

K-12 Service-Learning Standards for Quality Practice

An Annotated Bibliography

These standards and indicators were vetted through a series of “reactor panels” convened nationwide by the National Youth Leadership Council and RMC Research Corporation. The panels were composed of young people, teachers, school and district administrators, community members, staff from community-based organizations, policy-makers, and others interested in service-learning. The process was much like content-setting standards in other fields. Each panel considered the work of the two before them, revising the standards and indicators to ensure that they included the strongest aspects of quality, and to make the wording clearer, measurable, and actionable.

In this document, you will find an annotated bibliography of the background research that supports the standards, which are (in order of their appearance in this document):

- Duration and Intensity
- Link to Curriculum
- Partnerships
- Meaningful Service
- Youth Voice
- Diversity
- Reflection
- Progress Monitoring

This document was compiled by RMC Research Corporation and NYLC staff. For more information, visit www.nylc.org/standards.

DURATION AND INTENSITY

Shelley H. Billig and Judith Northup, RMC Research Corporation, 2008

What Is Intensity and Duration?

Sufficient intensity and duration means that service-learning experiences include investigation, planning, action, reflection, demonstration, and celebration, and occur during concentrated blocks of time (intensity) and are long enough (duration) to meet community needs and learning goals.

Application to Service-Learning

- Eyler and Giles (1997) found that more intense service-learning programs provide more challenging and varied tasks, more opportunities to make important decisions, a greater sense of ownership, stronger collegial relations with professionals in the field, more opportunities to apply content from the classroom to the community, and greater contributions to the community than those service-learning experiences that are less intense.
- Researchers caution that hours alone are not sufficient to determine quality; rather, “the field should be very cautious in implementing service programs that require or mandate so many hours of service in the absence of teaching methods that allow students to interpret and learn from the experiences they encounter” (Blyth, Saito, & Berkas, 1997, p. 52).
- Melchior and Orr (1995), in their study of the national Learn and Serve program, found that program duration was associated with multiple positive outcomes for students.

- Billig, Root, and Jesse (2005) found that duration of at least one semester was significantly related to all civic outcomes and enjoyment of subject matters.
- Spring, Dietz, and Grimm (2006) constructed a quality index comprised of three elements: reflection, student participation in project planning, and duration of a semester or more. The study sample was comprised of 3,178 Americans between the ages of 12 and 18 who were surveyed by telephone about their civic engagement attitudes and behaviors, volunteering habits, and experiences with service-learning. The number and type of quality experiences were correlated to outcomes in the areas of civic engagement. Students who participated in programs that featured the most quality components were “three times as likely to believe they can make a great deal of difference in their community than youth who participated in school-based service without any of the quality elements of service-learning” (p. 3), were more likely to say they would volunteer in the coming year, were more interested in world events, and were more likely to talk with their friends and family about politics. In general, the more quality elements in a service-learning experience, the higher the outcomes, no matter what the socioeconomic background or grade level of the participant.
- In their study of the Generator School Project, Blyth and colleagues (1997) reported that the number of service hours provided by students had a positive effect on reducing risky behaviors, increasing social responsibility, and reducing disengagement from school.
- Conrad and Hedin (1980) showed that duration of high school service-learning programs was significantly related to multiple academic and civic outcomes, especially when the program was one semester or longer.
- Kraft and Krug (1994) found that 6 to 8 weeks of experience in service-learning with field work once a week was not long enough to produce desired outcomes for students.
- Eyler and Giles (1997) demonstrated that students who participated in longer and more intense service-learning were more likely to see value in the program and commit to further service activities.
- Moore (1981) found that students’ understandings of tasks became increasingly complex and contextualized as they engaged in longer duration of service.
- In a CampFire USA study on a community preparedness initiative, those teams who participated in programs of longer duration had higher ratings of teamwork, leadership, and problem solving (RMC Research, 2007).
- The duration of service-learning activities was positively related to valuing school, civic engagement, social responsibility, and locus of control (Billig & Brodersen, 2007).
- A study that focused on the relations between students’ community service and service-learning experiences, academic success, and socioeconomic status found that the duration or longer exposure to service-learning programs had a positive effect on students’ on a scale of commitment to learning. In addition, there was a smaller achievement level gap between high and low socioeconomic status students who had longer exposure to service-learning (Scales, Roehlkepartain, Neal, Kielsmeier, & Benson, 2006).

Educational Research Supporting This Concept

- An evaluation of YouthBuild, a program to reconnect young people to school and community, revealed that programs serving this population need to be both multidisciplinary and last at least 9 months with excellent follow-up services (American Youth Policy Forum, 2002).

- A meta-analysis of research that addresses the outcomes from participating in outdoor education programs showed that longer programs and programs with adults tended to have larger impacts (Neill, 1999).

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LINK TO CURRICULUM

Shelley H. Billig and Judith Northup, RMC Research Corporation, 2008

What Does It Mean to Link to Curriculum?

Linking to curriculum means that service-learning experiences are specifically designed to meet particular learning and curricular goals and/or content standards. Learning goals should be clearly articulated and activities should be reviewed to ensure that there is alignment with the curriculum. Goals should explicitly be linked to desired outcomes for both those providing the service and those being served.

Application to Service-Learning

- Billig, Root, and Jesse (2005) found that using service-learning to teach content standards or curricular objectives was among the strongest predictors of all academic outcomes.
- In a study of CalServe, evaluators found that academic impacts were related to clarity of academic goals and activities, scope, and support through focused reflection (Ammon, Furco, Chi, & Middaugh, 2002).
- Kirkham (2001) found that 97.9% of teachers who linked service-learning to curriculum reported that students learned more than what they would have learned through regular instruction. Students' grades improved and absenteeism decreased. High school students in the study reported learning new skills, knowledge, and interests, and a greater understanding of people and the community.
- Kraft and Wheeler (2003) found that alternative school students who participated in service-learning with strong connections to curriculum demonstrated significant increases over time in motivation to learn, writing scores on a six-trait writing assessment, and in grade point averages.
- Hamilton and Zeldin (1987) showed that high school students learned more when issues, which were being discussed in the legislative sessions they observed, matched those being discussed in the classrooms; and when discussion in class, before the service experience, was related to greater satisfaction with the service.
- Conrad and Hedin (1980) demonstrated that students had the greatest increases in problem-solving skills when the challenges they experienced in the field were parallel to those discussed in class.
- In a study of over 500 students, Dewsbury-White (1993) found that students who participated in a content-integrated model of service-learning significantly outperformed peers in an isolated service-learning model on a measure of subject matter knowledge.
- Teachers who aligned their service-learning activities with standards had students who scored higher on measures of academic efficacy and engagement than those who did not (Billig & Brodersen, 2007).
- In a study of Project Citizen in which students attempted to address public problems through policy change, Root, Northup, and Turnbull (2007) found that in-class use rather than extracurricular use of the curriculum was linked to better student learning.
- Youth Service California (2006) has seven elements of high-quality service-learning, one of which is integrated learning. The indicators of integrated learning are:
 - The service-learning project has clearly articulated knowledge, skills, or value goals that arise from broader classroom or school goals. The service informs the academic learning; content informs the service. Life skills learned outside the classroom are integrated back into classroom learning (p. 15).

