School–Community Partnerships: Using Authentic Contexts to Academically Motivate Students

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Abstract

The opportunities school–community partnerships pose for students' learning continue to generate the attention of educational stakeholders. Children learn through a variety of social and educational contexts, and the goals for student academic success are best achieved through the cooperation and support of schools, families, and communities. The purpose of this article is to examine several instructional approaches that use diverse contexts to facilitate students' meaningful learning of academic subject matter: authentic instruction, problem-based learning, and service learning. Building upon the premise of a community of learners, school–community partnerships within each of these approaches are discussed.

Key Words: school–community partnerships, authentic instruction, problem-based learning, service learning, motivation, contexts, real world applications

Introduction

School–community partnerships refer to the connections between schools and community individuals and organizations that are created to enhance students' social, emotional, and intellectual development (Sanders, 2006). A central principle to Epstein's theory of overlapping spheres of influence is that goals for student academic success are best achieved through the cooperation

and support of schools, families, and communities (Epstein, 2011). In this spirit, there has been a growing interest in school–community partnerships in education (Epstein, 2010a; Faulconer, 2010; Gestwicki, 2013; Sanders, 2006, 2008; Sheldon, 2007). In this article, we propose that engaging students in activities that are consistent with environmental and sociocultural structures existing outside school walls will ensure a greater degree of parallel between school environments and real-life tasks that will facilitate students' meaningful learning of academic subject matter. These efforts will hopefully begin to address the commonly reported concern by educators that students, especially older students, do not see the meaningfulness in much of the academic subject matter they are exposed to in school. Instead, students see many academic tasks in terms of short-term learning necessary to secure a grade and do not grasp the learning's utility in the real world beyond the classroom. We discuss three context-based instructional approaches that can be utilized amidst school–community partnerships that help students to make meaningful connections between academic content and real-world applications of knowledge: (a) authentic instruction, (b) problem-based learning, and (c) service learning.

Social Contexts of Learning

Current research demonstrates that school–community partnerships lead to many benefits, including creating a caring community, improving the school's programs and climate, supporting families, enhancing student achievement, improving behavior, increasing attendance and graduation rates, and helping students to succeed both in school and in later life (Epstein, 2010a, 2010b). Growing interest in school–community partnerships can also be connected to a rich theoretical tradition in diverse areas of the literature that address the social contexts of learning, including that of situated learning, social constructivism, and learner-centered education.

Situated Learning

Situated learning or situated cognition proposes that learning and knowledge are situated in physical and social contexts and that the transfer and use of knowledge is affected by the context in which learning took place (Brown, Collins, & Duguid, 1989). Situated learning's viewpoint suggests that individuals learn by interacting with their environment, and cognition is essentially created through the interactions between learners and situations. The situated learning outlook can provide information about the ways in which the organization of classrooms may affect the opportunities for productive learning (Koran, Willems, & Camp, 2000). Brown, Collins, and Duguid (1989) argue

that students often acquire knowledge in school that is tied to the school context and cannot be used in the context of everyday life. This is because students are not being exposed to the community of learners in which the information will be used. It is through these communities that individuals understand how information is interpreted and how it is used. Creating a breach between the learning and the use of information leads students to separate what is learned from how it is used (Brown et al., 1989). In contrast, an individual's capabilities appear more efficient and effective across contexts that are more authentic and familiar to the individual. This finding has been demonstrated in pioneering research in various skill areas such as time monitoring, memory tasks, and mathematical calculations (Ceci & Bronfenbrenner, 1985; De Loache & Brown, 1983; De Loache, Cassidy, & Brown, 1983; Lave, 1988; Lave, Murtaugh, & De la Rocha, 1984; Nunes, Schliemann, & Carraher, 1993). More recent work on situated learning that highlights the role that context plays in learning has also been demonstrated with second-language writing and teaching economics (Broome & Preston-Grimes, 2011; Tsui & Ng, 2010). One of the hidden truths to improving instruction, according to McCann, Jones, and Aronoff (2010), is that student learning should be situated within the context of a coherent curriculum with the teacher linking instructional outcomes to future activities.

