

Experiential Education in Boston's Pilot Schools: A Three-Year Demonstration Project

DOCUMENTATION REPORT

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Experiential Education in Boston's Pilot Schools: A Three-Year Demonstration Project

Final Report

I'm constantly thinking about how I can make the learning experience that much more powerful for my children. I have, in the past, always been thinking about, "How am I going to get a test score up? How am I going to do this?" This [experiential education instruction] has helped me to be creative and to be thinking about getting them involved in learning. I think that's been the most powerful thing. (Teacher)

Context for the Pilot Schools Experiential Education Demonstration Project

The Pilot schools Experiential Education Demonstration (PSEED) project was intended to deepen and embed high-quality experiential education within each participating school's academic programs. A continuation of a multiyear set of initiatives by the Barr Foundation, PSEED was an effort to unify the foundation's content area foci on arts, fitness/sports, and environmental education with its belief that Pilot schools held promise as a systemic reform in the Boston Public School system (BPS). The Barr Foundation chose to collaborate with the Pilot schools in this work, in part because their greater flexibility allows for the adjustments in budget, staffing, and scheduling at the school level that are a prerequisite for successful experiential education programming. The PSEED work was grounded in the belief that high-quality experiential education would significantly enhance student engagement and performance over time. PSEED implementation began in the fall of 2005 and ended in the spring of 2008.

The decision to embark on the PSEED project was based on studies indicating that a greater emphasis on experiential education is needed. Research has shown that students learn in many diverse ways.¹ However, traditional education programs have favored students with certain learning styles, emphasizing linguistic and logical-mathematical intelligences over musical, spatial, interpersonal, intrapersonal, naturalist, and bodily-kinesthetic intelligences.² Experiential education, on the other hand, uses multiple senses and intelligences, and therefore is more effective in reaching a wider diversity of students, including traditionally underserved populations such as English language learners and students with special needs.³ Given the demographics of the students served by Pilot schools, as well as the collective mission of the Pilot Schools Network to provide

¹ Dewey, J. (1938). *Experience and education*. New York: The MacMillan Company; Gardner, H. (1993). *Multiple intelligences: The theory in practice*. New York: Basic Books.

² Gardner, *Multiple intelligences*.

³ Gardner, *Multiple intelligences*; Hansen, R. (Spring 2000). The role of experience in learning: Giving meaning and authenticity to the learning process in schools. *Journal of Technology Education*, 11, no. 2, 23–32.

high-quality teaching and learning, embedding experiential education would be a key vehicle to achieve their mission.

Participating Organizations

The PSEED project was a collaborative effort among Barr Foundation, the Boston Pilot schools, Center for Collaborative Education, and Community Matters.

Barr Foundation

The Barr Foundation is a private foundation committed to enhancing the quality of life for all Boston residents. While its primary areas of emphasis are education and the environment, it also provides support to arts and cultural activities. Its educational investments include a major emphasis on early education, the Boston Public School system, alternative educational approaches, and out-of-school programs. The Barr Foundation is interested in leveraging its grant making by combining several programmatic interests into one initiative. Currently, the foundation funds youth sports programs, experiential afterschool programs, as well as experiential environmental education and arts programs, both in and out of school. It decided to pool some of its grant funds in each program area to create a substantial initiative with synergistic program goals. Because of their control over budget, staffing, curriculum, governance, and schedule, as well as their missions and educational philosophies, Pilot schools are well positioned to integrate high-quality experiential education within their academic programs. By focusing these programming efforts on the Pilot schools, the foundation hopes to learn how these interventions make a difference in this subset of the district schools.

Boston Pilot Schools

Since 1994, the Boston Pilot schools have provided models of innovative practices for the Boston Public Schools and beyond. Like charter schools, Pilot schools have autonomy in the areas of budget, staffing, governance, school calendar, and curriculum and assessment.⁴ The theory behind Pilot schools is that student engagement and achievement increase when schools are small, personalized, mission-driven, and have autonomy over their resources in exchange for increased accountability. There are currently 20 Pilot schools, spanning grades preK–12 and serving approximately 11% of the BPS student enrollment.

While enrolling students that are similar demographically to that of the district's enrollment, and while operating with similar per-pupil budgets, Pilot schools have demonstrated significant measures of success over their history. Most Pilot schools perform at or above the district average on virtually every indicator of student engagement and achievement. Pilot school students tend to have higher attendance, and lower suspensions and transfers, all indications of strong family and student engagement and high "holding power." In addition, Pilot school students tend to have higher

⁴ Center for Collaborative Education (2001). *How Pilot Schools Use Freedom over Staffing, Scheduling, and Budget to Meet Student Needs*. Boston: Center for Collaborative Education

graduation and college-going rates, and comparable or higher MCAS scores, all indications of high student achievement.

Because of the Pilot schools' uniqueness, these schools are intended to serve as a reform model that could influence other district schools and practices. Pilot schools offer a controlled opportunity for research and development while providing a significant lever for change within the district. Pilot schools have expressed an interest and need for resources to improve experiential education offerings.⁵

A hallmark of Pilot schools is shared leadership and decision making by the people closest to the learners, which is enabled by a professional collaborative school culture. Using their autonomy, all Pilot schools schedule, staff, and govern in a way in which teachers share their practice and work in teams on a regular weekly basis. In schools with strong cultures of professional collaboration, "all participants remain dependent on others to achieve desired outcomes and feel empowered by their efforts."⁶ Schools with strong professional collaborative cultures are also correlated with stronger school outcomes.⁷ Not only does this aspect of Pilot schools impact the implementation of PSEED, it is also likely to be reinforced by the implementation of PSEED.

Center for Collaborative Education

Founded in 1994, the Center for Collaborative Education (CCE) seeks to improve student learning in K–12 public schools and districts by promoting models of whole school reform that are focused on school and systemwide change and instructional improvement.

CCE's goal is to be a resource and catalyst for the creation of autonomous and flexible schools in which learning is purposeful and meaningful, assessment demonstrates that students can do important things, teachers and students know each other well, diversity is respected and equity is embedded in all practices, and democratic values are modeled.

CCE fulfills its mission in four primary ways:

- Building an understanding with the larger public that innovative schools can increase opportunity and justice for every student.
- Creating effective models of urban education, district redesign, and leadership development.
- Providing onsite coaching, professional development, and networking opportunities for educators.
- Conducting research that documents school progress and student results.

The Barr Foundation, separate from the PSEED initiative, has supported CCE for its work with Pilot schools in the areas above. CCE's role in PSEED was to facilitate

⁵ CCE needs assessment survey of Pilot school leaders conducted in 2004.

⁶ Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership*, 60, no. 6, 41.

⁷ Fullan, M. (2001). *The new meaning of educational change* (3rd ed.). New York: Teachers College Press; Glickman, C. D. (1993). *Renewing America's schools*. San Francisco: Jossey-Bass.

communication among the foundation, partners, and schools; to convene Knowledge sessions and other planning meetings; and to provide coaching and technical assistance to schools around experiential education.

Community Matters

Community Matters (CM) is a consulting firm that works with leaders to create lasting initiatives to ensure the educational and social development of children and youth. CM helps school districts, community organizations, government agencies, universities, labor organizations, and foundations have an impact on the lives of the people they serve and the institutions and communities of which they are a part. From its inception, CM assisted the Barr Foundation to design, implement, and support the PSEED project, serving as the primary liaison between the participating schools and the foundation, and facilitating the development of learning and knowledge-sharing experiences for the PSEED network of schools.

History of PSEED

The PSEED initiative began with three ideas. First, the Barr Foundation wanted to have an impact on making educational environments “work better” for all students, including those with limited English proficiency and learning disabilities, and saw experiential education as one way to accomplish this. Secondly, they focused on working with the Pilot schools as a strategy that would both provide flexibility and create momentum for eventual change in the Boston Public Schools as a whole. Finally, the foundation wanted to respond to an increased interest in extending the school day and saw incorporation of experiential learning as an approach that would build on the work they had done in the afterschool field as well as target funding to youth sports, experiential environmental education, and arts programs.

Through conversations with the CCE, which discussed the potential project with its member Pilot schools, it became apparent that extending the school day did not necessarily meet the needs or interests of the schools, and might not be the best way to carry out the foundation’s objectives. Pilot schools were excited about the prospect of improving the experiential component of their instruction but felt that attention should be paid to embedding more experiential education into their school days before focusing on extending hours. Therefore, while the initial idea was for schools to select a focus area in the arts, environmental education, and/or sports and fitness during an extended day, the final design was for experiential learning to be integrated into the existing school day’s curriculum and instruction. The PSEED project had two goals:

- Develop the capacity of the Boston pilot schools to provide quality, sustainable experiential education programming with a focus on:
 - Arts and culture
 - Environmental education
 - Sports and fitness
- Support the development of existing and new experiential education models within Boston’s Pilot schools that would correlate with improved student engagement and

achievement, and that would have the potential to be replicated to other Boston Public Schools.