Educational Research Supporting This Concept

- In a review of the literature on curriculum integration, Lipson, Valencia, Wixson, and Peters (1993) reported that integrated curriculum helped students to apply skills, retrieve information quickly, develop a more integrated knowledge base, have more positive attitudes toward learning, and have more time to explore linkages within the curriculum.
- Researchers from the National Research Council (1999) synthesized studies on how students learn. They found that knowledge taught in a single context is less likely to support flexible ability to apply knowledge than knowledge that is gained in multiple contexts. “With multiple contexts, students are more likely to abstract the relevant features of concepts and develop a more flexible representation of knowledge” (p. 65).
- Tasks that are relevant, contextualized within the real world, and challenging but achievable have been found by researchers to increase student achievement when they are aligned with learning goals (Lepper, 1988).
- In a mixed methods study of a high school reform pilot project to address challenges of high levels of freshman failure, curriculum integration was identified as a strategy related to increased student understanding and learning (Patterson, Beltyukova, & Berman, 2007).
- In a qualitative study, middle school students who were involved in projects-based learning were more focused, excited, and highly engaged in learning (Wurdinger, Haar, Hugg, & Bezon, 2007).
- Epstein (2007) conducted a study of preschool practices and showed that children had much stronger learning outcomes when teachers intentionally connected hands-on and other activities to specific instructional targets.
- Bransford and Vye (1989) showed that students are able to transfer learning from the classroom and solve novel problems when there is repeated opportunity to practice, coupled with coaching and reflection.

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PARTNERSHIPS

Shelley H. Billig and Linda Fredericks, RMC Research Corporation, 2008

What Are Reciprocal Partnerships With the Community?

Having reciprocal partnerships with the community means that service-learning participants have a collaborative and ongoing relationship with community organizations or members, which enables partners to benefit, along with service recipients. Partnerships typically take place between youth, educators, families, community members, community-based organizations, and/or businesses. Partnerships have a shared vision and common goals, and feature regular two-way communications, allowing members to be well informed and to leverage and utilize resources more effectively. The establishment of reciprocal partnerships in service-learning is a process that requires examination of each partner's expectations and a commitment to bridge the different cultures of the partner organizations. Typically partners co-develop and implement an action plan and share information about the assets and needs each brings to the partnership, resulting in viewing each other as valued resources.

Application to Service-Learning

- Wade (1997) documented substantial benefits of community partnerships for service-learning that included both teachers and students receiving the skills, information, resources, and technical assistance needed to meet a genuine community need; community agencies helping to meet client needs that could not otherwise be addressed by paid staff; more effective services to clients; the ability to match individual's capabilities and interests with the needed tasks; a widening of understanding about community issues; and the pooling of information and resources.
- In his analysis of lessons learned about partnerships over the course of a 3-year demonstration effort, Bailis (2000) observed that most partnerships are what he labeled "instrumental partnerships"; that is, ones that are created to implement a specific project and are subsequently dissolved when that project comes to an end. While instrumental partnerships can produce benefits for service recipients and providers, they are also associated with many disadvantages. These can include the considerable time and effort expended in continuously cultivating new partnerships, a relatively superficial relationship constructed between the school and the community organization, and a more limited impact of service activities. Bailis' study, which focused on multisector partnerships between colleges, K-12 schools, and community organizations, found that a very different kind of partnership was required to deepen relationships between partners and create higher quality experiences for students, agency staff, and service recipients. Bailis concluded that the practice of service-learning could ascend to a higher level of effectiveness and sophistication only in tandem with the cultivation of partner relationships that were long-term, well-designed, and mutually beneficial. Such partnerships were reciprocal in nature, characterized by collaborative communication and interaction between the stakeholders and an efficient leveraging of community assets.
- In a three-phase study of service-learning, Bailis and Melchior (2004) found that many educators felt they could determine community needs themselves, without the help of partners. They cautioned that while the need for equal and reciprocal partnerships was often expressed by practitioners and researchers, implementation of this concept frequently lagged far behind intention.
- After interviewing staff from six different community agencies invested in collaborations with schools and youth volunteers, Batenburg (1995) concluded that schools and agencies represented two radically different cultures and needed to take the time to identify and work through their differences. Writing from the community agency perspective, Batenburg said that schools were often difficult partners because of scheduling inflexibility, bureaucratic control, and teachers' inability to listen. Agencies were sometimes hampered by internal problems and an inability to work with multiple volunteers at the same time.

Nonetheless, agencies remained committed to partnerships with schools because of the desire to serve clients and increase the diversity of volunteers.