Social Constructivism

From the social constructivist perspective, it is important that students' experiences at school are connected with the world outside the classroom (Santrock, 2011). Social constructivism emphasizes the belief that knowledge is constructed when individuals interact socially and talk about shared tasks or dilemmas (Driver, Asoko, Leach, Mortimer, & Scott, 1994). In Vygotsky's contextual theory, the pathway to expertise is associated with immersion in a particular social situation over time, with individuals acquiring skillful knowledge and the ability to engage successfully in the discourse, norms, and practices of the particular community of practice (Vygotsky, 1962). "From a Vygotskian perspective, the teacher's role is mediating the child's learning activity as they share knowledge and meaning through social interaction" (Dixon-Krauss, 1996, p. 18). Teachers (or knowledgeable peers) can offer guided assistance through an individual's zone of proximal development (those tasks that a student cannot handle independently but can once they have assistance).

Therefore, from the social constructivist perspective, learning occurs during social negotiation and through the opportunity to discuss multiple perspectives as people make sense of their world. Collaboration within a community of learners is an opportunity to reflect and share one's perspective with others

and to negotiate meaning and develop better solutions (Alesandrini & Larson, 2002; Driscoll, 2005). Individuals come to be exposed to multiple perspectives on a particular subject that may help to better inform and broaden their own current conceptions. Thus, this approach would afford students the opportunity to jointly construct meaning for an activity while enabling them to look beyond their individual point of view. Teaching practices that build on the social constructivist perspective allow for social dialogue and exploration in an atmosphere of shared learning, foster group reflection and multiple viewpoints, and encourage meaningful group activities around common interests and authentic real-world problems (Bonk & Cunningham, 1998). In addition, constructivist practices emphasize the importance of stimulating students' self-regulated and active learning, connecting learning to authentic and real-life contexts, and encouraging students through open-ended questions and guided discovery (Erdogan & Campbell, 2008; Mayer, 2004; Thoonen, Sleegers, Oort, Peetsma, & Geijsel, 2011).

Learner-Centered Instruction

The social influences on learning are also echoed within the American Psychological Association's 14 learner-centered psychological principles that emphasize the active and reflective nature of learners (Learner-Centered Principles Work Group, 1997). These principles are intended to apply to all learners regardless of age and summarize what research has revealed about how students learn (McCombs, 2003). Of particular interest to this paper is Principle 11, "Social influences on learning," which states that learning is enhanced by social interactions and communication with others during instructional tasks. "In interactive and collaborative instructional contexts, individuals have an opportunity for perspective taking and reflective thinking that may lead to higher levels of cognitive, social, and moral development, as well as self-esteem" (Learner-Centered Principles Work Group, 1997, p. 6).

Further, in a classroom based on learner-centered principles, decision-making is shared, whereby students are involved in decisions about how and what they are learning, and students assume increased responsibility for their learning (McCombs & Miller, 2007; Pierce & Kalkman, 2003; Weimer, 2002; Weinberger & McCombs, 2001). Choices can be offered to students that are developed from within teacher- and state-mandated curriculum constraints. When students are given choices, it feeds an innate need for autonomy, and they are more likely to feel a sense of ownership, empowerment, and enjoyment in their learning; they are more likely to be intrinsically motivated and satisfied with instruction (Cornelius-White & Harbaugh, 2010; McCombs & Miller, 2007; Weinberger & McCombs, 2001).

Suggestions for School–Community Partnerships

The instructional suggestions for school–community partnerships that follow build on these themes that emphasize learning in social contexts. Strategies presented in this article situate learning in authentic contexts and encourage student choice and shared decision-making in order to foster students' academic motivation and meaningful learning of subject matter. In addition, they engage students in opportunities for collaboration and group reflection with their teachers, peers, families, and members of the community.

Parent Involvement

Epstein (2010b, 2011) proposes six different types of involvement: parenting, communicating, volunteering, learning at home, decision-making, and collaborating with the community. For instance, when parents are involved with students' learning at home, students have more positive attitudes towards schoolwork and show gains in related skill areas, while parents get a better awareness of their child as a learner and are more equipped to support and encourage student learning at home. When parents volunteer, student learning is enhanced for those skills that receive targeted attention from volunteers, and parents gain the awareness that families are welcome and valued at school. Research has found relationships to exist between parent involvement and students' academic achievement, sense of well-being, attendance, attitudes toward school, homework readiness, time spent on homework, motivation, and educational aspirations (Gonzalez-DeHass, Willems, & Doan Holbein, 2005). When parents show an interest and enthusiasm for what their children are learning, they provide a support system at home that buttresses the child's academic learning and reinforces the value of schooling (Ames, de Stefano, Watkins, & Sheldon, 1995). Parents can also play a vital role in modeling effective learning strategies and encouraging students' achievement motivation and self-regulated learning skills. As we will discuss later in this article, teachers can involve parents in their child's learning through authentic and meaningful learning activities.

