#### Learning Goals

Grades: K-12
All subject areas:
Mastering gradeappropriate content
knowledge; mastering
grade-appropriate
higher-order
thinking skills.

Service-learning programs in IC-12 classrooms can provide students with educational experiences that meet standards and create a passion for learning.

by Shelley H. Billig, Ph.D.

Learning considers so dents decide ways with street. The considers so dents decide ways with street. The considers so dents decide ways with street.

n Georgia, kindergarten and first-grade students conduct a community mapping activity to figure out the needs of the children within the school. Kindergartners new to the school say that the school layout is confusing and it is hard to find their way to the classrooms. Each class considers solutions, and students decide to label the hall-ways with street signs. Each class

## "If students build a playground, they learn geometry, measurement, calculation, design, blueprinting, and many other skills."

brainstorms potential names for the hallways, and firstgrade students design and conduct a survey. They eliminate names that do not represent positive images. (No Shock Street because it would scare the five-year-olds.) The surveys are administered, the data are entered into a spreadsheet on the computer, and the students review the street names with the highest votes and allocate them to particular hallways. They then grapple with the question of whether the signs they make to identify the halls should be permanent or whether students each year should have the chance to name the halls so they feel more ownership of the school. They decide to poll all of the students, graph the results, and decide based on majority rule. While reviewing the polls, they decide whether bar graphs, line graphs, or pie graphs are the best way to present the data to other students so that everyone can understand the results.

In Vermont, high-school students decide they want to do something to help the homeless. Initially, they think they will conduct a food drive, but then after studying the availability of shelters and food in the area and interviewing some of the homeless people in the shelter, they recognize that the homeless did not really need food, but instead need clothing and school supplies for the children in the shelters. They initiate a drive to collect funds and repair used clothing to raise money for school supplies. They soon realize that this solution is only temporary, so they decide to build a business that will bring a sustained income to the project. They survey high-school students, recognize that their skills can be used to repair computers, and open a computerrepair business with the profits going for school supplies for the homeless. They learn how to write a business plan and how to apply for grants to get the business started. They set up both the repair business and the clothing and supply distribution centers.

These are two of the hundreds of examples of an instructional strategy gaining great popularity in schools. This instructional method—service-learning—combines academic learning with service to the community. By helping others, students learn the knowledge and skills reflected in the content standards of particular academic areas such as reading/language arts, math, science, and social studies. If the students are building a playground, they learn geometry, measurement, calculation, design, blueprinting, and many

#### Shelley H. Billig, Ph.D. (billig@rmcdenver.com)

is an researcher, evaluator, and technicalassistance provider who has written extensively about educational technology, service-learning, and other issues. She is vice president of RMC Research Corporation in Denver, Colo.

other skills. If they develop a nature trail, they learn about habitat, signage, environmental protection, plant growth, and

path construction. If they work with seniors on an oral history project, they learn about history as individuals lived it, about gerontology and the influence of economic and political forces on human behavior. The types of service that can be offered and the concomitant learning are nearly limitless.

It is important to note that service-learning is not the same thing as community service. Community service, which is typically defined as volunteer work to help the community, is not necessarily tied to academic learning the way that service-learning is. As such, community service is a wonderful activity, but does not advance academic performance in the same way that service-learning does.

#### **Keys to Success**

Service-learning practitioners typically have the same desired outcomes as other educators: Students should be motivated to learn and engaged in subject matter, acquire important knowledge and skills, and be able to demonstrate their knowledge and skills on a performance measure. The particular knowledge and skills that students demonstrate depend upon the way that the service and learning experience is planned, implemented, and followed up.

Planning requires some way to determine authentic community needs, and students need to both own the process and have many choices. Planning also ensures that the service activity is connected to important learning goals, usually content standards and school curriculum.

Implementation requires commitment to the project from inception through conclusion. There should be at least some way to recognize and solve any problems that may arise, and good teamwork and collaboration between and among students and adults working on the service activity. Throughout the activity, young people and adults should reflect on the knowledge and skills they acquired and how they solved problems.

Follow-up takes the form of reflection and celebration activities that make explicit what was learned. Follow-up extends the learning and stimulates higher-order thinking skills by posing questions such as: "How else could we have accomplished our goals? Why do you think this was a community need? What do you think will happen now and what new challenges will emerge?" Again, the possibilities are nearly limitless, but the activity is most effective when young people reflect on the affective, behavioral, and cognitive aspects of the experience, and use the skills of summarization, generalization, prediction, inference, analysis, critique, and taking perspectives. They should also understand and articulate how the service connects to the economic, social, or democratic systems that govern our communities or societies. In short, young people are learning both important subject matter and processes for acquiring and applying information.