- Abravanel (2003) identified a number of different areas where community organizations and schools had completely different expectations for service-learning. She pointed out that while agencies were focused on the end product of service, such as the planting of trees or building of houses, schools were focused on the process of learning and acquiring knowledge and skills. Agencies generally wanted their youth volunteers to follow a prescribed course of action to meet the goals of the agency, while many schools wanted to see youth have a greater role in planning and leading projects. The agency or organization defined success by the accomplishment of certain tasks, while the school determined success when students met particular academic benchmarks or standards. Requirements in other areas, such as transportation, scheduling, and assessment, could also differ markedly between school and community partners. She cited the essential importance of school and community partners engaging in an ongoing dialogue to develop and refine the partnership. What schools need to communicate to the community partner is a clear definition of service-learning, the essential elements of a service-learning program, the benefits to the community, the academic and curricular standards for which teachers are held accountable, and the role of youth voice in implementing projects. What the community partner needs to communicate to the school is the mission of the organization, the capacity of the organization to provide service-learning opportunities, and both the resources available and the costs required to support the service-learning partnership.
- In reviewing the literature on service-learning sustainability as well as lessons learned from her study of six schools and three districts in New Hampshire that received state grants to implement service-learning as an educational reform strategy, Billig (2002a) said that one of the key factors leading to service-learning sustainability was enduring partnerships that featured mutual high regard and reciprocity. These partnerships helped to lend stability to service-learning practices. When problems occurred, they were able to be solved because the sustaining sites featured open communication with leaders in the school and community who were already supportive.
- In Billig's (2002b) study of 18 service-learning programs funded by the W.K. Kellogg Foundation over a 10-year period, reciprocal partnerships were seen as one of seven critical success factors in institutionalizing service-learning practice. School service-learning leaders often found multiple ways for partners to work together to build long-term interest and commitment.
- A 3-year, in-depth evaluation of the CalServe initiative (Ammon, Furco, Chi, & Middaugh, 2002), which was created to promote sustainability and institutionalization of service-learning in California's K-12 schools, underscored the importance of reciprocal partnerships as one of the foundations of program sustainability. The study also found that school/community partnerships were frequently strengthened by "a focus on an 'issue' area in which most of the students' service-learning activities occurred" (pp. 7-27). The issue, whether it was related to environmental, social, political, or other areas, helped to provide a central organizing principle around which both partnerships and curriculum could be developed.
- In his study of 80 schools and districts across the United States that had successfully institutionalized service-learning, Kramer (2000) cited reciprocal partnerships as one of eight essential categories. He reported that "projects became successful and permanent by developing stable, long-term relationships with other stakeholders, particularly at the local level" (p. 35). When partnerships were short-term and isolated, he found a diminished interest from teachers and students in service-learning because of the lack of local support and the difficulty in initiating more partnerships.
- In a report describing lessons learned and outcomes of the W.K. Kellogg *Learning In Deed* project (Fredericks, 2002), local sites shared a number of specific strategies related to research-based indicators that were effective in building and maintaining reciprocal partnerships. The indicators and strategy examples included: (a) co-developed policies and practices that govern the operation of school/community

partnerships; (b) ongoing opportunities to meet, discuss expectations, and when necessary, revise the operation of service-learning activities; (d) mechanisms to evaluate the impact of the partnership; and (d) shared training and other resources.

Educational Research Supporting This Concept

- In a study of 62 school/community partnerships to support language minority student success, Adger (2000) found that schools most often partnered with either ethnic organizations, community-based organizations whose function is the partnership, or multipurpose service organizations. Types of relationships and contributions varied, and the partnerships were fluid in nature, with new partners coming and going as funding streams evolved. About half of the partnerships featured joint leadership. Partnerships that were most successful in helping language minority students achieve academic success were those that had adequate resources, program flexibility, client responsiveness, and provisions for evaluation.
- Sheldon and Epstein (2002) examined the impact that school and community partnerships had on students and found that communication and active involvement of family and community members on activities that focused on student behavior resulted in fewer disciplinary actions.
- An evaluation of Citizen Schools (Mott Foundation, 2007) showed that students who worked with adult volunteers in hands-on activities during after-school programs developed academic and leadership skills.
- A study of the Peekskill, New York, extended day program showed that strong school-community partnerships resulted in students acquiring greater self-discipline and increased scores on measures of academic progress (Mott Foundation, 2007).
- A report issued by the Carnegie Foundation (1988) discussed the benefit of reciprocal partnerships for urban schools. Researchers found that partnerships are particularly useful in helping educators to respond to the needs of their culturally and linguistically diverse students.
- Research from the Search Institute (Scales & Leffert, 2000) and from Eccles, Wigfield, and Schiefele (1998) identified community involvement among the lists of experiences that young people need to thrive. Such partnerships lead to many aspects of healthy human development.
- Grossman and Tierney (1998) found that positive relationships with caring adult mentors was associated with reduction in risky behaviors and increased academic performance and attendance.
- Youth with opportunities to work in communities show higher scores on a constellation of youth development variables, such as resilience, efficacy, and having positive role models (Eccles & Gootman, 2002).

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MEANINGFUL SERVICE

Linda Fredericks and Shelley H. Billig, RMC Research Corporation, 2008

What Is Meaningful Service?

Meaningful service provides a sense of purpose, connection, relevance, and usefulness. The Alliance for Service-Learning in Education Reform (1995) defined a “meaningful contribution” as one that fills a recognized need in the community, is appropriate to the age of the students involved, results in a tangible or visible outcome or product, and demonstrates learning outcomes. In service-learning, all activities should have personal relevance for participants, and they should be appropriate to the ages and developmental abilities of the young people who are involved. Activities should be designed to be engaging and interesting, and should encourage participants to understand the social context in which their service is taking place.

Application to Service-Learning

- Melaville, Berg, and Blank (n.d.) pointed out that community-based learning helps students to draw on their prior knowledge, giving them “structured opportunities and tools for physically exploring their communities and interacting with many kinds of local experts” (p. 11).
- Root and Billig (in press) discovered that students found meaning in their service when they interacted with individuals faced with personal difficulties, confronting examples of injustice, or encountering inefficient policies. These types of interactions seemed to help students invest in an issue emotionally and move from an egocentric to a more sociocentric perspective on the world.
- In his study of 529 high school students who took part in high quality community service, service-learning, or service-based internship programs, Furco (2002) found that the students who were most strongly influenced by their service experiences were engaged in meaningful service activities that challenged them to some degree and/or ones in which they had responsibility and interest. The students’ sense of engagement was enhanced when they felt that they were being treated like adults or were treated with respect by members of the community. When students were challenged to take on adult roles, they showed greater willingness to meet the challenges and show teachers, service partners, peers, and themselves that they could do the job well. Conversely, when students were involved in service activities that they described as “useless,” “meaningless,” “boring,” or “pointless” (p. 43), their feelings of empowerment were very low. Student outcomes were greatest when students had some degree of control over the service activities, perceived that they were making a difference, and had a commitment to the cause that their service activities were designed to address. Students also experienced improved outcomes when program organizers paid attention to the quality of the relationships that were being developed among students, between students and teachers, and between students and community agency representatives.
- In a study of more than 1,400 high school students, Billig, Root, and Jesse (2005) found that service that was perceived as meaningful prompted students to be more committed to their service-learning project and acquire greater knowledge and skills. Meaningfulness was related to students making important decisions, developing their own ideas for projects, feeling that they had made a contribution, and experiencing challenge.
- A study by Catalano, Haggerty, Oesterle, Fleming, and Hawkins (2004) showed that participation in communities helped students develop a greater sense of efficacy and stronger connections to the community norms and values, thereby contributing to community cohesion. Outcomes were maximized when students interacted with others, developed skills, and felt rewarded upon project completion.
- Berman wrote (as cited in Kessler, 2000), “Young people are continually negotiating a sense of meaning, place, and commitment” (p. 69). He stated that young people are always asking questions such as, “Do I