Community Partners

Teachers can also turn to a variety of members in the community whose expertise or experiences naturally complement curriculum subject matter. Potential community partners might include local businesses and national franchises, colleges and universities, high schools, fire and police departments, volunteer organizations like the YMCA or United Way, senior citizen organizations, libraries, museums, zoos, faith-based organizations, or individuals living

within the community (Sanders, 2006). As we will discuss later in this article, school–community partnerships take authentic instruction and problem-based learning (PBL) to another level of collaborative learning by exposing students to real-life experts during meaningful and enriching learning activities. Collaboration between schools and members of the community is beneficial for students because it can provide students with opportunities for mentorships and afterschool programs that extend the classroom curriculum to the real-world setting (Ferreira, 2001). Exposing students to positive adult mentors through service learning can help students learn academic content and skills through community service experiences. School–community partnerships help to improve the school's programs and climate, enhance student achievement, increase graduation rates, and help students succeed (Epstein, 2010a, 2010b).

Establishing Effective Partnerships

Research has identified several essential components for effective school–community partnerships:

- *Awareness of the overlapping spheres of influences on student development*: The goals for student academic success are best achieved through the cooperation and support of schools, families, and communities. In addition, there is consideration for the various types of involvement for schools, families, and communities to work together (Epstein, 2010b). School–community partnerships are most effective when all parties see the benefits that the alliance will bring to all stakeholders involved, and because the collaborative efforts are viewed as fruitful and valuable, then each individual's commitment to the success of the partnership is encouraged (Hands, 2005).
- *Leadership from an action team.* Action teams may include school administrators, teachers, students, parents, and community representatives who can offer diverse perspectives on partnership program development (Epstein, 2010b; Sanders, 2006). The team takes responsibility for assessing current practices and implementing and evaluating next steps for building partnerships (Epstein, 2010b). Ultimately, these practices should take into account the particular needs of students, teachers, and families in their school.
- *Student- (or learner-) centered environments:* In this vein, community partnerships are undeniably connected with the school's efforts to support students, enhance achievement, and nurture possibilities for their future careers (Sanders, 2006). Partnership programs are inexorably linked to an organized program of collaborative activities to help students succeed (Epstein, 2011). Rather than being seen as an isolated occurrences to involve family and community members, a systematic program for partnership is

linked to school improvement goals and becomes a fundamental goal for teachers to support students' learning and success.

- *State- and district-level support:* In addition to strong school leadership support, support from state and district leaders is also important for effective partnerships (Epstein, 2010b; Sanders, 2006). This support includes leaders facilitating ongoing dialogue and feedback about educational practice, policy creation for building school partnerships, and creating opportunities for professional development.

Authentic Contexts to Academically Motivate Students

Authentic Instruction

Authentic instruction utilizes classroom activities that have some connection to real-life tasks students will face outside the classroom. Authentic learning involves real-world problems that mimic the work of professionals in that discipline; utilize open-ended inquiry, thinking skills, and metacognition; engage students in discourse and social learning among a community of learners; and empower students through individual choices to direct their own learning projects (Rule, 2006). It is through these authentic activities that learners are exposed to a particular community of practice or culture's use of a particular skill and, as a result, enhance their learning and transfer of that skill. Teachers might have children learn the importance of mapping in a realistic setting by having them navigate the neighborhood to locate important landmarks such as the fire station, police station, grocery store, and post office. Older students might create and adjust budgets using real monetary transactions (such as bank statements and checkbooks). Problem-based learning (PBL), which we discuss later in this article, refers to a type of authentic instruction where students acquire knowledge and skills by solving real-life problems.