Experiential education was defined in the Request for Proposals as a cycle with four steps, suggesting the ongoing nature of learning. Regardless of the content of the experience, learners use the following sequence:

- Engagement in concrete experiences;
- Observation and reflection of the experiences;
- Formation of concepts and generalizations from the experiences; and
- Application of new understandings.⁸

The Barr Foundation funded all interested Pilot schools for a total of 14 small planning grants, and then funded 7 proposals for three years of implementation. Each school received significant grants to fund particular activities, with the typical grant being around \$100,000/year. The schools served a range of students, grades preK–12; had opened at various times and therefore were between newly opened to more than ten years old; and had various levels of readiness and exposure to experiential education. The schools adopted extremely varied experiential education approaches focused on different goals. For example, one school set whole-school implementation of experiential education as its goal, while another brought in a music teacher and strengthened community connections. Still another school hired a new staff member to extend its work in media arts, and another focused on developing and documenting high-quality experiential education curricula.

Table 1: Summary of PSEED Focus Areas by School

School Name	Grades Served	Total Enrollment	PSEED Focus
Boston Arts Academy	9–12	415	Design fundamentals and digital portfolios
Boston Day and Evening Academy	8–12	294	Environmental and health education
The Harbor School	6–8	270	Physical and environmental education
Lee Pilot Academy	K0–3	250	Physical and arts education
Lilla Frederick Pilot Middle School	6–8	661	Environmental education
Mission Hill School	K1–8	166	Arts, physical, and environmental education
Young Achievers K–8 Pilot School	K1–8	340	Environmental education

Purpose of the Documentation Report

The purpose of the PSEED documentation report is to summarize the three years of work in the seven Pilot schools, all of whom had diverse goals and implementation plans. The following questions guided the data collection and analysis:

1. How has experiential education been implemented at the school and in classrooms in new ways?

⁸ Hansen, *The role of experience in learning*, 23–32.

2. How and to what extent have PSEED activities, technical support, and professional development supported the experiential education work at the school?
3. How and to what extent has PSEED made a difference in culture, curriculum, pedagogy, and structures?
4. Have there been changes in student engagement during the PSEED project's time in the schools?

Methods and Data Collection

When educational researchers find changes in schools, teachers, and students, are these changes the result of the initiative rather than other factors? The PSEED initiative was not a research project, so there was no “control group” to allow measurement of student engagement and achievement in the absence of PSEED, nor would that have been possible or appropriate. Furthermore, the documentation project took place in the third and final year of PSEED, so “pre-post” data on measures such as the rubric to assess change over time does not exist.

Therefore, the Documentation Project team used a method referred to as “triangulating” the data from a variety of sources and perspectives. When there is agreement that effects on students, teachers, and schools resulted from the PSEED initiative, we can make the link with reasonable confidence.

The documentation team collected all data for this report in Year 3 of implementation, the school year 2007–08. Each data source is described below:

Rubrics—The rubric is organized in four focus areas of project implementation: curriculum, pedagogy, culture, and structures. The intent is to create a “common” set of measures that can provide a multifaceted portrait of school progress and facilitate dialogue on practice and processes throughout project implementation. Each focus area is constructed to explore key characteristics of experiential education. The rubrics ask for multiple perspectives from different stakeholders: teachers, students, school community, and school partners. The rubric focus areas and key characteristics are (see Appendix A1 for full rubric):

Table 2: PSEED Rubric Focus Areas and Key Characteristics

Curriculum	Pedagogy	School Culture	Structures
Authentic Content-rich Engaging Project- and performance-based	Inquiry-based Flexible Active Reflective	Quality-focused Connected Collaborative Visible	Supportive leadership Flexible schedule Flexible structures Inclusive student groupings

A school implementing experiential education will go through phases of development as it deepens and spreads its work. A school may be in different phases across different areas, or even in different phases within one area. These phases are on a four-point scale and reflect the frequency at which such work is occurring: Most of the Time (4), Some of the Time (3), Beginning to Occur (2), and Not at All (1). While the question of quality of implementation is also important, this scale does not attempt to capture that dimension.

Teachers completed the rubrics sections on Curriculum, Pedagogy, and School Culture. Each PSEED school had a designated PSEED “point person,” a staff member responsible for either leading the initiative or administering it. This person was also the primary contact person for the documentation team. Each principal and point person completed the sections on Curriculum, Pedagogy, and School Cultures as well as the section on Structures.

Self-reported ratings from different numbers of staff members with different roles in each school were collected. In some cases, PSEED teams completed the rubrics. In other cases, available teachers completed the rubrics. In one case, the whole staff completed the rubrics. Rubric data was entered into SPSS for analysis of means by item, focus area, school, and role. Mean rubric data for Curriculum, Pedagogy, and School Culture by school is provided in Appendix A2.

Documentation—Proposals, midyear and year-end reports, meeting agendas and minutes, memoranda from consultants to both the Barr Foundation and PSEED participants, as well as other supporting documents were collected. Selected exemplars and items are provided in Appendix B.

Interviews—Teachers, point people, principals, Barr, CM, and CCE staff were interviewed. Interviews were all recorded and transcribed. A total of 35 interviews were conducted. Selected quotes are used in this report to illustrate the findings. The attributions identify the speaker’s role, but not his or her school. Quotes included in the report represent all PSEED schools. When multiple quotes are used to illustrate a finding, the quotes come from a range of schools.

Observations—For all but one school, 2 observations were conducted per school. For the remaining school, one observation was conducted, for a total of 13 observations. Schools chose which events the documentation team would observe. Observations were written up within 24 hours, using a standard format.

School practices—School practices are quantitative indicators that describe how the school is structured and organized during the school day as relates to professional collaboration and student learning. Indicators used in this documentation report include amount of core instruction time, amount of professional collaboration time, and average class sizes.

Interviews and observations were analyzed using HyperResearch, a software program that allows researchers to study and analyze text and other qualitative data to identify trends based on code groupings and frequencies.

Instruments used in the documentation project are provided in Appendix A. These include the PSEED rubric, documentation list, interview protocols, and observation format.

The researchers worked as a team, developing data coding and analysis methods together and then dividing the work. Researchers met weekly by phone or in person to discuss data collection, findings, and next steps.

Limitations of the Data Analysis

- Data was collected at one point in time. We can describe change and change due to PSEED from the perspective of the various participants. Because the documentation project was implemented in Year 3, these descriptions are not based on data collected at the beginning and end of the grant period. Therefore, descriptions of the effects of PSEED could not be based on objective pre-/post-data.
- Data was collected from a nonrandom group of participants. They were often individuals selected because of their proximity to the PSEED project. Therefore, findings should be interpreted with the knowledge that other perspectives may be held by those not involved in providing data for the documentation project.
- With such a limited number of observations, independent data on quality/integrity of implementation is not quantified or presented.
- Limited conclusions about the impact of PSEED on student engagement and performance can be made for at least two reasons: (1) the quantitative data from Year 3 is available until 2009; and (2) PSEED was not the only initiative in the schools during the grant period that could have had an impact on student engagement and performance.

Cross-School Components of PSEED

Besides the grants to each participating school, the PSEED initiative included five cross-school or PSEED-wide components: (1) three “Knowledge Sessions” each year, which brought together leaders and teachers from each school to share their experiences; (2) a website; (3) technical assistance from several sources; (4) a Summer Institute conducted between Years 2 and 3 of the initiative; and (5) a common rubric tool, introduced in the fall of Year 3, to facilitate a common definition of quality experiential education and to capture a snapshot of where schools stood vis-à-vis implementation. In order to describe the implementation of PSEED, it is necessary to describe both the formal and common experiences that PSEED schools were offered and the school-level work on experiential education. We start with the common cross-school components while acknowledging that the bulk of the PSEED time and work—and not surprisingly successes—were located in individual school implementations.

In most schools, the PSEED initiative was designed to involve all staff. Each school had a designated “point person” who was responsible for facilitating the implementation, representing the school in PSEED-wide meetings and decisions, and communicating with the documentation team.

Knowledge Sessions

Knowledge Sessions were developed as a way for the grantees to share their experiences, learn from each other, and gain knowledge from outside sources. There were eight Knowledge Sessions in total over the three years—three in each of the first two years and two in the final year, followed by a community celebration of PSEED work in the spring of the final year. The Knowledge Sessions generally were comprised of time for sharing between schools (often providing peer-to-peer consultation in small groups), business items (deadlines for reports, budget issues), and common tasks such as developing a definition of experiential education, planning for the website, etc. Attendance at the Knowledge Sessions varied, with some schools sending several staff, including the principal, and others sending just one person, but all schools were generally represented.

The final Knowledge Session for spring 2008 was transformed into a PSEED Celebration. Held at the Commonwealth Museum adjacent to University of Massachusetts—Boston, school staff, families, students, and others in the greater Boston community were invited to attend. Each school set up an exhibition of its work, typically with students available to discuss their work with guests, and the afternoon included performances by students from several schools.