have a meaningful place in the social and political world? Are there values that I can make a commitment to and people I can stand with? Am I capable of contributing something useful to others that they will welcome and appreciate?" (p. 69). Young people must turn their aspirations into action in order to find their own answers to these questions.

- An analysis of three national studies on service-learning (Melchior & Bailis, 2002) supported this assertion. The authors wrote: "Most young people begin with a fairly well-developed sense of civic responsibility" (p. 211) and service-learning efforts "might best be understood as strengthening or reinforcing students' generally positive set of attitudes rather than building a positive set of attitudes from scratch" (p. 211).
- Hart (2007) found that students in an Explorers Club that utilized service-learning to teach literacy were both more engaged and more focused on understanding literacy concepts when they could see their relevance to the service project.
- Youniss, McLellan, Su, and Yates (1999) studied inner-city African American youth and showed stronger positive outcomes when the service activity took place within their own communities and solved meaningful problems within the community.

Educational Research Supporting This Concept

- Pearce (1992) described the process of making meaning as an essential but often overlooked part of young people's emotional growth (p. 190). Unfolding sense of meaning occurs in three stages. First, beginning around age 11, youth experience "an idealistic image of life" that becomes more palpable as they move into adolescence. Second, around age 14 or 15, young people feel strongly that "something tremendous is supposed to happen." Finally, adolescents "sense a secret, unique greatness in themselves that seeks expression." To fulfill these yearnings, young people search for a vehicle through which they can express their unique gifts and a person who can provide a strong role model for accomplishing this mission. Pearce warned that if these deep, developmentally motivated yearnings are not fulfilled, hope and idealism can easily give way to cynicism and despair.
- Dewey (1938) said that learning itself is a constant process of making meaning of the world and one's individual experiences within social contexts. He believed that all personal development occurred when initial desires and instincts are tempered by learning experiences and shaped into more purposeful and conscious actions.
- Ravitz and Becker (n.d.) defined "meaningful thinking" tasks as having students: work on tasks with no indisputably correct answer, suggest or help plan classroom activities or topics, debate and argue a point of view sometimes different from their own, represent the same idea/relationship in more than one way, make conjectures about what they might learn, and/or lead a discussion or presentation for more than one hour. Meaningful tasks were also facilitated by teachers who raised unanswered questions, elicited student ideas and opinions, asked students to justify or explain their reasoning, and asked students to relate the work to their own experiences. Working in small groups to come up with a joint solution, writing an essay explaining one's thoughts, and assessing one's own work on an assignment were also considered meaningful cognitive tasks.
- The National Research Council's (2003) summary of the research on schools that engage students similarly discussed the need to make teaching and learning relevant to the students' experiences, cultures, and long-term goals.
- Dewey (1933) pointed out that four factors were necessary for a project to be educative; that is, the project must generate interest; have intrinsic worth; present problems that stimulate curiosity and create a demand for learning; and cover a considerable time span, being capable of fostering development over time.

- In a study of literacy programs, Guthrie, Anderson, Alao, and Rinehart (1999) found that connecting literacy instruction to real-world interactions led to better comprehension since abstract concepts were translated into concrete experiences.

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YOUTH VOICE

Shelley H. Billig, Stephany Brown, and Jennifer Turnbull, RMC Research Corporation, 2008

What Is Youth Voice?

In service-learning, youth voice has been defined as “the inclusion of young people as a meaningful part of the creation and implementation of service opportunities” (Fredericks, Kaplan, & Zeisler, 2001, p. 1). Youth should have input in planning, implementing and evaluating service-learning experiences with guidance from adults. Input should include the generation of ideas and making decisions during all phases of the service-learning activities, involving youth and adults in creating an environment that supports trust and open expression of ideas, and helping young people acquire leadership and decision-making skills. Having opportunities to be heard and to partner with adults in improving schools and communities can help young people master developmental tasks, form stronger commitments to school and community, and act as agents of social change.

Application to Service-Learning

- In service-learning, voice is enhanced when practitioners ensure that all partners have a clear understanding of its meaning and buy into its importance, give youth opportunities for input into all stages of service-learning projects, and scaffold young people’s capacities to assume responsibility (Fredericks et al., 2001).
- Hart (2007) showed that middle-school students’ level of engagement in a literacy service project increased when they were given autonomy over literacy service events. When teachers established more control over events or decisions about meetings or materials, students generally disengaged from the project. Students’ autonomy over the literacy service project revealed a strong positive correlation with higher academic engagement and achievement.
- In a peer-to-peer service project centered on seat belt use, Bradley, Eyler, Goldzweig, Juarez, Schlundt, and Tolliver (2007) found that when high school students had ownership over the development and presentation of the service project they showed increases in self-confidence, personal efficacy, interpersonal, communication, and critical thinking skills. Student involvement was also shown to be a predictor of increased student school and community engagement.
- Giving young people a say in every phase of a service-learning project has been shown to have a strong influence on all forms of engagement, both academic and civic (Billig, Root, & Jesse, 2005).
- Research demonstrates that when youth are not actively involved in service-learning experiences they become dissatisfied with their experiences. They feel discouraged, alienated, not respected, and believe that their contributions are unimportant. More voice allows young people to become an integral part of the process and shape their own service-learning experiences, which may lead to increased interest in community engagement in the long run (Fredericks et al., 2001).
- Bradley (2003) noted, “When students are personally involved in selecting the service activity, they are far more likely to buy into the program and care about what happens” (p. 59).
- Blyth, Saito, and Berkas (1997) found that the more opportunities youth had to plan and work together, the better the outcomes. “The more group oriented the service project is, the more impact on social responsibility and intent to serve. The more personally responsible youth are for their own service experience, the greater the chances it affects them personally—assuming they reflect on the experiences in a structured way” (p. 52).