Research on authentic instruction has demonstrated that students benefit from the use of authentic tasks which essentially embed real-life context into school-related subjects like reading (Laster, Ortilieb, & Cheek, 2009; Parsons & Ward, 2011), writing (Jago, 2002), and science and mathematics (Buxton, 2006; Dennis & O'Hair, 2010; Turner, Gutiérrez, Simic-Muller, & Díez-Palomar, 2009). Of most relevance to this article, research has shown that authentic tasks enhance students' motivation (Blumenfeld et al., 1991; Duke, Purcell-Gates, Hall, & Tower, 2006; Parsons & Ward, 2011). Authentic projects contextualize academic learning and may enhance deep understanding because students are required to apply information and concepts, set goals, test their ideas, and evaluate their progress in contexts similar to those seen outside of school (Blumenfeld et al., 1991). Students become interested and perceive

the value in the activity when tasks are seen as authentic and having worth, there is choice about what work is done, and the teacher affords students opportunities to work collaboratively (Blumenfeld et al., 1991).

Authentic instruction can utilize school–community partnerships and involve both parents and community members in the educational experience. Meaningful homework connects school learning to real-life situations, encourages family participation, and has students create products that will be used in meaningful ways (Alleman et al., as cited in Bembenutty, 2011). Use of out-of-school contexts (such as zoos, planetariums, museums, or botanical gardens) and information technology (internet and virtual world "field trips") in science education may lead to instruction that is more valid, authentic, and motivating (Braund & Reiss, 2006). Supplementing traditional instruction with online education, which has become more popular and accessible in K–12 schools, can provide students with learning opportunities to investigate real-world issues through authentic and collaborative learning environments with students, teachers, and subject experts (Doering, 2006). Teacher observations and anecdotal evidence speak to the power of this instructional strategy for capturing students' interest and enhancing meaningful learning:

- Middle school and high school students engaging in authentic research assignments connected to their own interests might interview school staff, parents, or subject matter experts in the community and then create multimodal products—artwork, digital slide shows, oral presentations, written reports, or portfolios—appropriate to the project and intended audience (Krovetz, Casterson, McKowen, & Willis, 1993; Schack, 1993).
- Elementary school classes where students engage in hands-on and environmentally focused authentic learning themes across subject areas show enhanced test scores, better attendance, and increased parent and community involvement (Irvin, 2007).
- Field trips to museums become more powerful, authentic, and meaningful when students develop research topics for these excursions beforehand that are linked to classroom work (Hobart, 2005).
- Authentic learning can even occur on a school-wide level when community experts and parents share their expertise on themed topics, teachers collaborate with community members to create organized and visually stimulating presentations that will hold students' interest, students are engaged in active and hands-on learning relevant to the subject, and learning of curriculum-driven topics is emphasized over any pure entertainment value of such activities (Black, 1993).

In analyzing recent journal articles addressing authentic learning in different contexts, Rule (2006) offers some insight into the components for its most effective use: allowing the student to take the role of the inquirer who engages in critical, creative, and metacognitive thinking; affording student choice to empower and motivate students; and establishing a collaborative community of learners who can scaffold each other's learning. Still, authentic instruction can pose some challenges to teachers due to the innovative nature of the lessons and the flexibility required of the teachers to implement them. Lack of time to cover material and plan lessons, expenses incurred to purchase materials, teachers' views on nontraditional educational perspectives, issues with assessment, and student attendance can all prove challenging with regard to authentic instruction (Burke, 2009; Dennis & O'Hair, 2010). Conversely, authentic instruction is likely to be really time consuming only the first time the lesson is taught; some teachers are able to reallocate funding to purchase materials, and if authentic instruction is effectively engaging students in real-life situations that they see as beneficial then they are more likely to want to attend (Dennis & O'Hair, 2010). The challenge of how to effectively assess authentic instructional activities is covered in the next section.

Authentic Assessments

Students can also be evaluated through the use of authentic assessments in the classroom by using assessments created to mirror the real-life context (Moon, Brighton, Callahan, & Robinson, 2005; Svinicki, 2004). Authentic assessments are different from traditional assessments in that they vary in nature, and although they can include the use of paper and pencil, they often do not. Some examples of authentic assessment might be for students to translate aloud a foreign language passage in a book, conduct a science experiment, play a musical instrument, write a newspaper editorial or literary critique, or parallel park a car. This type of assessment truly tries to capture whether the student can think like a foreign language expert, a scientist, a musician, a newspaper editor, or an effective driver. Authentic assessment can also require students to utilize knowledge from different subject areas. For instance, a science problem may require students to read and reflect on the current research literature, apply scientific and mathematic principles, and yet also take into account complex social or geographical dynamics. In sum, an authentic assessment can be as creative as the jobs and tasks that people perform in everyday life, for these assessments are a direct reflection of the real world.