In interviews, we asked teachers and administrators about their experience of the Knowledge Sessions. We heard somewhat mixed responses, with a general sense that the sharing got better over time, as schools new to experiential education began to “catch up” with those that had been immersed in it over the previous years. In general, respondents appreciated the networking opportunity, but remarked on the challenge of finding common points of work, given the wide range of students, spanning pre-K to high school,

and the varied focus of the PSEED projects. Some interviewees expressed a sense of tension between the goals of sharing work and providing some evidence of progress to the foundation during Knowledge Sessions. Finally, some respondents voiced their desire to share work on a deeper level with peers. Typical comments include:

I wish with the Knowledge Sessions that we would have more time meeting with people in the other schools, though. . . . We shared work, but I would love to then take it a step further and start hearing about the explorations that are going on at other schools and how they went through the process. . . . I would really like that time . . . to . . . pick people's brains that have been doing it for a while. . . . It was great seeing other people's work, students' work. (Teacher)

Even though [they were] well-intended, [the Knowledge Session] was already created, and we fit into the . . . agenda. . . . So I know that I had X amount of minutes to say something, dah dah dah, and it went around. (Principal)

PSEED Website

When the idea for a PSEED website emerged, even though it was not part of the original thinking for the initiative, PSEED point people and principals agreed that a website sounded like a helpful tool in the abstract. It had the potential to help school staff work in a fundamentally different way, such as through sharing of practice electronically. A PSEED website was launched in February of Year 1. Schools were introduced to the website at a Knowledge Session. This was followed by information sessions and onsite technical assistance as needed, conducted by Barr Foundation staff at each school. The website included a home page for the project overall that included sections for each Knowledge Session, general announcements, forms, and a school calendar. It also included individual sections for each school, a resource library, an area for each school to post documents and key contacts, and space for discussion among schools.

However, the website was not well utilized. Opinions as to why were varied: most respondents felt that it was difficult to use, both in its organization of information and, in particular, that the need to use a password created barriers for them. In order to have more easily integrated the electronic communication and sharing into their daily work lives, several interviewees suggested that it would have been preferable to integrate the function into existing systems, such as the district's data management system. Given the time constraints faced by staff and administrators at the PSEED schools, the website became more of a task requested by the Barr Foundation and less of a working communications tool. Schools utilized the website primarily to post reports to Community Matters. Most of the teachers who were interviewed were not aware of the website, providing further evidence of its lack of integration into the daily life of the schools. Comments included:

It's wonderful in the idea, but then in the implementation and the expectation on the school and the expectation on myself—sometimes it doesn't fit very naturally. It ends up actually stressing out folks at the building level. (Principal)

People are so busy and they have their own systems already set up. . . It is almost like if it could be integrated into what we use for BPS Webmail or something to that effect, it would be easier. . . (Point person)

I hate that there's a password on it. I never remember the password, I have to save it in my e-mail so I can go back and find it. I always feel like you can't force-fit something like that. It's either user-friendly and usable, . . . or it's not. . . . So people don't really use it that much. Why? Because it doesn't really fit the need, right? So each of our contexts are so different as schools that it's not always simple to do carryover. So, I don't find it helpful, so I don't go there. (Point person)

Technical Assistance

Technical assistance was a stated component of the project from the beginning. For instance, a memo distributed in January of the first year of the project stated:

The Foundation, CCE, and CM are strongly committed to addressing any technical assistance needs identified by individual schools or the collective group of participating schools. We understand that the Knowledge Sessions provide an opportunity to address some issues, but there may be additional needs for assistance or training. We'd like to hear more about what kinds of TA and training might be helpful to you in addition to the professional development and training you may already be planning and implementing. We are particularly interested in addressing TA needs common to many or all of the grantees.

The technical assistance component of the project was fairly complex and changed each year. Three different groups had some role in technical assistance: Community Matters (CM), which helped Barr Foundation staff manage the project; Center for Collaborative Education (CCE), which has coaches assigned to each Pilot school; and in Year 3, the option of consultation with experts from Expeditionary Learning Schools—Outward Bound (ELS) was made available to schools that attended the Summer Institute.

However, there was broad agreement in the interviews that the TA component of the project was both critical and underdeveloped. A memorandum distributed in October 2006 (the fall of Year 2) commented on this need: “Many [PSEED project participants] also indicated that you would like more access to resources that could actually help you—individually and across sites—have a better understanding of experiential education practice and how to implement them” (10/23/06 Memo, p. 3).

The foundation began with the vision that significant technical assistance would flow through the already-in-place CCE coaches, who had played a significant role in designing the project plan, developing the RFP, and discussing the grant with school leaders.

CCE coaches played a role in supporting the work of the schools, either in implementation or fulfilling grant requirements such as proposals and reports.

We had coaching [from CCE] around the original [proposal], when we first put the proposal together for the Barr grant. (Teacher)

Some of the professional development we did was, we tried to talk about Understanding by Design and using Understanding by Design principles. [A CCE coach] did a March retreat maybe of the first year, an all-day institute. And then followed up in the summer as part of the summer stipend, the week before school started, offering another all-day session to get people familiar with backwards planning and Understanding by Design principles. (Point person)

So [the coach] called and said, “I want to come and I want to meet with everybody because as we do this documentation, I want to really coordinate.” And she ran the meeting with the five teachers. It was enormously helpful. (Point person)

Because CCE coaches work with schools in a responsive manner, not all coaching at PSEED schools was focused on experiential education implementation. CCE coaches do not drive the agenda, but rather focus on issues chosen by the schools. For example, one school was working intensively with their coach on competency-based assessments prior to the start of the project. Her work continued in the same vein and did not focus on PSEED. If a school did not raise the issue of experiential education as a topic for their coaching work, a coach had little connection to PSEED.

CCE staff involved with PSEED played roles beyond technical assistance to sites. They were instrumental in setting up meetings, facilitating common activities, and communicating between the foundation and the grantees, especially at the outset of the project development project. These activities were the focus of the funding that CCE received from the Barr Foundation, rather than support for individual coaching at the schools.⁹

Community Matters' (CM) leadership team, Elaine Fersh and Andrew Bundy, played a major role in project management for the Barr Foundation from the beginning of the project, including participating in writing the Request for Proposals, working with Barr staff to select grantees, and working with individual schools and PSEED leaders over the course of the initiative, both providing technical assistance, such as planning, building partnerships or collaborations, and logistics, and facilitating efforts to secure technical assistance. They acted as the “eyes and ears” of the Barr Foundation, bringing the interests and requirements of the foundation to the grantees, getting to know the projects, and reporting back to the foundation on progress and challenges at the schools. CM also played a key role in organizing and planning common activities such as the Knowledge Sessions.

Each school worked with one CM staff person over the three years, in a number of cases building strong relationships with PSEED leaders. However, several issues limited the

⁹ Barr Foundation provided CCE with a separate grant to support its Pilot schools work, including its coaching and technical assistance.

efficacy of this type of technical assistance. First of all, CM's other roles meant that any technical assistance was combined with a monitoring and reporting role, complicating the nature of the CM staff's relationship with leaders at the sites. Second, CM's expertise lies in program development, policy analysis, and other areas, rather than teaching and learning in general or experiential education in particular. While their work on the project was referred to as "technical assistance" in some materials, and in fact they played an important role in implementation at some schools, their capacity for technical assistance relating to issues such as instruction and curriculum was limited.

A number of respondents commented on their relationship with their CM point person:

We work with [him], and he's been really helpful. He comes to some of our team meetings and really pushes us to think deeper or to tweak things. He's been really great because he asks great questions. He's not someone that says, "You need to do this," or, "What are you doing?" But, he really gets us to probe our reasons and our motivation behind things and where we are. (Point person)

[He] connects with me through e-mail and with [the principal] to kind of find out what's happening on a large and small level, asking about things that he can visit, attend. So it seems to be that he's more of an observer and sending along information that he thinks might be useful to us. But it's been a small role. (Point person)

However, others noted that, although they had positive experiences with CM staff, the technical assistance component of the relationship was fuzzy at best. While CM was not meant to provide technical assistance, their role was vague:

What was the role of CCE versus Community Matters versus . . . ?—I mean it is like so many . . . moving parts. (Principal)

He's definitely offered to help very often, especially around reports or, more, the concrete stuff. However, the expectation is on us as a school to figure things out, which is really interesting. I feel that there was a disconnect there, where I thought he would be the person that maybe I would call, but then not really. That wasn't always clear, what that role was, and I ended up using much more the support of CCE on that work. (Principal)

The Summer Institute prior to Year 3 of the initiative was a major step in providing professional development that helped schools implement their PSEED work (see below). Once the potential for this sort of support became clear, the foundation made it possible for schools to continue to work with the trainers—Ron Berger and Scott Hartl of Expeditionary Learning Schools (ELS), a program of Outward Bound—on an individual basis.