- In a national study of service-learning programs for students aged 12-18, Spring, Dietz, and Grimm (2006) found that when students had roles in planning projects, as well as sufficient duration of programs and opportunities for reflection, they were more likely to say they would engage in service in the next year, become more interested in world events, and feel more efficacious.
- The “KIDS as Planners” model of youth voice in service-learning evolved from a program in Maine that encouraged the state’s communities to plan for their future. Communities needed help in this process and a former teacher and state planner recognized that young people could contribute. Students were engaged in local planning efforts that allowed them to learn academic subjects as they worked to solve genuine local needs. Students took on roles as planners and decision makers with adults acting as coaches and facilitators. More than 85% of participating teachers reported that this model provided students with “opportunities to construct knowledge, learn effective communication skills, and apply in-depth learning beyond school most of all of the time” (KIDS Consortium, 2001, p. 9).
- Morgan and Streb (2003) discovered that students who had more opportunities to express their voice in service-learning projects made greater gains in political knowledge, were less cynical about government, and had a greater desire to be politically active than others.

Educational Research Supporting This Concept

- Mitra (2004) found that high school students who were given opportunities for voice in school made gains in three characteristics associated with positive youth development: agency, belongingness, and competence. When students felt their ideas were heard, they increased their ability to articulate opinions to others, constructed new identities as change makers, and developed a greater sense of leadership (agency). Opportunities for youth to develop positive forms of identification led to improved interactions with teachers, increased attachment to school, and willingness to develop relationships with caring adults (belongingness). As students worked with teachers to develop leadership skills, they also developed problem solving, facilitation, and public speaking skills (competence).
- Oldfather (1995) found that enhancing student voice in school gave disconnected youth a sense of ownership and helped them to re-connect to school. Student voice opportunities helped young people to gain a stronger sense of their own abilities and build student awareness so they could make changes in their schools for themselves and others.
- In a study for the California campaign for the civic mission of schools, the Constitutional Rights Foundation in collaboration with the Center for Civic Education and the Alliance for Representative Democracy (2005) found that when students were given the opportunity to voice their opinions regarding school policy, they were more likely to participate in service activities when compared to those that were not given the opportunity to voice their opinions. Additionally, student voice in school/class governance was also shown to increase social and political trust.
- In a study of youth governance in community organizations, Zeldin (2004) found that leadership opportunities helped a majority of youth explore identity issues and gain a sense of connectedness to the community.
- Zeldin and colleagues (2000) found that in community organizations where young people played leadership roles, adults developed more favorable views of youth, confidence in their ability to interact with them, and a stronger sense of connection to the community. In addition, organizations, which included youth in leadership positions, adapted their missions and goals to include youth-oriented language; and their policies and practices to routinely include youth became more responsive to the needs of youth.

- Kohn (1993) noted that traditional school policies, rules, laws, and beliefs might create a climate where teachers do not feel they have input into decisions that are made by administrators. Teachers, in turn, desire to have more control in their classroom and therefore do not want to turn over decision making to students for fear of losing that control. Student resistance to being involved, even when given the opportunity, stems from being told what to do at home and at school.
- Wang and Stiles (1976) showed that second-grade students who were given choice about their learning, including the tasks they would tackle, tended to complete more learning tasks in less time.
- Larson, Walker, and Pearce (2004) found that in youth-driven programs, high school students experienced high degrees of ownership and empowerment and reported learning multiple leadership and planning skills. They also gained self-confidence and reported learning skills from the adults.
- Stereotypes that adults and youth have of each other present challenges related to youth voice, such as adults assuming that youth do not yet possess leadership capabilities, and youth feeling that not all adults are trustworthy. Adults often believe it is easier to engage youth who have already been identified as leaders (Justinianno & Scherer, 2001).
- In schools, strategies for promoting voice include gathering information from students through surveys and focus groups, involving students as researchers, and engaging students as equal partners in school reform. In communities, young people can provide meaningful input by consulting with government leaders about public policy, participating in community coalitions, engaging in organizational decision making, taking action, and carrying out service-learning projects (Camino & Zeldin, 2002).

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DIVERSITY

Shelley H. Billig, RMC Research Corporation, 2008

What Is Diversity?

Diversity in service-learning is widely recognized as being multidimensional, and includes understanding and mutual respect for different points of view. Projects with effective approaches to diversity help service-learning participants to identify and understand multiple perspectives and develop interpersonal skills in decision-making and conflict resolution. Within service-learning activities, it is particularly important to actively seek to understand and value the backgrounds and perspectives of those offering and receiving service, and to recognize and overcome stereotypes.

Application to Service-Learning

- Spring, Dietz, and Grimm (2007) from the Corporation of National and Community Service investigated teenagers from economically disadvantaged communities who engaged in volunteerism. The report showed that youth from economically disadvantaged communities were much less likely to volunteer than those from other backgrounds. Youth from economically disadvantaged backgrounds were more likely to volunteer so they could gain skills for work or school. These youth had more positive civic dispositions and behaviors relative to their peers, but were less likely to have access to service-learning. Teachers were found to play a key role in motivating youth from disadvantaged circumstances to volunteer.
- Weah, Simmons, and McClellan (2000) wrote that service-learning can help students go beyond personal perspectives to learn the perspectives of multiple others; provides a structured opportunity to reflect on and discuss concerns about race, culture, or other differences and a way to practice respect for diversity; and gives an equitable opportunity for all to participate in devising solutions to social problems.
- Billig, Root, and Jesse (2005) found that greater diversity in service-learning programming was related to academic engagement, valuing school, enjoyment of subject matters, civic dispositions, and civic engagement.
- A service-learning diversity taskforce collected information from 36 focus groups and multiple study groups that discussed diversity and service-learning. From these data, Simmons and Toole (2003) concluded that there was a fundamental lack of consensus about the mission of service-learning and its relationship to diversity. Some practices were counterproductive to diversity aims, such as the “missionary ideology” underlying some approaches that led to reinforcing stereotypes and the imbalance of power in the relationship between social groups. Simmons and Toole suggested that negative outcomes were more likely to occur when there is a lack of understanding of the importance of diversity as reflected in a lack of understanding of the need for and content of the pre/post reflection activities; lack of awareness of one’s own cultural lens; lack of professional development on this topic; and the lack of good practice due to time constraints. They recommended that service-learning practitioners start with the provision of service to their own communities before offering to serve a community with people whose backgrounds are different. The authors also suggested that the missionary ideology is less likely to occur when service is based on an asset rather than a deficit mode, when issues of culture are directly addressed, and when service is discussed in the larger context of societal needs and cultural traditions of those offering service and of those being served.
- Hammond and Heredia (2002) showed that service-learning fostered diversity in the Washington Unified School District in multiple ways, including helping others to acquire literacy, helping individuals to become “cultural brokers” from different communities, and finding mutual benefits, with those being served learning through the wisdom of multiple cultures.