Some of the proposed benefits of using authentic assessments include teachers gaining a richer understanding of student learning, student motivation and engagement in learning, students seeing the value and meaningfulness in the

activity, opportunities for embracing multiple intelligences, a focus on higher-level thinking and problem-solving, and greater transfer of student learning to the real world (Darling-Hammond, Ancess, & Falk, 1995; Day, 2002; DeCastro-Ambrosetti & Cho, 2005; Gulikers, Bastiaens, & Kirschner, 2004; Janesick, 2006; Svinicki, 2004; Wiggins, 1998). However, as one might expect, using authentic assessments brings a bit of complexity. They can require a great deal of time and effort for students and teachers (Svinicki, 2004), although some have found this only to be perceived as a drawback early on in the process (DeCastro-Ambrosetti & Cho, 2005). There are also issues where consistency in grading is concerned (Svinicki, 2004).

An effective way to evaluate students might be through the use of rubrics which outline important criteria students should demonstrate in their product or performance (DeCastro-Ambrosetti & Cho, 2005; Fischer & King, 1995; Janesick, 2006; Moon et al., 2005; Wiggins, 1998). Rubrics provide a description of student performance that designates requirements for each rubric score's points, and their usage adheres to the belief that effective assessment begins with reflection about what test-takers should know and how that knowledge will be appraised (Mabry, 1999). Rubrics help students to understand what is expected of them, establish a clear channel of communication between teacher and students, make grading more objective and less time-consuming, and take the guesswork out of the assessment process (DeCastro-Ambrosetti & Cho, 2005). In addition to rubrics, assessing authentic instruction can be achieved through the use of portfolios and checklists; the teacher would make the choice of which assessment technique to utilize depending on the type of authentic instruction used (Burke, 2009).

Research offers other general criteria for the effective use of authentic assessments (Gulikers et al., 2004; Moon et al., 2005; Wiggins, 1998). Assessments should reflect the usage of information or skills in the real world, be conducted in situations similar to the real-life context, and occur in a social context that is present in real-life contexts. Ideally, this assessment would require judgment and innovation in solving unstructured problems, lead to a quality product or performance that incorporates a full array of tasks, and allow for multiple ways students can demonstrate mastery of criteria. Overall, authentic assessments should allow for feedback, practice, and revision, and be evaluated against valued criteria and competencies that are used in the world outside the classroom and that are clearly articulated beforehand.

Problem-Based Learning

Problem-based learning (PBL) refers to students acquiring knowledge and skills through real-life problems that are presented in context with the support

of teachers and experts (Hung, 2002) and occurs as a result of students' efforts to solve a complex problem by identifying their own learning needs, locating resources to meet those needs, and applying what they have learned to the problem situation (Pedersen & Liu, 2002). This instructional strategy is particularly distinctive in that learners are typically allowed to seek out a variety of resources to help them develop solutions (Driscoll, 2005). PBL is focused on engaging students in a problem-solving activity that students can relate to and see as meaningful, and it has been discussed as a viable instructional approach, particularly with older students from middle school into higher education.

Similar to situated learning, PBL emphasizes the authentic aspect of learning in context. Teachers can create a real-world problem that students will attempt to solve within a particular educational situation. PBL is made up of these real-world problems that are meaningful to students, collaborative problem-solving communities where students are self-directed and actively involved in critical thinking and other higher-order thinking skills (such as the ability to apply, analyze, synthesize, and evaluate), opportunities for scientific thinking (identification of problem, generation of hypotheses, inquiry, and investigation), incorporation of multiple learning resources, and culminating/assessment activities that allow learners the opportunity to demonstrate their mastery of material (Echeverri & Sadler, 2011; Hung, 2002; Hushman & Napper-Owen, 2011; Own, Chen, & Chiang, 2010; Savoie & Hughes, 1994; Sears, 2003; Stepien & Gallagher, 1993; Yadav, Subedi, Lundeberg, & Bunting, 2011).