However, few schools took advantage of this option. One school had both consultants come for a full day, working with two separate teams on issues such as portfolio

development and learning targets in what was described as a very productive session. Ron Berger also spent one day at another school, observing and debriefing with them on their Town Hall, which was one focus of their PSEED work. The other PSEED schools did not request this consultation assistance.

Summer Institute

Besides the Knowledge Sessions, formal professional development on an initiative-wide level occurred at the Summer Institute, held August 20–22 of 2007. The Summer Institute was designed and led primarily by two consultants, Scott Hartl and Ron Berger, of Expeditionary Learning Schools (ELS), a program of Outward Bound. ELS has developed a whole-school design based on a version of experiential education termed “expeditionary learning,” currently being implemented in approximately 150 schools across the country. The Summer Institute included an immersion experience focused on lobsters, reflections on the experience, a “gallery walk” that allowed participants to view a wide range of student work, peer-led workshops on PSEED work at individual schools, and time for schools to plan as teams for the upcoming year, with onsite technical assistance provided by ELS. Some schools had much more of a presence than others at the Summer Institute. One school had already scheduled its mandatory summer professional development for the same days, new teachers had orientation that partially overlapped, while another school sent over 20 staff members. Staff from CCE and CM served as facilitators.

While there were challenges during the institute, including responding to the large number of new teachers participating, the overwhelming response from participants was positive. Some comments:

[The Summer Institute] just put everything in perspective. It really helped me, going through the process. It helped me also seeing some of the things that I do with reading text. . . . (Teacher)

Yes. I had . . . one of the largest groups there, because I brought all the new staff, I brought the enrichment team, and I brought a couple of other veteran staff who'd been involved in PSEED the whole time, to have it be a time to really bring those new staff into the fold in terms of understanding what we mean by experiential education. . . . That was tremendously helpful, and had an impact on the school long-term, because it helped to bring a whole new group of staff . . . “up to speed,” and to learn about what experiential education is—and, I think, in a more powerful way than we typically have been able to do just ourselves. (Principal)

What was captured in the summer, I would have liked to have had more of over the course of the three years. (Point person)

That's where I think learning what an expedition is and then being taught in that way, for new people who are coming in to try to teach kids and learn through expeditions, that was excellent. (Point person)

There was a general consensus—on the part of those managing the initiative as well as grantees—that kicking off the project with an experience such as the Summer Institute in the first year would have been extremely helpful in creating a shared understanding of high-quality experiential education as well as how to implement learning experiences.

PSEED Rubric

The idea for a PSEED rubric arose at the first Year 2 Knowledge Session, while participants were revisiting the definition of experiential education provided in the initial Request for Proposals. That discussion led to the question, “How do we know if we’ve achieved quality experiential education?” In response to this question, during the winter of the second year, the Barr Foundation invited a group of consultants to help them and the grantees think about an appropriate tool that would help the schools to understand how experiential education was defined and played out and to find themselves on a continuum of implementing experiential education. While outcomes had been a thread of discussion from the beginning, and grantees had been required to articulate outcomes as part of the funding process, no common outcomes had been identified or were being tracked. The group consisted of Scott Hartl and Ron Berger from ELS, Steve Seidel and Mara Kreschovsky from Project Zero at Harvard, Rosann Tung from CCE, and Beth Miller from MMRA. Members of the group met with staff from the foundation and then attended a Knowledge Session that was focused on evaluation and outcomes. The final results of this process were the documentation project that created this report, as well as a rubric to be used for assessing schools’ status in implementing experiential education.

The rubric was designed in an interactive process, with the first draft vetted at a Knowledge Session. The final rubric has four sections: curriculum, pedagogy, school culture, and structures, each of which includes guiding questions as well as 6 to 12 specific items within each section. Teachers were asked to fill out only the first three sections of the rubric, while principals and point people completed all four sections. For each item in the rubric, there is a four-point scale: not at all; beginning to occur; some of the time; and most of the time.

While the rubric could be used as a measure of change over time, its implementation in the third year of the project meant that it was utilized as a snapshot of one point in time. The documentation team visited each school to collect data from staff convened by the principals and point people. Responses to the rubric were quite mixed, with some respondents feeling that it was a very valuable tool and others resenting the imposition of a new measure two-thirds of the way through the project. In addition, several schools were already working with their own self-designed rubrics, so it was difficult to shift to a different vision of experiential education. Comments included:

I think the rubric is horrible. . . . Not because I don’t think that it represents the ideal but because it feels so unwieldy. . . . So, we reviewed it very thoroughly with our staff, they understand what the expectations are, but it feels very difficult to use because it’s so big. It would be nice if there were ten things that we felt we

*needed to connect with in order to do the work well, at least as a starting place.
(Principal)*

The rubric was really helpful in that process. And it was really nice to use and to think as a school, where are we in this, and how is PSEED . . . where are we in the larger scheme of things as a new school, as it relates to curriculum and structures and different things. (Point person)

The aggregated school findings were presented at the second Knowledge Session of Year 3. The numbers presented in Appendix A2 are the average scores of all staff who completed the rubric at each school. Some schools valued the rubric as being a useful guide to teaching and learning. The discussions that took place during the sessions to complete the rubric suggested that staff members found it a useful tool to reflect on their practice and to refine their working definitions of experiential education. One school developed its own experiential education rubric tool. CCE plans to use the PSEED rubric as an appendix in the School Quality Review benchmarks for schools to provide data as evidence of an experiential approach to teaching and learning.

In summary, PSEED provided several major components in an effort to develop a common understanding of and language for PSEED, including Knowledge Sessions, a website, technical assistance, the Summer Institute of 2007, and a rubric tool for self assessment. These components also provided a way for school staff members to share ideas and challenges with people in other schools who were implementing similar curriculum and pedagogy. Participants valued the time and forum to share and hear what others were doing in their practice, to think about teaching and learning in new ways, and to meet experts in experiential education. However, participants underutilized some components, whether due to time constraints and timing, lack of alignment between schools' needs and the component (e.g., website), or the offerings being external to the schools. There was a sense on the part of many respondents that starting some things earlier—expert technical assistance, Summer Institute, and possibly the website—would have made a difference in the effectiveness of the components themselves and the overall project.

Individual School Implementations of PSEED

The components of PSEED—grants, website, rubric, technical assistance, etc.—were common across the Pilot schools; each school had the same access to and voice in the components described in the previous section. In contrast, the implementation of PSEED was unique for each school. Schools were asked by the Barr Foundation to assemble an implementation team in order to execute their proposal plans. Beyond an implementation team, schools gathered faculty and staff for professional development, hired new staff, and developed partnerships with community programs and consultants to guide their work.

There was wide variation in the themes of the experiential education work in each PSEED school as well as in the diversity of the proposed staffing and professional development. Despite the variety in proposed activities, we describe below themes in how the implementation played out in PSEED schools.

Professional Development

Professional development provided teachers, point people, and principals an opportunity to experience experiential education “hands on.” Professional development took many forms: workshops, staff meetings, conferences. Furthermore, professional development took place at varying times throughout the academic year: regular meetings, summer institutes, weekend continuing education courses, as well as on an as-needed basis. Across schools, attendees at these regular professional development meetings consisted of teachers, point people, and implementation teams.

Most schools set up partnerships with community organizations, inviting professionals from these organizations or schools to provide professional development for teachers. Lee Academy Pilot School worked with Wheelock Family Theatre to incorporate aspects of theatre into school curricula. Harbor School and Young Achievers worked with Expeditionary Learning Schools. Across PSEED schools, teachers learned ways to increase students' interest in subject areas and methods to increase class participation levels for students who may need additional coaching and support (Appendix B1).

*The year before, we had worked with Tufts, and that was very helpful. I think had we not worked with Tufts, we wouldn't be where we are with digital portfolio.
(Principal)*

A few schools provided in-house professional development. Teachers and point people who developed and implemented this type of professional development were eager to share the knowledge and skills gained with their colleagues; in some instances, these teachers had skills in a specific content area or had attended a workshop or conference on experiential training.

The first year, it was five weekend sessions . . . in which teachers were invited, they were self-selected, to learn design principles, for application on teacher

documents. . . . “Bring in existing teacher documents that you want to redesign, that you want to be more dynamic.” (Teacher)

We have too many people here for us to have one or two people go to a P.D. and bring it back. So we had 26 come to our weeklong P.D. that we structured internally, because it directly related to their classroom experience. . . . Team[s] work[ed] together to create at least one expedition. (Principal)

We tried to talk about Understanding by Design and using Understanding by Design principles. [Our coach] did a March retreat . . . the first year, an all-day institute. And then . . . the week before school started [she offered] another all-day session to get people familiar with backwards planning and Understanding by Design principles. (Point person)

Schools that utilized an in-house format typically had regular PSEED-focused professional development meetings.