- Gregory, Steinbring, and Sousa (2003) and Hobbs (2001) investigated the volunteerism of individuals from Latino backgrounds. Discussing the results of three focus groups with 18 participants, Hobbs noted that Latino volunteerism occurs in the context of family, church, and neighborhood and is not often construed as being service or volunteerism. Rather, this type of service is viewed as simply “helping others.” If service or service-learning is to be scaled up in this community, cultural traditions and norms need to be taken into account, including the need to spend time to get to know the individuals and culture and to establish strong interpersonal connections before being accepted.
- Vang (2004-2005) wrote that refugees, immigrants, and migrants can benefit from being providers or recipients of service, but that special attention must be paid to the challenges being faced by these communities. Service-learning is an unfamiliar concept in many cultures, and there may be resistance due to cultural traditions or internal politics. There is a need to help individuals to adapt, but the service needs to be culturally sensitive and to avoid the missionary ideology. Benefits can be considerable, including nurturing leaders, building infrastructure, and promoting international understanding.
- In summarizing characteristics of service-learning practices in urban settings, particularly for African American students, Keith (1997) noted that multiple researchers, writing in the mid 1990s, “concluded that schools should be responsive to diverse styles of learning, cognition, and motivation. The minority students studied tended to learn more when knowledge was presented in context (“field sensitive”), when the learning process was collaborative, when they could see the relationships between their efforts and accomplishments, and when they engaged in activities that allowed repeated experiences with success and therefore promoted patterns of internal attribution. Finally, as learning involves more than learning tasks, relationships were also important. More learning occurred when teachers were perceived as caring” (p. 137).
- LaPointe (2004) provided similar suggestions for Native Americans, noting that the strong cultural traditions promote service, but not necessarily in the ways in which service-learning fosters service. Understanding the history and traditions of the community is critical to success, along with the idea that service-learning must be seen as a mutually beneficial experience.

Educational Research Supporting This Concept

- Hurtado, Milem, Clayton-Peterson, and Allen (1999) demonstrated that students who socialize with individuals from multiple cultural backgrounds are more likely to be tolerant of diverse ideas, accepting of people unlike themselves, and are more likely to be culturally aware.
- Secada (1989) defined equitable learning as different from equality. In his view, equality is quantitative and refers to parity among groups for a measurable set of factors or on some index. Equality is qualitative and concerns justice. For schooling, this means that some students may need additional assistance or materials, not just access to the same materials and resources that other students have.
- Boykin (1994) studied differences in learning styles between African American and Euro American students and concluded that African American students outperformed their peers when tasks stressed cooperation rather than individual performance.
- The Kentucky Department of Education (2003) defined multiple strategies for equitable learning, including strategies that addressed classroom structure, curriculum, instruction, assessment, and professional development. Equity in school culture is expressed through having high expectations for achievement for all students, involving multiple stakeholders in decision making, assigning personnel so that their strengths are maximized, using multiple communication strategies to reach all interested parties, and specifically stating the value and importance of equity and diversity. Equity in curriculum and materials is reflected in the types of textbooks that are selected, the accessibility of the curriculum to all students, and connecting

curriculum to everyday life and experiences (Kentucky Department of Education, 2003). All students must have access to curricular materials, including technology. Instruction should be ‘learner-centered.’

- Sellers, Roberts, Giovanetto, and Friedrich (2005), summarizing the research on teaching mathematics, science, technology, and engineering, suggested that diversity goals would be achieved when educators know the diverse backgrounds of their students and the implication of those backgrounds for learning; identify the curricular, teaching, and assessment practices that promote equitable learning opportunities; draw upon the diversity of students to enhance and enrich teaching; and recognize existing inequities and address them through the promotion of an inclusive and respectful environment for learning. Their framework provides a rubric with measures for each of these dimensions.
- Researchers who conducted a literature review of effective teaching practices for Hispanic students concluded that culturally-responsive instruction results in improved acquisition and retention of new knowledge; increased self-confidence and self-esteem; better transfer of school-taught knowledge to real-life situations; and exposes students to knowledge about other individuals or cultural groups (Rivera & Zehler, 1991)
- Peregoy and Boyle (2000) found that when teachers provided instructional activities that were based on familiar and “real-world” concepts, students demonstrated stronger gains in literacy and content learning and felt more comfortable and confident with their work.
- August and Hakuta's (1998) comprehensive review of research on effective instruction for Hispanic students found that having opportunities for extended dialogue (such as in reflection activities) enabled students to practice their English skills and perform better on measures of academic success.

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REFLECTION

Shelley H. Billig and Linda Fredericks, RMC Research Corporation, 2008

What Are Challenging Reflection Activities?

Reflection is defined by Toole and Toole (1995) as “the use of creative and critical thinking skills to help prepare for, succeed in, and learn from the service experience, and to examine the larger picture and context in which the service occurs” (p. 100). Reflection in service-learning should occur at all phases of the project, not just at the end. It should include a variety of types of activities, including verbal, written, and artistic, so that youth can demonstrate their learning, understanding, or changes in attitude in multiple ways. Reflection should show the connection between previous knowledge and newly acquired knowledge, often allowing young people to examine and correct their preconceptions and assumptions. Reflection also allows youth to see their place in the larger community or societal context.

Challenging reflection typically means that the activities go beyond the basics of summary of events and examination of feelings to prompting more advanced thinking skills such as analysis, problem solving, and critique. Cognitive challenge is typically defined as presenting the learner with a problem or situation that the learner cannot tackle with his/her existing cognitive structure. In many of the studies on cognitive challenge, researchers also describe prompts that engage students in metacognition, defined as thinking about thinking or being conscious of one’s own thinking and reasoning processes. Challenge within the service-learning context also involves relating experiences to various social and civic issues in order to understand connections to public policy and civic life.