## **Learning that Matters (continued)**

#### Why Service-Learning Works

Studies have shown that these kinds of hands-on, experiential projects-which are tied to standards, meet authentic needs. and are followed by deep reflection focused on learning—have the elements that lead to deep and sustained learning. The learning that occurs has relevance for the students. It gives them a chance to contribute to real-life challenges and they feel a sense of efficacy when they succeed. Students feel valued because their voices are heard and their ideas count. The learning engages the entire physiology and all of the multiple intelligences that individuals possess, typically involving verbal/linguistic, logical/mathematical, visual/spatial, body/kinesthetic, interpersonal, and intrapersonal activities.

Service-learning helps students to become attached to and invested in their communities. They learn how to collaborate, understand the value of participating in activities that promote democracy and

citizenship, and interact with peers and adults in mutually respectful ways. These relationship-building activities help students feel less isolated and more responsible for supporting each other. They learn the virtues of diversity. Students come to recognize that they can make a difference and that contributing to communities brings benefits to both those who give and those who receive. This developing sense of agency gives students a reason to act in a prosocial manner. Engagement in service-learning, then, helps to mitigate the feelings of alienation that some young people develop. It assists them in choosing to act in ways that are less individualistic and that help them develop characteristics of good citizens. They begin to understand concepts such the common good. Service-learning also helps students develop leadership skills.

#### **Documented Outcomes**

Research on the outcomes of service-

learning is beginning to demonstrate effects on students, schools, and communities. The social and personal development impacts on student participants are the most documented. Summaries of the research (for instance, Billig, 2000) and large-scale national and state evaluations (Melchior, 1999; Weiler, et al., 1998; and Furco, 2002) show that students develop a strong sense of efficacy, a greater appreciation for diversity, more self-confidence, and greater protective factors that mitigate students' participation in risky behaviors.

Academic learning also occurs. Although there are not as many studies published in this area, they do show great promise. Akujobi and Simmons (1997), for example, found that elementary-school students who participated in service-learning

showed statistically significant higher scores on Michigan state assessments than their nonparticipating peers. Santmire, Giraud, and Grosskopff (1998) similarly found differences in scores on state assessments in math for students who were randomly assigned to service-learning, compared to their nonparticipating peers. Scales, Blyth, Berkas, and Kielsmeier (2000) studied 1,153 racially and socially diverse middle-school students from schools in Kentucky, Massachusetts, and Missouri. They found that randomly assigned students who participated in service-learning programs were more likely to take responsibility, become engaged in schoolwork, pursue higher grades, and develop more concern for others' welfare. Students who were motivated by the learning, participated for more hours, and engaged in meaningful reflection activities experienced greater impacts. Melchior also showed differences in English/language arts learning among middle- and highschool students, but in his study, the results were not sustained over time.

Several studies have shown that students who engage in service-learning develop strong attachments to the community and an ethic of volunteerism. Studies by Yates, Youniss, and McClellan (1997) suggested that provision of service during high school is associated with provision of service as an adult 15 years later. Studies of high-school youth in Hawaii (Billig & Meyer, 2002) showed that students engaged in service-learning were much more likely to care about their environment, take responsibility for addressing community problems, and see education as an important endeavor than their nonparticipating peers.

There are also obvious benefits to the exposure young people get to a variety of role models and career paths. This is particularly important for students who have not had the opportunities to examine the range of jobs that are available. The exposure frequently motivates students to learn important subject matter so that they can pursue a particular career (Melchior, 1999).

Schools and communities also benefit. A study of schools in New Hampshire (Billig & Conrad, 1997) showed that teachers were stimulated to think more deeply about teaching and learning. Superintendents in Hudson, Mass., and Nestucca Valley, Oreg., used service-learning as a primary vehicle for

### teachingtools

#### Corporation for National and Community Service

http://www.nationalservice.org Funding for service-learning through the *Learn and Serve* program, and other information about service-learning.

#### National Service-Learning Clearinghouse

http://www.servicelearning.org Comprehensive information on grants, mentoring, publications, conferences, and other servicelearning resources.