They’ve created a meeting time for the teachers to come together and plan. It’s regular, it’s consistent, it’s intensive, it’s focused, it’s away from the school so the teachers aren’t distracted. It’s ten hours a year per grade of that focused planning time, plus the other professional days that they have. (Point person)

Well, we’re pretty lucky in that . . . there are no students in the building theoretically after 12:30 on Fridays. Friday afternoons are devoted to professional development and to departmental time meetings. . . . Generally we meet 2:00 to 4:00. (Point person)

Every other week, we have meetings for the PSEED team. . . . During the summer there’s a good amount of professional development. And I had led that professional development because I wanted to start talking about [experiential education] to other teachers. (Teacher)

Several schools sent staff to out-of-state conferences for professional development.

You know, [teacher] and I have just recently been having conversations about the pedagogy behind [experiential education] because we were part of . . . that group of teachers that went to a conference last fall—where we heard all different perspectives of experiential ed and outdoor ed versus classroom ed. (Teacher)

PSEED-Specific Staff

Support for teachers and administrators was important for the successful implementation of PSEED. Schools found support with the addition of specific staff members. A few schools hired staff from the outside, while others promoted or gave stipends to current teachers to lead the project. Staff specific to PSEED were not only able to provide content expertise, they also dealt with administration, scheduling, and connecting with partner organizations, which teachers find more difficult to do during the school day.

Implementation was smoother and more stable for schools that were able to hire at least one additional staff person. Staff members hired to coordinate the PSEED grant worked with teachers to develop curriculum and to provide support for teachers on fleshing out what experiential education is. A few schools felt as if the addition of a specific coordinator allowed them to create a successful infrastructure.

Not every school, but several of them had . . . this point person. So, I think schools used their resources in ways that they thought worked for them. And for many of them, having this on-site . . . point person perhaps also diverted where they would use either Community Matters or CCE coaching—which makes sense. (CCE)

School leaders indicated the addition of staff allowed them to build a curriculum that could survive the comings and goings in urban schools.

I think there are some pieces in place now that weren't there before, like the curriculum's documented in most grade levels and, in some grade levels, really well. . . . And there's sort of a collective school knowledge that carries forth even if individual people come and go. The knowledge, expectation, and understanding that this is what we're about as a school, that's there more, I think. You still need to beat the drum, but it's . . . there. (Point person)

On the other hand, another teacher discussed the potential impact of not having a specific person to coordinate the work and help teachers to develop curriculum.

I definitely feel like having [staff person] . . . help us think through curriculum and help us think about experiential ed and help us actually execute a project is a big plus. I'm not sure, if [staff person] were not here, how that momentum would be. (Teacher)

As schools attempted to build a larger team to support the PSEED work, some met a few challenges along the way, including difficulty finding qualified coordinators and achieving staff buy-in. The few schools that experienced challenges in finding a person who was a “good fit” for the schools spoke about the lack of experience and training potential partners had in experiential education. The addition of staff who lacked training in experiential education resulted in confusion and less than desired staff buy-in.

I know that when we had the part-time coordinator, I think the teachers saw it as . . . one more thing we have to do, one more obligation, not necessarily something that would make their job easier, or more interesting, to help the kids learn better. (Principal)

The lack of well-trained staff meant teachers did not have consistent support with building their knowledge of experiential education and embedding the work.

I feel like I constantly have ideas about ways I could use [experiential education] that I just feel like I'm not able to carry out—because what it would really take is

someone consistently reminding me of what I wanted to do, and helping me think through, step-by-step, how I could get there. (Teacher)

Furthermore, not having appropriate staffing resulted in teachers feeling overloaded.

Right now, I feel like I'm spread a little bit thin. I do have people helping me, but it's still not to that point where it feels really tight, and where students are really able to own things. (Teacher)

Community Partners and Consultants

Most schools' point people, administrators, and teachers spoke about how successfully students were able to connect to the greater community outside the school. The connection to the community came through students' working alongside community partners, as well as through structured fieldwork. Several schools included community partners, such as museums, service organizations, and local businesses, in the experiential curricula. Such inclusion instigated an instant rapport between community members and students, through which students established respectful working relationships with community members.

Some students constructed learning projects that supported the work of community partners. These projects introduced students to social justice causes and highlighted their role in solving community issues. In some instances, students' involvement with a community organization spurred their excitement for an academic project.

We try as much as possible to participate, to do a school without walls and to be a member of the neighborhood, which is part of the project. And we've developed a really nice relationship with Haley House (a local café). . . . The best part about it? . . . Once [the students] knew they were going to donate this, they were so willing to make sure those collard greens grew. . . . They wanted to really take care of them. (Point person)

Other students designed individual projects for neighborhood organizations. Students seemed to put their best efforts into designing a purposeful project.

The student had done an impressive job of thinking through, planning and preparing for her project, which focused on working with young people at a community center on creative writing. She had worked out a plan with administrators at the center, prepared the entire curriculum including lesson plans for every meeting, etc. (Observation)

We had students clean up around the school so it was community-based. They cleaned up around the whole campus. . . . We had ACE (Alternatives for Community and Environment) come by. It's an activist group right there in the neighborhood, and they show how dumping of certain materials in certain neighborhoods affects communities and how that spikes asthma levels. . . . (Teacher)

A few schools developed community partnerships that would outlast the grant.

With PSEED, we've been also connecting to the Urban Ecology Initiative, Franklin Park Coalition, [and . . .] Students Learning Through Urban Gardening. So we've developed some new relationships that will be ongoing after PSEED, because a lot of these groups have their own funding, and they need the students. (Point person)

Challenges to Implementation

In each school, the development of curriculum, staffing, and professional development provided both opportunities for growth and challenges. The challenges had to do with both external constraints and school-level ones, such as limited time and unstable staffing.

Evolving Definition of Experiential Education among PSEED Schools

A working definition of experiential education was provided in the original Request for Proposals, and the initiative had access to strong local experiential education resources in Project Zero and ELS. Consultants at both of these organizations, with deep knowledge and experience in helping schools to implement experiential education, predicted the elusivity of “defining” experiential education. Not surprisingly, there was variation within and among PSEED schools about what experiential education meant and how it should be implemented. Some of that variation was related to participants’ roles in their schools, some to their prior exposure to experiential education, and some to the length of their tenure in a particular school. When asked to define experiential education, some participants focused their answers on what students were asked to do, while others focused their answers on how they acted or perceived teaching differently. The responses of those whose definitions focused on what students were asked to do, although they contained different vocabulary to define experiential education, indicate that experiential education allows students to experience curricula by imitation, experimentation, or questioning. Relevance to students’ lives was a key component of experiential education definitions. Some definitions as spoken by teachers follow:

[Experiential education] is having students be able to tie things that they're being taught to the standards that teachers teach them through the curriculum that they have to follow, but making sure that it has relevance and importance in their lives. . . . (Teacher)

Experiential education is . . . taking what they're learning in the classroom and bringing some authenticity to it, in terms of putting it in a real-life situation so that they can understand it. (Point person)

My definition would be hands-on learning with real-world artifacts that have a purpose and give access to different types of learners, so that it's not always reading in a book or looking at a computer screen and reading. They're getting to touch things and feel things and hear things and see things. . . . They might be

learning facts, but also they're learning about their learning through that process . . . the process is just as important as the product. (Teacher)

For those teachers for whom the definition of experiential education was focused on their teaching process, observation and reflection were key pieces of their definitions. For these teachers, the definition of experiential education evolved over the course of PSEED. Teachers who experienced a change in pedagogy recognized that experiential education required them to think and act differently from the way they were taught in their educational programs. As a result, teachers who shifted from traditional teaching methods to experiential education methods found that teaching through experiential education required them to be more reflective and observant in their teaching in order to further their own pedagogical style.

If you went to a more traditional teacher preparation program, it was more about following the curriculum and managing the kids. Leaving that kind of learning is very scary, because it's less about looking at a manual and it's more about really observing and reflecting. (Teacher)

[I]t has really challenged me to think about what's happening in my students' minds when I teach different ways. (Teacher)

Given the acknowledged elusive nature of “defining” experiential education, compounded by changing staffs, varied preservice exposure to experiential education, and multiple community partners and professional development providers, implementation of experiential education varied across the PSEED schools. With such divergent projects in such diverse schools with varied community partners, it was challenging (and perhaps not possible or necessary) to develop a static definition of experiential education. However, using a common frame of reference for the seven PSEED schools and the partners might have allowed more focused reflection on implementation challenges.

Changes to Original PSEED Proposal

In addition to the challenges faced by all the schools in implementing professional development and hiring specific staff, several schools faced significant challenges in implementing their proposed PSEED initiative. More specifically, three schools changed their PSEED proposals to reflect the significant obstacles they faced in Year 1 of implementation. The obstacles reported by principals and point people included internal and external factors: the inability to find a point person to guide their work, challenging community partnership, and the scope of PSEED programming.