Application to Service-Learning

- High-quality reflection occurs before, during, and after the service is performed. In preservice reflection, the emphasis is on students examining their beliefs and assumptions about issues and service populations. When students are engaged in service activities, the reflection practice focuses on sharing with and learning from peers, receiving feedback from teachers, asking questions, and solving problems. Post-service reflection can allow students to revisit their initial attitudes and assumptions and compare them to their current beliefs. Students can also evaluate project outcomes, for themselves and the service recipients, and discuss how they will apply what they have learned (Toole & Toole, 1995).
- Reflection activities that are designed well and implemented thoughtfully allow students to acquire a deeper understanding of the world around them and of how they can make positive contributions to society (RMC Research, 2003). Other benefits of reflection tied to the cultivation of meaning include the facilitation of greater caring, the development of closer relationships with others, a breaking down of barriers and building of bonds with others from different backgrounds, and a heightened sense of connection and belonging (Andersen, 1998).
- Billig, Root, and Jesse (2005) found that service-learning approaches that featured cognitively challenging activities and reflection were associated with students being more likely to value school, feel more efficacious, engage in school and enjoy subject matters, and acquire more civic knowledge and more positive civic dispositions.
- Root and Billig (in press) showed that teachers with the strongest student outcomes in their study wove cognitive challenges into the service activities by asking students to learn more about issues, investigate potential causes and solutions, weigh alternatives, resolve conflicts among themselves, consider how to persuade others, and manage complex tasks. For one teacher, an additional aspect of cognitive challenge involved the service activity’s ability to stimulate students to question their assumptions about society. For other teachers, challenge was also inherent in the ability of projects to prompt students to realize the complexity of social problems.

- Eyler and Giles (1999) showed that reflection helped students gain a deeper understanding of what they learned and helped them to apply learning to real-life situations and develop increased problem-solving skills. They also demonstrated that reflection was a good predictor of openness to new ideas, the ability to see issues in a new way, and the ability to analyze issues systemically.
- Bringle and Hatcher (1999) described how the raw material of the experience is transformed into more cohesive learning “when critical reflective thought creates new meaning and leads to growth and the ability to take informed action” (p. 180).
- A study of the Generator Schools (Blyth, Saito, & Berkas, 1997) revealed that the amount of reflection was related to service-learning outcomes in complex ways. Youth who did not engage in reflection typically had less socially responsible attitudes than those who did. Those who reflected the most were more engaged in school.
- Conrad and Hedin (1987) demonstrated that students who engaged in more reflection activities were more likely to become aware of their own changes of attitudes and behaviors; to develop a sense of community; and to develop more of an internal locus of control, feeling that they have better control over their own lives.
- Waterman (1993), in a study comparing students in Philadelphia who participated in service-learning with those who did not, found that students who engaged in a process that featured more reflection had stronger self-confidence and social responsibility outcomes than those who did not.
- Leming (2001) concluded that reflection allowed youth to form identity in community service settings, particularly with regard to feeling a sense of purpose, social relatedness, and moral-political awareness.
- Eyler, Giles, and Schmiede (1996) demonstrated that students engaged in critical reflection were more likely than their peers to apply what they learned to understanding and solving social problems.
- Reflection helps students to both understand the links to the curriculum and explore what they have learned through thinking and writing and talking (Andersen, 1998).

Educational Research Supporting This Concept

- Yates (1995) studied 119 students in a parochial high school who worked in a soup kitchen. Surveys, observations, and essays revealed that engagement in the service experience was a prerequisite for “transcendent reflection”; that is, reflection that helps students to place their experiences within a larger social-historical context. “Once students had included reflective evaluations, feeling good about helping and learning life details about specific individuals predicted making higher level evaluations” (p. 72). Students who had higher-level reflections in their final essays were more likely to report that they intended to volunteer throughout their lives.
- In 1999, Perry and Albright noted that reflection involves five steps: (1) remembering and thinking about what was experienced, (2) relating current to prior experience, (3) representing the experience in some way, (4) reaching further into the experience by extending thinking and analyzing at higher cognitive levels, and (5) revising the experience by examining its value.
- Marzano, Pickering, and Pollock (2001) found that the strongest effect sizes for school improvement occurred when teachers integrated strategies, such as teaching similarities and differences, perspective taking, and nonlinguistic representation, as a regular part of classroom instruction. Many of these strategies are associated with cognitive challenge and represent a type of reflection activity.

- In an AERA publication (2006) titled, “Do the Math: Cognitive Demand Makes a Difference,” unlisted authors discussed the need to increase the cognitive demand within K–12 education. They summarized the 1999 Trends in International Mathematics and Science Study that examined the ways in which mathematics instruction varied among the seven countries. The analysis showed that the key difference between the United States, the lowest performer, and higher performing nations was the way in which teachers and students worked on problems. Higher performing countries did not have a higher percentage of cognitively demanding tasks, but rather teachers placed higher cognitive demands on students as they were solving the problems. In practice, this meant that teachers did not reduce tasks into procedural exercises emphasizing computational skills, but rather encouraged students to focus on concepts and connections between and among concepts to engage in better problem solving. Rather than simply applying a set of rules, students learned to reason and solve problems by analyzing problem characteristics, justifying their responses, and explaining the rationale for solving a problem in a particular way. The study concluded that teachers should design high-demand tasks and then keep students engaged in high-level thinking and reasoning. They should encourage students to use multiple problem-solving strategies, represent the problem in multiple ways, and explain and justify their work. “High cognitive demands or thinking processes involved in solving a task can include the use of general procedures connected to underlying concepts and reasoning, complex thinking, and reasoning strategies” (p. 3).
- Jacobson and collaborators (n.d.) reviewed the literature on learning about complex systems and described six design principles for creating learning environments and tools. The first is to connect with the learner’s passions, interests, or experiences so they become more motivated to learn and receptive to instruction. Second, students should experience complex systems phenomena through systematic observations and experiments. Experiences allow students to “iteratively explore questions and hypotheses” (p. 4) in either real life or virtual settings. Third, core concepts should be made explicit. Fourth, students should engage in collaboration, discussion, and reflection. Discussions can be peer-to-peer or peer-to-expert and allow for individuals to articulate or reify their ideas and develop metacognitive scaffolds to understand the experience and connect it with other experiences they may have had. The fifth principle is to engage students in constructing theories, models, or experiments. This may be accomplished by having students generate questions and hypotheses and testing them with others or through experimentation. Finally, students should be encouraged to deepen their understandings and explorations so they engage in trajectories of learning. “Complex systems concepts learned in one class . . . should form a conceptual toolkit that students will be able to use and to enhance in subsequent classes” (p. 6).
- In a PowerPoint presentation summarizing the results of one 1998 national survey, Ravitz and Becker (n.d.) discussed teaching for understanding as having a focus on challenging objectives and tasks. Challenging tasks ask students to articulate their reasoning, revise their work, and engage in peer discourse, group decision making, and metacognition. They wrote that these types of tasks are made feasible by allowing students access to resources, such as information and *thinking tools*, by teachers modeling the learning process, by giving students freedom and responsibility, and by assigning meaningful tasks that are consistent with learning goals. To make tasks meaningful, they should be “contextually rich” projects that have real-world applications, authenticity, depth, and embedded skill learning. Students’ thinking and feelings should be taken into account by considering students’ prior beliefs and interests and by giving students choices. Classrooms should be reorganized to give students opportunities to be in cooperative work groups, to take leadership roles, and to take initiative. Their research showed that projects of this nature are most likely to be implemented in schools serving children from middle to high income families where student abilities are rated as middle to high. These types of projects were much more frequent in elementary and middle schools than in high schools. Cognitive challenge most often occurs in the form of problem-solving activities. Students either worked on problems for which there was no obvious method or solution, designed their own problems to solve, or decided how they would address complex problems.