#### National Service-Learning Partnership

http://www.service-learningpartnership.org
A broad-based service-learning advocacy group.
The site offers a monthly electronic newsletter, opportunities to influence decision-makers, an extensive selection of links, and publications.

#### RMC Research Corporation

http://www.rmcdenver.com/service\_learning.htm Service-learning research reports. Information on the 3rd Annual International Conference on Service-Learning Research, Nov. 6–8, Salt Lake City, Utah.

For an online version of this story with links and a complete bibliography, go to http://www.ciconline.org/Enrichment/ Teaching/learningwithtechnology/default.htm.



#### **Q&A: John Bridgeland**

http://www.usafreedomcorps.gov Assistant to the President and Director of the USA Freedom Corps

Established by President Bush in January 2002, the USA Freedom Corps is a coordinating council working with key service agencies in government, as well as organizations in the nonprofit and private sectors, to provide opportunities and incentives to serve others at home and abroad. Available on their Web site is "Students in Service to America: A Guidebook for Engaging America's Students in a Lifelong Habit of Service."

# Why is service-learning important to the federal government?

Fostering habits of service starting very young is important to the country, so the federal government has a role to play in fostering and understanding the best ideas and practices to engage students in service projects and connect them with what's being learned in the classroom. We think it's vitally important to engage young people as active citizens when they are going through school.

#### Are there any servicelearning programs that stand out in your mind?

In 2003, Ohio is celebrating its bicentennial, so they are designating specific high schools and junior-high schools in every county as Bicentennial Service-Learning Schools. The students will conduct research and interviews to

make connections to their past. One county, for example, is the birthplace of Ulysses S. Grant. Others will partner with other organizations to conduct countywide needs assessments, then create a service project designed to enhance the future of their county. But it is all framed in this notion of Ohio celebrating this great anniversary—let's make a statewide effort to preserve the past, look at the present, and shape the future.

## Where does technology fit into service-learning?

Technology has opened up new ways for Americans to access fantastic service opportunities. We created the U.S.A. Freedom Corps volunteer network, which is a comprehensive Web-based clearinghouse with over 60,000 organizations and millions of service opportunities organized by zip code, areas of interests, or proximity to your home. With a click of a mouse, Americans can connect with service opportunities across the country and in dozens of other countries.

Finally we have an American History, Civics, and Service Initiative. We partnered with the National Archives to make 100 milestone documents in our nation's history more readily accessible to community schools and teachers on the Web. It's called Our Documents, and it's also available through the USA Freedom Corps Web site. My daughter

or any other student or teacher around the country can download original documents and read everything from the Richard Henry Lee resolution to the Voting Rights Act of 1965, with lesson plans and discussion questions about what these defining documents mean.

## How does that relate to service-learning?

Democracy is not self-sustaining. Every new generation needs to rediscover and perpetuate it. When I talk to young people across the country, I leave them with the thought that through their actions, they have joined a long tradition of service and civic engagement that connects them to generations long gone. It also connects them to future generations who will inherit a better world based upon the service legacy that this generation leaves. That's a powerful and important notion, to connect American history with service-learning.

# Where would you recommend teachers begin if they want to start a service-learning program?

I would recommend they start by downloading "Students in Service to America" and take part of an evening or a lunch break to flip through it. Then think about the subject matter that they're teaching. Through this guidebook, teachers will get some specific ideas that are very simple and not very time-consuming. For those who want to do something more comprehensive, they'll have the best ideas and practices from around the country available in this one little guide.

school reform and reported that service-learning revitalized teaching and learning and focused reform efforts (Education Commission of the States, 2002). In several studies, community members report that they came to perceive young people as resources and understood the need to support schools (Billig, 2000).

#### **Getting Started**

Service-learning does not cost a lot to

implement. Funds are needed for professional development to learn how to plan, implement, and evaluate service-learning activities and time to organize particular activities. Many schools find that hiring a parttime coordinator helps. Schools looking into service-learning should also examine district transportation and safety policies. If transportation or safety issues emerge and are not easily resolved, then service-learning activities should simply be confined to the

school community. There are many online resources available to help implement service-learning (see Teaching Tools box).

Service-learning provides students with learning that matters. Many students who participated in service-learning say that it was the best experience they ever had in school. Given the need for all students to engage in academic work and learn higher-order skills, it may be time to introduce this type of learning in all schools.