We initially planned on . . . focusing on our neighborhood and environment in the local area with a full-time or a half-time . . . person to run the environmental side of it. To do all the coordination and support and really run the program. And we hired somebody and she was terrible. It was a nightmare for us. It wasn't helpful. We actually considered giving the money back. (Principal)

What we focused on was the idea . . . of how . . . [to] link the physical education component more to our expeditions. We had lofty goals when we wrote the grant, and then, . . . not all of those came to fruition. . . . We ran into more glitches in our seventh-grade planning around canoes. We ran into glitches there around the capacity of Thompson Island to do canoeing with our kids. (Principal)

What we started with was every kid was going to do a digital portfolio for their RICO review, which is the refine, invent, connect, own, really the reflective part of our curriculum. . . . Then we went to 50%. And now we are looking at two exemplars that run completely through the reflective curriculum, the arts curriculum and the academic curriculum. (Point person)

One example of turning a challenge into an opportunity took place at Boston Arts Academy early in the PSEED initiative. The original proposal was for all ninth graders to take a class in design principles. However, when professional development planners realized that, in order to implement their proposal idea, all teachers in grades 9–12 would need to understand design principles, they quickly changed the focus of PSEED to provide teachers with professional development in design. In addition, design would not be confined to one course, but would be infused into all of the arts classes. Not only was the school able to act responsively to the needs of its students, the foundation was also flexible enough to accept this change from the proposed project.

Staff with Experiential Education Expertise

Principals and point people undertook three main strategies to bring expertise to their schools as they implemented their PSEED initiatives: conducting professional development specific to experiential education or PSEED content; hiring specific staff to help guide their work; and connecting with community partners to execute specific components of their initiatives. Although not all schools were able to hire staff with a deep understanding of school culture and practices and experiential education knowledge to help with implementation, schools that did employ this strategy overwhelmingly reported they experienced a great deal of support from their experiential education staff. These individuals guided teachers in their development of content, organized field experiences, and developed teachers' knowledge of what experiential education is. When PSEED-specific staff did not have legitimacy with the school staff, did not have content expertise in experiential education, did not fit into the school culture, or when they had other teaching responsibilities, schools struggled with their experiential education implementations.

Other challenges mentioned less frequently by interviewees were about staffing as it related to school leadership, teacher turnover, and administration of the PSEED initiative. Staff discussed what happened when new staff joined the school or the project. In many instances, new teachers struggled to understand experiential education and had little time to lend to its implementation. The struggles of new teachers, indirectly, impacted their ability to join established collaborative efforts.

[For] some of the newer teachers, there hasn't been the time allotted this year to sharing what we're doing in PSEED. . . . I think the biggest thing is the time, and the teacher buy-in. But I think teachers buy into it if they have the time to see the potential. (Point person)

Time to Support and Implement Experiential Education

The biggest challenge identified by interviewees was time. In the PSEED schools, often teachers were asked to carry out multiple initiatives. Teachers said that the time it took to develop experiential curriculum units and the time it took to document this work so that others could use it was extensive. Even finding the time to get the right people to a meeting was challenging.

I think that is an issue with some of the teachers that they hold themselves accountable for some major important, serious work. And it takes so much planning, resources, knowing who to write, who to call, money to get stuff, organize it within the school system that it just becomes overwhelming and then it doesn't happen. (Teacher)

A second time-related challenge in schools was the time it took to implement the curricula with students. Not only did teachers feel pressure to explicitly prepare students for MCAS or teach basic skills like reading and writing more directly, they also said that the greater out-of-class time and the product-oriented nature of the experiential units also made time a challenge.

So how do I balance that time? . . . I need to be spending time teaching how to write. A lot of time goes into these field experiences. How do we balance that? (Teacher)

Time is always tough. I think that this school's done a better job in terms of planning time and managing time. In five years I've seen teachers become more and more crazy and manic about [MCAS] . . . the whole buildup and angst around that takes away from good thinking and good curriculum around experiential ed. (Point person)

As our expedition came to a close, "let's get the artifacts ready." Let's get these products done. And . . . a little bit of emphasis on the product, maybe made the teachers feel a little frantic. (Teacher)

One of the effects of this challenge of time in the busy lives of PSEED school staff was that PSEED-related activities, like technical assistance, professional development, Knowledge Sessions, consultations with Expeditionary Learning staff, were difficult to schedule or attend. Aware of time constraints, the PSEED partners were reluctant to add or require common professional development or technical assistance. Ironically, another challenge mentioned by several interviewees was the need for staff to understand experiential education better, a challenge that could be addressed by more common, cross-school PSEED experiences.

Every time I have a math department meeting and we talk about this, people want that external validation, “We want an expert to come in and say, ‘This is how it works in a real classroom.’” (Teacher)

Embedding High Standards into Experiential Teaching and Learning

As noted in the previous section, our interviews suggested that teachers felt a tension between implementing experiential education units and focusing on standards, test preparation, and more mundane tasks such as teaching grammar. They felt that in order for the projects to be fun and engaging, it would be difficult to include those purely academic foci into the projects. The challenge seemed to be embedding the standards and academic content into the experiential education curriculum. The goal of embedding both standards and relevance is expressed in Young Achievers’ own experiential education rubric (Appendix B5). In one school, this challenge was evident in data from several observations, in which culminating exhibitions of student work had not been cleaned of errors or in which students were not prepared to discuss their reflections in depth. In another school, this challenge was expressed by the principal as a common, and perhaps false, perception that achieving “certain goals in the core content areas” and implementing experiential education were at odds or felt like “add-ons or supplements.”

Schools experienced many successes in their implementation of PSEED. However, most schools experienced a few implementation challenges: time, hiring specific staff, finding appropriate experiential education professional development, and changes in their proposed work. Although this was the case, individual schools overcame challenges by resubmitting their proposal with alternative plans that were appropriate for the current state of the school. Implementation challenges did not appear to halt a school’s implementation of PSEED. In the end, all schools implemented experiential activities for children and youth.

Effects of PSEED

The goals of the grant were to embed and deepen experiential education in the schools as a means to improving student engagement and performance. This section covers the effects of PSEED on the school culture, the teaching and learning, and ultimately, the students. The data showed that teachers changed their curriculum and pedagogy through the PSEED implementation, and that the PSEED work encouraged and facilitated the development of school cultures that were collaborative and celebrated student and teacher work. Students in turn showed high engagement with the curriculum, took on new roles, and changed some of their behaviors.

School Culture

A healthy school culture, in which adult and student collaboration is evident, and in which all stakeholders, including students and families, have a voice in decisions that affect them, is a hallmark of the Pilot school principles. Such a culture supports the implementation of experiential education curriculum and pedagogy because it encourages teachers to experiment with new practices, share with their peers, and use data and reflection to modify and change their practice.

Interviewees from all PSEED schools emphasized *collaborative* and *visible* school culture as the aspects of school culture most relevant to and affected by PSEED. Almost all schools shared evidence of collaboration and visible displays of work supporting experiential education.

Rubric data from the focus area of school culture was most often between 2.0 and 3.0 for all but two schools with higher school culture ratings (See Appendix A2).¹⁰

Collaborative School Cultures

The collaborative school cultures in the PSEED schools supported their experiential education work. Teachers from almost all of the schools frequently discussed the role of collaboration in allowing them to create curriculum, troubleshoot problems, plan together, and share ideas. The foundation's original thinking about Pilot schools having the ability to be responsive supports the findings in this section—being relatively small and having flexible schedules allowed them to create the multiple different groupings based on what made sense for the tasks at hand, such as cross-disciplinary committees and teams, grade-level teams, content-based focus groups, and whole staff. Teachers at one school talked about how important it was for teachers to get to know each other, while teachers at other schools discussed the advantages of working collaboratively.

I think a lot of the decision making and development happened because we have Friday morning planning times . . . there was a lot of collaboration between us

¹⁰ A school implementing experiential education will go through phases of development as it deepens and spreads its work. The rubric responses represent these phases and are on a four-point scale. They reflect the frequency at which such work is occurring: Most of the Time (4), Some of the Time (3), Beginning to Occur (2), and Not at All (1). The mean rubric response for each focus area is reported.

and the kindergarten team, and the art teacher . . . and [PSEED coordinator], helping us out, and then the other first-grade teacher [and I], we work really closely all the time. . . . So I would say the most important part of it has been the collaboration. (Teacher)

And my emphasis has been a way that we can make it about interdisciplinary teaching and learning in a really real way instead of just talking about it. (Teacher)

We meet as a team twice a month and report back and share resources and ask each other questions. And for example, a couple teachers are looking at the issue of urban sprawl. And they want to bring in an architect or some architects. . . . So the teachers are excited because that was an interest that they brought to the table, not that we told them they had to do. (Point person)

One positive effect of the adult collaboration in PSEED schools was the modeling of collaboration for students.

In each classroom, there is a head teacher and a community teacher. Automatically, whether you realize it or not, you are modeling an adult relationship for children. They notice everything. (Teacher)

Besides the collaborative culture that develops through meeting and planning together, interviewees from almost all of the schools also discussed professional development as key to their PSEED implementation. The schools hired external consultants and professional developers to build their understanding and skill in implementing experiential education curriculum. These sessions were always conducted collaboratively and built capacity in schools.