The teacher's primary role becomes that of a resource (Aspy, Aspy, & Quinby, 1993) and a model for metacognitive and self-directed learning (Stepien & Gallagher, 1993). Teachers must adapt their instructional repertoire to allow for more listening to students, helping students to frame effective questions, aiding students in the location of appropriate resources, and becoming fellow learners (Aspy et al., 1993). The framing of student questions becomes a central task whereby teachers aid students in asking questions like "What do we know?", "What do we need to know?", and identifying consequential hypotheses and relevant learning resources (Stepien & Gallagher, 1993).

School–community partnerships take PBL to another level of collaborative learning by exposing students to real-life experts during meaningful and enriching problem-solving activities. First-hand accounts of teachers and schools using problem-based learning in connection with community partnerships illustrate the potential outcomes for students' learning:

- Working with community biologists studying the impact of human development on cougar habitats, high school biology students show enhanced engagement, participation, interest, and student learning (Quitadamo & Campanella, 2005).

- Working with teachers, members of community environmental groups, and government officials to protect watersheds in the Gulf of Maine bioregion promotes middle and high school students' enthusiasm and confidence and reinforces the important role of scientific dialogue and transfer of knowledge from the classroom to the real world (Miner & Elshof, 2007).
- Asking students to design scientific problems while encouraging scientists to participate as community partners engages students in authentic scientists' roles; this activity addresses important National Science Education Standards that emphasize science as inquiry and motivates students who see the activity as more authentic and meaningful to them (Sterling & Frazier, 2006).

In general, teachers report that problem-based inquiry helps students' attentiveness and active participation, motivation and self-directed learning, and acquisition of subject matter knowledge and overall learning (Havorson & Wescoat, 2002; Savoie & Hughes, 1994; Stepien & Gallagher, 1993). Empirical research is beginning to document evidence supporting PBL's instructional benefits. Although much of the research comes from medical schools and gifted education, PBL does seem to help students develop flexible knowledge, effective problem-solving skills, and self-directed learning skills (Hmelo-Silver, 2004). Other research has documented the benefits of PBL in K–12 education. Pedersen and Liu (2002) found that a cognitive modeling instructional technology PBL unit helped sixth grade science students apply effective problem-solving strategies, influenced their reasoning ability and presentation of convincing and well-developed solutions, and overall helped students to act more in line with the way an expert scientist would approach the problem of sustaining alien life forms on a newly established space station. In comparison to lecture-based learning, fourth grade students using a multimedia based PBL unit showed higher intrinsic motivation, equal gains in declarative knowledge, and better long-term retention (Zumbach, Kumpf, & Koch, 2004). House (2010) found that PBL computer activities were positively related to science achievement for middle school students in his cross-cultural study. And while quantitative data reveals that sixth grade students show more intrinsic motivation during PBL than during regular class activities, qualitative data indicates this might be because of greater opportunities for collaboration and student control of class activities (Pedersen, 2003).

Other researchers also emphasize the important role of social collaboration inherent to PBL and its benefits for student motivation. Sungur, Tekkaya, and Geban (2006) found that tenth grade biology students instructed with PBL earn higher academic achievement and performance skill scores than students in traditional classes, and students utilizing PBL were more proficient at or-

ganizing relevant information, constructing knowledge, and coming to better conclusions. "PBL allows students to interact with their environment and their peers; in a typical PBL class, students work in groups cooperatively which allows evolvement of knowledge through social negotiation" (Sungur et al., 2006, p. 159). In addition, PBL students have higher levels of intrinsic goal orientation, task value, use of elaborative learning strategies, critical thinking, and metacognitive self-regulation in comparison to students instructed in a more traditional teacher/textbook-centered fashion (Sungur & Tekkaya, 2006).

There are potential obstacles that educators will need to address for PBL to become a viable instructional method in public schools or institutions of higher education. Most practically, teachers may resist such changes despite apparent benefits, given they will have to overhaul their lesson preparation and instructional methods (Gil, 1992, as cited in Aspy et al., 1993). PBL requires much time and effort on the part of both teacher and students (Chin & Chia, 2004). However, comprehensive curriculum built around full-scale PBL units may not be the only, or necessarily the best, option. Stepien and Gallagher (1993) offer the use of "post-holes" which are short problems that can be employed when teachers cannot design entire curriculum around PBL but wish to supplement their other instruction with opportunities for PBL. Use of such "post-holes" still retain fundamental elements of PBL and have resulted in attentive and actively learning participants who were more likely to recognize the benefits of having access to real-world experts as guest speakers on the subject matter to be learned that day (Savoie & Hughes, 1994).

