more authentic social responsibility assessments. To this end, we review several measures of social responsibility that incorporate scenario-or dilemma-based tasks. These assessments present students with hypothetical situations and probe for how students would behave in those situations. There are also several performance-based measures of social responsibility. These measures can assess the knowledge component of social responsibility through multiple-choice or free-response questions. Alternatively, there are several rubrics that can be used to assess social responsibility from student behavior or work products.



Avenues for Future Exploration

Education researchers are increasingly interested in the potential of games and simulations as assessment and teaching tools (DiCerbo, 2014). Games and simulations represent more authentic activities than self-report forms because they present students with complex scenarios that require the application of knowledge and skills. There is certainly interest in using games and simulations in the context of social responsibility. For example, researchers at the University of Michigan developed the Island Telecom simulation that exposed students to ethical dilemmas in international business (Shami, Box, Fort, & Gordon, 2004). This simulation was used as a teaching tool in several business courses, and researchers examined how student responses in the simulation could provide information on student perspective-taking and their ability to come up with creative solutions for different business trade-offs. There is limited empirical evidence for the effectiveness of simulations as social responsibility teaching tools, which represents one important area for future research.

Additionally, in order for simulations to be used as assessments on a large scale, there is a need to understand how data logged within a simulation can provide evidence of social responsibility. In the case of the Island Telecom simulation, student responses were manually coded to provide evidence of outcomes. While important, this type of manual scoring does not allow for immediate feedback and cannot be used for assessing a large sample of students. Simulations provide records of student behavior in the form of log files. Data in these log files can be automatically scored and combined into indicators of different skills using statistical models (see DiCerbo, 2014, and Ventura & Shute, 2013, for examples). Students can then be provided with immediate feedback, and scores on these indicators can be used to determine which information or scenarios a student should receive next as they progress through the simulation. When developing these types of simulation-based assessments, the assessments need to be validated against other measures of social responsibility to insure that in-simulation behaviors do indeed predict real-world behavior. Overall, simulations represent an exciting avenue for future exploration that could allow for teaching and assessing social responsibility at a large scale using authentic activities.

Conclusions and Recommendations

The research reviewed here reveals a number of important conclusions regarding teaching and assessing social responsibility, which are summarized in Table 5. The recommendations also included in Table 5 provide a general set of best practices that, if enacted, can help enable effective instruction and assessment for social responsibility.

Conclusion	Recommendation
Social responsibility is important for academic and occupational success and can also support increased social welfare by helping to build ethical and well-functioning communities.	Educators should explicitly teach social responsibility at all levels of education.
Social responsibility includes several key dimensions of competence: multicultural, ethical, civic, and environmental.	Educators should address each of these specific dimensions of competence in their instruction.
Research indicates that multicultural competence is supported by multicultural coursework, diversity workshops and trainings, and peer-led interventions, with interactions with diverse groups and learning about diversity being key features of effective programs.	Educators should consider implementing multicultural coursework, particularly those that incorporate both learning about diversity and having positive interactions with diverse groups.
Several different school-based character education interventions for primary- and secondary-school students supported ethical competence. Features of effective programs included: role-playing and skills practice, ethical decision-making strategies, and storytelling and literature-based activities. There is also support for the effectiveness of whole-school programs like the Child Development Project and Smart Character Choices.	Primary- and secondary-school educators should integrate character education programs that include features like role-playing and skills practice, ethical decision-making strategies, and storytelling and literature-based activities. Administrators can also consider whole-school programs with research support, such as the Child Development Project and Smart Character Choices.
For college students, ethical competence training appears most effective for supporting field-specific ethical behavior and decision-making as opposed to more general ethical reasoning. In particular, active participation, case-based instruction, and opportunities for practice support effective ethical training.	College instructors should focus on teaching students about how to behave ethically in particular contexts relevant to their future careers as well as ethical decision-making. Instructional strategies that particularly support ethical competence include active participation, case-based instruction, and opportunities for practice.
When teaching civic and environmental competence, it is important to provide students with the opportunity to meaningfully engage with relevant topics.	For civic competence, educators can provide civic coursework that integrates opportunities for practical civic engagement such as participating in elections, service learning, and meeting with community leaders. Hands-on experience with nature appears to support environmental competence.
For college students, service learning, diversity experiences, and social-justice coursework were all associated with civics competence.	College instructors can encourage students to participate in service learning, diversity experiences, and social justice coursework as ways to develop civic competence.

Conclusion	Recommendation
Conclusion	Kecommenaanon

Instructors can incorporate goal-setting (particularly Strategies around goal-setting and other cognitive setting implementation intentions) and other cognitive and behavioral strategies can help students and behavioral strategies (including social modeling and practice more sustainable behavior. prompts) to encourage more sustainable behavior. Evidence-centered design provides a useful framework Consider utilizing evidence-centered design to develop for developing new assessments, particularly those new assessments of social-responsibility skills. that focus on socially responsible behaviors. There are many self-report and informant-report Educators may consider self-report and informantquestionnaires that assess social responsibility, report questionnaires to measure social responsibility, particularly relevant attitudes and values. particularly relevant attitudes and values.

Scenario- or dilemma-based measures, performancebased assessments, and the application of rubrics
to student behavior or work products offer other
avenues for more authentic assessment.

Educators may consider scenario- or dilemma-based measures,
performance-based assessments, and the application of rubrics
to student behavior or work products to assess knowledge
and behaviors associated with social responsibility.



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