The culture of collaboration extended to students in the PSEED schools, where much of the experiential education learning was through group projects. Students were expected to work together to learn and create products.

Finally, another aspect of collaborative school culture was the openness to learning from other like-minded schools and organizations. Not only did PSEED schools welcome the opportunity to share their experiential education work with each other, they also formed collaborative relationships with other schools focused on experiential education and community-based organizations that could support their learning expeditions/experiences.

School Culture of Public Displays of Learning

In most of the PSEED schools, student work emanating from experiential education units was evident through public display, either at events or in the hallways of the schools. Students created products for sharing information, for demonstrating what they had learned, and for celebrating. Some examples include:

- Displays of student work from experiential education units
- Videos—both creative and informational

- Community service proposals shared with peers
- Town halls and community meetings
- Radio shows
- Digital portfolios
- Slide shows using PowerPoint
- Murals
- Interviewing visitors to the school

In two of the PSEED schools, families were visible as a part of the experiential education units that we observed. A few schools used an exhibition format to display student work. This format typically involved students working on a major project for a significant portion of the semester. As students collected, discussed, revised, and reflected on their assignments, they also began to collect products that would construct their final presentations. Students who participated in exhibitions gave oral presentations of their work in front of classmates, teachers, and community members. In addition, students displayed multiple drafts of their classroom work, as well as final drafts, in this open forum setting.

The Senior Project is a capstone experience for all BAA graduates. The seniors are required to write proposals for art projects that address a community need. This afternoon's event includes the 40% of seniors whose proposals were rated as the best, and 12 to 15 [students] will receive funding to implement their projects. The presentations are rated by outside panels of reviewers using a rubric developed by BAA staff. Seniors can do their projects as individuals or team up with another student. (Observation)

At another school, parents, teachers, and students gathered in the auditorium for a multimedia display of student work:

[Point person] explained that students worked on projects since the beginning of the year. Students from the two first-grade classes chose their topic and broke into working groups. . . . On the day of the exhibition, students displayed their folders that reflected the drafting process. Most students had six drafts of their artwork in their folder. The cover of folders held the final, color draft. The final projects hanging across the room were laminated for preservation purposes. Each year, the first graders create a book of their final work that is to be left in the classroom for future first graders. (Observation)

Two schools instituted an ongoing, informal format for students to display their learning during weekly whole-school meetings. Schools that utilized this format included all students and teachers, with presentations by class on a rotating basis. For both of these schools, teachers and students developed the content of the meeting, with students taking the lead role on the day of the meeting. Presenting classrooms usually displayed a small portion of what they were learning as it related to PSEED. Teachers and administrators who spoke about this format stated how important it was for students and teachers to

have this opportunity to come together as a community. Ultimately, community meetings helped the two schools to solidify their identity.

It is the time our entire school community comes together. . . . We get to see everybody. Every week, you see the three-year-olds up to the third graders having some kind of job, some kind of responsibility. You get to see the classes perform. You get to see the teachers on stage. (Teacher)

A couple of schools showcased their work by reaching out to other Bostonians. Teachers and students identified social justice issues that could potentially be impacted by their displays of learning. Schools that participated in these types of displays of learning used technology to make their cases. Students from these schools researched social justice issues, collected supporting data, and reported findings to community members, often supported by the use of technology.

Second graders at one school learned about the diversity and history of Boston neighborhoods through field work. As a result of their community visits, they developed public service announcements to educate listeners of a popular local radio program about some of the issues they observed or learned about in the field.

While in the recording booth at the radio host's studio, each student read out loud one sentence to the radio host and the audio tech to test his/her recording voice. Students within each group were quickly instructed on how to speak clearly, not to make thumping noises that could be heard on tape, and how mistakes would be later edited. Throughout the taping sessions, the radio host gave students the thumbs up. (Observation)

The documentation team was invited to many of the events and meetings during which student work from experiential education units was shared beyond the classroom. In each school, the flavor and enthusiasm for showcasing their work was evident from both students and teachers.

School Culture Successes

Clearly, the collaborative school cultures in PSEED schools supported the implementation of experiential education and the public valuing of PSEED products. Another success of the project was that administrators from every school considered PSEED work to have schoolwide impact, whether or not that was the original intent of the work. Administrators noted that the PSEED ideas for curriculum and pedagogy have permeated their school cultures.

It's not just about Town Hall. This is a metaphor for who we are as a community. This is the embodiment on Fridays of what we strive to be every day of the week. (Principal)

I'm impressed with how the faculty has embedded it, in all aspects of every major. . . . I can't think of a major where we haven't vetted media arts. (Principal)

Every academy, every child, has participated in expeditions. So it's been . . . more efficacious than the original proposal, and it's far more broad in its approach. . . . Every child, every content area is now involved, as opposed to before where it was really focused on science. (Principal)

Curriculum

Curriculum is defined as a set of courses and its content at a school (<http://www.merriam-webster.com/dictionary>). Given that experiential education is a philosophy and process for learning, the *curriculum* of experiential education is the four-step process outlined previously. The PSEED schools started at different places with experiential education curriculum. Some schools had experiential education in specific classes or electives or afterschool programs, while others had long histories with embedding experiential education throughout their core academic courses. In their PSEED proposals, each school articulated how the project would allow teachers to integrate experiential education into their curriculum and instruction. Regardless of where they started, their goals were to develop, implement, and in some cases, assess and document experiential education. Most schools progressed in their goals, and many teachers in these schools successfully created and participated in the PSEED activities and curriculum units designed by their schools.

Through analysis of the data gathered in this documentation project, we found that PSEED gave the seven schools the opportunity to embed experiential curriculum in specific classes, grades, and in several cases, across the school. Specifically, the PSEED project supported the school staff to develop more *authentic, interdisciplinary, project-based* curriculum, grounded in out-of-school, community-based experiences in six of the seven schools.

Rubric data supported the findings in this section. All but one school rated themselves from 2.5 to 4.0 for every item within the focus area of curriculum (See Appendix A2).

Authentic Curriculum

There were three aspects of authentic curriculum that interviewees most discussed—that the experiences involved learning about real work, places, and jobs; that the experiences had relevance to students' lives beyond school; and that the experiences taught students about social justice, fairness, and equity. The simplest way that teachers offered students curriculum experiences outside the school and classroom was by field trips—to gardens, green spaces, farms, other neighborhoods, and workplaces. Teachers added authenticity to trips outside the school by making them research trips—collecting information about health care and access to resources, for example—and using them as models for planning their own projects. Through asking students to write about and reflect on their excursions and assignments outside of the school building, teachers increased academic content.

Now teachers are much more in a place where they're thinking more about the experiential ed learning cycle, where they get kids out, they have an experience,

they process that experience, they reflect on it, and they go back out and do it again. (Point person)

I think people are working towards having their kids outside of the school a lot more than they used to be, and integrating the academic disciplines a lot more than they used to. (Teacher)

What I've found is that the easiest place to sort of make things overlap is in our writing and our reading. Having them do reflective pieces after we go on trips. (Teacher)

Teachers also increased authenticity in their curriculum by exposing students to experts and practitioners in the curriculum topic, either in their workplaces or in the classroom. Across all of the PSEED schools, students were given opportunities to hear, talk with, interview, and observe professionals—for example, sailors, radio announcers, farmers, architects, carpenters, doctors, scientists, park rangers, musicians, and lawmakers.

A prominent feature of the experiential curriculum across six of the seven PSEED schools was a focus on learning about and understanding social justice concerns, especially those affecting students' own communities. For example, the curriculum gave students the opportunity to study, expose, and connect with neighborhood residents' differential access to air quality, water quality, technology, health care, public transportation, cleanliness, and affordable housing. For example, Young Achievers Pilot School created a whole-school curriculum that focused attention on social justice issues. Students in all grades had an opportunity to learn traditional subjects infused by current community topics: sustainable food supply, gentrification, and deforestation, for example (Appendix B2).

Teachers talked about how students were able to connect their own experiences with the new experiences the curriculum offered. Their sense of fairness guided the curriculum connections and engagement with the content. The trips to community organizations, job locations, and neighborhood sites also allowed students different entry points into the curriculum, because they were interesting to students with different learning styles and preferences.