There is also the question of whether or not younger students will benefit from PBL methods. While it is true that some research has demonstrated potential for PBL being used with younger elementary students (Hickey, Moore, & Pellegrino, 2001; Zumbach et al., 2004), more studies on PBL have been conducted with students in middle school and high school (Chin & Chia, 2004; House, 2010; Pedersen, 2003; Pedersen & Liu, 2002; Sungur & Tekkaya, 2006; Sungur et al., 2006). In addition, reviews of PBL (Dochy, Segers, Van den Bossche, & Gijbels, 2003) and articles simply promoting the use of PBL (Miner & Elshof, 2007; Quitadamo & Campanella, 2005; Savoie & Hughes, 1994; Stepien & Gallagher, 1993) are generally geared towards teaching middle school, high school, and college students. Some researchers have expressed a genuine concern that PBL assumes a level of planning and reflection skills that some students might not have (Pedersen & Liu, 2002), and in absence of effective models of problem-solving, students risk adopting ineffective strategies resulting in frustration (Williams, 1993).

However, Pedersen and Liu (2002) have begun to address this shortcoming via the use of PBL instructional materials incorporating apprenticeship-like

support that serves as a scaffold for students' work during self-directed study. Here, students are exposed to experts modeling their problem-solving strategies through realistic and visually rich technology that students can replay at their desire.

> Through the use of audio, video, animation, and context-sensitive timing, a hypermedia program can be designed to offer modeling of pertinent strategies as students are engaged in problem-solving by providing expert opinions at appropriate points throughout the program. These "experts" can be hypermedia-based characters who pop up at key points within the program to share relevant stories or explain useful strategies. (Pedersen & Liu, 2002, p. 357)

Technology may aid teachers by providing alternative "expert-scaffolds" and thereby may overcome a genuine concern with PBL—that many students might need special scaffolding in the thinking skills necessary to reap the benefits from PBL approaches.

Service Learning

Another opportunity to offer enriching educational activities via school–community partnerships is through service learning. Service learning is a teaching method whereby students learn academic content and skills through community service experiences. Typical service learning is made up of (a) preparation by teacher and students involving identifying learning needs and planning a project, (b) action by carrying out the service learning activity, (c) reflection on the learning experience, and (d) demonstration and celebration of the skills or content mastered (Duckenfield & Madden, 2000; Kaye, 2004). Much different from our conception of volunteering or of doing community service, service learning involves academic and personal learning goals; service is connected to the curriculum, and learning is enhanced by reflection on the service experience (Thomsen, 2006). Projects are actually integrated into the academic curriculum. In this vein, both academic learning and civic responsibility are enhanced.

This method has shown to be beneficial for students across K–12 education, although it is predominantly employed with high school students (Dymond, Renzaglia, & Chun, 2008). Service learning also appears to work for a variety of subject areas, affording students opportunities to expand upon their understanding of academic content by providing a needed service in the community. Perhaps history students become better informed on historical events by interacting with older citizens at a senior center, or students studying physical science can help with planting a community garden or assisting at a local

park. Other common types of service learning projects include tutoring, assisting in a daycare center, or collecting food for shelters. Service learning may even overlap with some of the other methods described in this manuscript. For instance, problem-based learning projects become intertwined with service learning when students target a community need and a way to fill that need.