- In a study in the United Kingdom that utilized an experimental design, Adey, Robertson, and Venville (2002) found that intentionally promoting cognitive challenge led to significantly higher gains on measures of cognitive development and that cognitive development was accelerated when students worked in groups.
- Researchers affiliated with the Center for Research on Education, Diversity & Excellence (CREDE, 2002) noted: “working with a cognitively challenging curriculum requires careful leveling of tasks so that the students are motivated to stretch” (p. 1). According to CREDE (2002), indicators of challenging activities include assuring students see the big picture as a basis for understanding its parts, designing instructional tasks that advance student understanding and help students build on previous successes, and providing direct feedback about how well students are performing relative to challenging standards.

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PROGRESS MONITORING

Shelley H. Billig, RMC Research Corporation, 2008

What Is Progress Monitoring?

Progress monitoring refers to a process for gathering information to determine whether there has been movement toward goal attainment. Progress monitoring requires attention to reaching benchmarks to show both advancement toward outcomes and the effectiveness of procedures. Typically, goals are set, along with ideas about expected rates of progress needed to meet goals by a specified time frame. Effective monitoring is “low stakes” and used for improvement purposes only, not for making major decisions about a student, teacher, or program. Sample measurement tools used frequently for monitoring student progress include observations or anecdotal records, analysis of work products, criterion-referenced measures that examine mastery of specific knowledge or skills, and performance assessments. Progress monitoring often includes the use of rubrics or ratings that measure how well the service-learning is aligned with effective practices. Results should be shared with all stakeholders and used for continuous improvement.

Application to Service-Learning

- Billig, Root, and Jesse (2005) found that service-learning assessment and program evaluation, including progress and process monitoring, were related to students’ enjoyment of subject matters, civic knowledge, and efficacy.
- Greene and Diehm (1995) demonstrated that students who received more frequent written feedback on their written reflections were more likely than those who received checkmarks to say that the population being served contributed to their education and that they were more personally invested in the service.
- Shumer (1997) conducted a synthesis of the service-learning qualitative research and concluded, “Efforts to plan and control student learning are not always successful. The process of learning from experience is dynamic; it requires methods of reflection and feedback to continually monitor its flow and direction” (p. 36).

Educational Research Supporting This Concept

- Safer and Fleischman (2005), in their review of the research of progress monitoring in educational settings, reported that when teachers implement student progress monitoring, “students learn more, teacher decision making improves, and students become more aware of their own performance.” (p. 82)
- Shannon and Bylsma (2003) noted, “In a supportive school environment focused on continual improvement, feedback allows teachers to make procedural corrections, reteach, and encourage students’ efforts, as well as to change their practices” (p. 27).
- Good and Brophy (2000) noted that in progress monitoring, “Errors are treated as learning opportunities, not test failures, and should lead to additional instruction and practice opportunities” (p. 229).
- Schunk and Pajares (2002) reported that students developed a sense of efficacy based in part on feedback and whether they are given enough opportunity to improve enough to meet standards.
- One form of progress monitoring that has a scientific research base is curriculum-based measurement (CBM). Fuchs and Fuchs (2006) identified more than 200 empirical studies published in peer-reviewed journals that attested to the effectiveness of this type of progress monitoring for helping students improve reading, mathematics, and spelling skills. CBM approaches assess all of the skills covered in an annual curriculum such that each weekly test is different, with different items, but measures a sample of the skills

to be mastered by the end of the year. CBM uses standardized measures, and all tests, administration and scoring procedures, and interpretation protocols are specified. Research on CBM shows its utility for identifying students in need of additional or different forms of instruction, its effectiveness in helping teachers plan more successful instructional approaches and programs, and raising achievement scores.

- Specific conditions that can be influenced as a result of the progress monitoring include instructional time and location, organization of instructional components, specific teaching and learning strategies, assessments, classroom management, school climate, and personal relationships (Bernhardt, 1998).
- Studies of “turn-around” low-performing schools show that many used quality management approaches that featured continuous process and progress monitoring and improvement. Goldberg and Cole (2002), for example, documented the Brazosport, Texas, process that led to greater equity and higher student performance for the entire school district. The focus was on instructional processes and their effects on student learning. The instructional team monitored instructional processes to ensure that quality practices, including high expectations, safe and orderly climate, and ongoing measurement for decision making, were in place. “Process data were then generated to align resources and to continuously improve support process” (p. 10).
- Quenemoen, Thurlow, Moen, Thompson, and Blount Morse (2004) pointed out that the essence of progress monitoring is that data should inform educators when students are not progressing as they should so action can be taken to improve progress. Actions to accelerate progress could include changing instructional approaches, providing more learning supports, and adding reflection activities. These researchers also argued for using multiple forms of progress monitoring to ensure accuracy.

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