Service learning is increasing in popularity, with some estimates showing that approximately 30% of all public schools and 50% of high schools include service learning as part of their curriculum (Dymond et al., 2008; Koliba, Campbell, & Shapiro, 2006). Some high schools now require students to complete a form of service learning or community service to be eligible for graduation. Advocates and researchers of service learning have uncovered the following benefits for various stakeholders in education, including benefits to students, schools, and the community (Billig, 2000; Decker & Decker, 2003; Kaye, 2004; Thomsen, 2006):

- Schools benefit because students who are engaged in service learning are less likely to engage in risky behaviors. Service learning also helps reduce behavioral concerns surrounding misbehavior, poor attendance, and tardiness. This partnership also helps create more mutual respect between students and teachers, more community support for schools, more positive links with the community, and a more positive school climate.
- Students benefit because they see the academic curriculum as more relevant, they become more motivated, take on more responsibility for their learning, become more adept at problem-solving and higher order thinking, and improve academically. In addition to the academic benefits, there is also a positive impact on interpersonal development including benefits to students' empathy and acceptance of cultural diversity. They also have the opportunity to forge strong ties in the community and meet caring adult role models who might help students gain realistic insights about career choices.
- Members of the community benefit because of the contributions students make during service learning and because service learning helps to promote a productive citizenry, civic responsibility, and a sense of community in students.

On a larger scale, a study of over 4,000 high school students showed that while participation in any service activity is linked with beneficial outcomes, students who work with individuals in need have better academic adjustment, while those who work with organizations have better civic outcomes (Schmidt, Shumow, & Kackar, 2007). Action research corroborates the benefits of authentic educational activities during service learning on fifth grade students'

attendance and learning of standard core curriculum content: "Students exposed to service-learning in this study were more likely to make real-world and authentic connections between their in-class learning and their personal world" (Soslau & Yost, 2007, p. 49).

However, careful planning of service learning experiences is critical in order to reap the educational rewards associated with this method. Planning on the part of teachers, administrators, and field supervisors helps to ensure experiences are connected to the school's curriculum and are meaningful and productive for students (Sanders, 2006). Teachers should consider how appropriate standards for the grade levels they teach and students' preexisting talents might be interwoven in service learning projects (Sagor, 2003). Connecting important curricular objectives to service learning projects is one very basic way to ensure learning is at the heart of service learning projects. Also, by giving students some choice in their service learning projects, educators afford students the opportunity to draw on their own special talents, thereby increasing their sense of usefulness in offering a valuable contribution to a specific need in the community. By including students in indentifying genuine needs in the community, they are more likely to see their involvement as making a significant difference even as they further their own academic learning (Kaye, 2004). Planning also must allow students a period of reflection to tie their field experiences with academic content (Sanders, 2006). Journal writing, more formal written assignments, collaborative discussion, or self-evaluations are great opportunities for students to make these meaningful connections.

> To really work, reflection must go beyond students simply reporting or describing what they are doing or have done. When students can compare their initial assumptions with what they have seen and experienced in the real world, reflection can be a transforming experience. (Kaye, 2004, p. 11).

Eyler (2002) explains that any modest effects reported for service learning may be attributable to limited opportunities for reflection, one of the critical components for transforming a typical community service activity into a quality service learning project in which students link their experience to their academic study. By organizing service learning with opportunity for reflection before, during, and after service, Eyler (2002) feels educators can design instruction that integrates field experience with academic content in their courses.

Reflections can then be synthesized into the demonstrations students make to share what they gained from their service experiences. Individual papers, presentations, or artwork are all considered to be typical ways students can demonstrate mastery and learning gained from service learning projects. Concluding with an assessment of the service learning experience allows teachers to

evaluate the reciprocal benefits for student learning and contributions made to the community before making note of ways to improve the experience for next time (Kaye, 2004).

Final Comments

We have presented work that shows promising applications for building school–community partnerships while striving to enhance students' meaningful learning and academic motivation. However, there are many questions that will require ongoing discussion and reflection in the educational community. For instance, which practices are most likely to be supported by various stakeholders (in terms of teachers' willingness to use, administrative and district support, and community likelihood to be involved)? Which methodologies have the best chance of addressing teachers' needs to meet significant curricular objectives amidst pressure for accountability and time demands associated with statewide standardized testing? As researchers and educators continue to address these questions, opportunities for school and community partnerships can be crafted into valuable learning opportunities in the real-world environment. Teaching methods like authentic instruction, problem-based learning, and service learning hold great promise for effective contextual instruction that will complement more traditional or direct instruction. Learning becomes more meaningful with authentic, problem-based activities that involve real-world tasks. Service learning opportunities grounded in academic requirements encourage students' interests, reflection, and self-regulated learning. Infusing these opportunities for contextualized learning into academic activities will help students begin to see the meaningfulness of academic subject matter and its relevance beyond the classroom setting.

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