I think they're looking at things differently, in a way that they haven't before, and maybe even the adults in their homes haven't . . . "How can I impact this?" Or "How can I work with others?" (Point person)

This is the kind of stuff that will serve them, and it's showing them how to . . . look at a place, . . . how to think about a place, and how to be active in your community and in your peer group. . . . And letting them know that they can do that. As youth, as middle school youth, they've already been part of community change. (Point person)

Giving them access to these things at such a young age so that, you know, by the time that they're in high school or even college, that they'll already have this background of social activism. (Teacher)

They know what's fair. They have this idea of equity really young; it's almost intrinsic. . . . It's practiced among adults and students and among student and adult relationships, and I think that we teach that explicitly in a historical context within the experiential ed curriculum. (Teacher)

This [initiative] brought place-based education, environmental education, social justice education, all under one heading of "how you do your business," and that is you experience it. In order to understand social justice issues you've got to experience it in the community. In order to understand how science connects to the local environment you've got to get out there and experience it. (Point person)

We're learning about food all year. So, we have this idea that if all year we're learning about how does the food get to your table, then in the spring, we would talk about what happens when the food doesn't get to your table? And how does the community help you get access to food and help you get what you need to live? So, we visited some shelters that also, that provide people with food and shelter, so that's why they get combined. (Teacher)

Interdisciplinary and Project-based Curriculum

One of the goals of PSEED was to embed experiential education more into the school day and core academic subjects, rather than in electives or afterschool time. All schools described curriculum developed through PSEED as crossing academic disciplines and being project based. While it is difficult to tell which schools would have been implementing interdisciplinary, project-based curriculum without the PSEED project, it is clear that these projects are connected in teachers' minds to PSEED. For example, Boston Arts Academy created a curriculum that incorporated writing, reflection, and technology (Appendix B3). Some other examples of projects and products in the PSEED schools, with the disciplines that they covered, are listed here:

- Haiti deforestation—science, writing, environmental justice
- Mapping wireless access in neighborhood—technology, performance, math/geography, social justice
- Garden—math, science, health, social justice
- Radio show—writing, presentation, music
- Recycling—science, writing, environmental justice
- Sailing—physical education, meteorology, physics
- Nutrition and diabetes—science, math, writing, social justice
- Park design—math, writing, science
- City design—geometry, writing, art
- Culminating senior project—arts, academics, technology, social justice
- Lobster tank—biology, creative writing
- Farm books—reading, writing, math, drawing

Not only did the experiential education curriculum integrate across academic disciplines, it helped students to more readily make connections in their learning. This finding also crossed all PSEED schools. For example, second graders made more “text-to-world” connections because they had more out-of-school experiences, middle schoolers were thinking more about the impact of recycling on their neighborhoods and the environment, and high school students conducted culminating projects, such as designing a green building or studying the statistics of war, that incorporate math, science, social justice, and writing.

Challenges to Developing and Implementing Experiential Curricula

There was a consensus across PSEED schools that developing experiential curriculum was challenging for PSEED school staff primarily because of the pressure of standards and testing. While Pilot schools have curriculum and assessment autonomy, their students must still take the MCAS, and the schools are still held accountable for results under NCLB. Teachers across six schools talked about the need for classroom time focused on preparation for MCAS, even as they acknowledged the benefits of the experiential education curriculum.

As a teacher you’re supposed to be thinking, “MCAS, MCAS, MCAS.” And sometimes it’s hard to change the channel and know that you’re still teaching with rigor when it’s not as strict, and sitting in your seat, and reading, and answering questions. So that’s been a kind of hard thing for me. Realizing that these kids are really working, but it’s not the MCAS prep stuff. It’s just as worthwhile and they’re getting a whole lot more than doing . . . seat work.
(Teacher)

There’s a million ideas of things you want to do, but the reality is you still have to spend time teaching grammar. *(Teacher)*

While administrators spoke about the need to document strong curricula, two teachers spoke about the challenges they faced in planning and developing curricula. This teacher discussed the challenge of time and of collaborating.

To be honest, it’s effort, the planning . . . making those initial connections with people. And looking in the area for connections and people to work with, be affiliated with. *(Teacher)*

In addition to the issue of finding time and making connections with individuals who can support the design of a teacher’s curriculum, it was reported by one teacher that locating grade-level experiential education resources was challenging.

Pedagogy

Pedagogy is defined as instructional strategies or styles. Teachers’ pedagogy for experiential education should encourage students to engage in the four-step cycle of experiencing: observing, reflecting, generalizing, and applying their learnings. While it is

difficult to separate curriculum and pedagogy, in this section we focus on teachers' strategies of instruction (teaching process instead of content) as much as possible. As stated in the Methods/Limitations section, the teachers we interviewed were not a random sample. Administrators connected the documentation team with those teachers who were most closely connected with the PSEED work. These teachers were likely to be more open to changing their teaching practices.

The data collected informing pedagogy strongly supported the aspects of pedagogy described by the PSEED rubric—teaching was reflective, active, inquiry based, and flexible. The rubric data for each school confirmed these areas of strength. For all schools, almost all of the items in the focus area of pedagogy were rated between 3.0 and 4.0 (See Appendix A2). Clearly, PSEED schools had a strong focus on this type of teaching.

Reflective Pedagogy

Interviewees in all PSEED schools talked about how experiential education had influenced their instruction, particularly in the ways in which they asked students to perform tasks or answer questions. Their questioning often focused on higher-order thought processes, like explaining how, predicting what would happen, or making connections to other knowledge and experiences.

What do you think's going to happen to the animals however many years from now? (Teacher)

Most successful was . . . kids making hypotheses about why their seeds grew or didn't grow. . . . There were a few kids [whose seeds] didn't grow, so then they had to change some of the variables. And then get something to grow. "Why do you think that seed disappeared?" . . . So kids being scientific . . . [i]t was a problem they wanted to figure out and solve. (Teacher)

I learned through the professional development that I've got to make some connections between the writing process . . . and the documentary film process in terms of using images and words together. . . . How do you want it to start? How do you want to transition? And having that not just be about using language to do those things, but using visuals to do those things. (Teacher)

Through changed pedagogy, not only were students asking questions and reflecting in different ways, the data also supported the notion that teachers were reflecting on their instruction in new ways, through implementing experiential education units and projects. This reflection took place in group settings, such as team meetings and focus groups, as well as with individual teachers.

Reflection among Groups of Teachers

PSEED teachers had many opportunities to discuss the implementation of PSEED and the changes in their practice with each other. In the various groupings previously described,

they were able to collaboratively tackle the improvement of the assessments, their questioning skills, and their teaching processes.

Encouraging teachers to be reflective practitioners and just to focus on a few things in particular—so the quality of those conversations, those meetings that we have about the portfolio and the teachers' shared portfolio should give us some evidence if it's taken root. (Point person)

It's made us rethink in some ways our academic exhibition, the way that we ask students to demonstrate what they know. . . . We're feeling much more comfortable with academic teachers talking about "What are the choices that you are making in terms of how you are presenting information?" (Teacher)

Well, how would we assess this way? How is it like or unlike what we've done before? How does it push us in a new, different way? (Teacher)

We felt that to be able to stand with power and talk about what our kids know and can do, we had to also talk product. And the reflective portfolio is not product related, which has been its fault. . . . We need to make sure we are clear about the competencies and the standards our kids have to reach and the reflective crafts, the reflective part of this whole process. (Principal)

Reflection by Individual Teachers

Teachers also modeled reflection for students individually. They consistently reflected on their changed practice through wondering about how to improve student learning.

"How many stops is it from Forest Hills to Downtown Crossing? Are we going inbound or outbound when you go towards the city?" There's a whole mapping skill involved in that. There's all these moments that happen, and then you start realizing, "I can be really explicit about this. I can be explicit about making this MBTA thing connect to math." (Teacher)

Active and Inquiry-based Pedagogy

The PSEED curriculum was authentic (see previous section)—students experienced real-world, interdisciplinary, project-based learning. It follows that the pedagogical approaches teachers used were active, allowing students to go outside the classroom and explore their own questions. Teachers and administrators from all schools defined experiential pedagogy as “hands-on” learning. Young Achievers School developed an experiential education rubric to guide teachers in their pedagogical approach to developing active and inquiry-based curricula (Appendix B5). Interestingly, several elementary school teachers said that their instructional approach required students to physically move.

Learning through experience, taking a skill set and then, instead of me sitting down in the classroom and then telling the kids what to do and how to do it, going and experiencing those skills hands-on. (Teacher)

This school believes in hands-on experience to teach students. Which, if you think about education, that's what it is. That's the essence of how people started learning things way back at the beginning of time, is experience. (Teacher)

My definition of experiential education is kids learning through action, action being some type of hands-on learning, some kind of movement. Whether it is [getting] them up out of their seats, whether it's [having] them creating something, going on a field trip, growing a garden—something that links their learning to movement. (Teacher)

Teachers designed curriculum experiences that allowed students to guide their own learning and to ask their own questions. Rather than showing and telling students what they needed to learn, teachers asked guiding and probing questions to facilitate students' inquiry process and let them discover through exploration and experience.

I joke with them all the time that I don't teach. I don't stand there and I don't tell them. I guide them. I give them some ideas. I give them a direction. I'm more of a foreman than I am a teacher. (Teacher)

The kids are the do-ers of learning. They're not the be-ers. They're constantly doing it, they're in control of it. It's not the teacher up there telling them what to do, but they're experiencing it firsthand. They're exploring, and then through their exploration they're experiencing. (Teacher)

In order for teachers to facilitate learning rather than to lecture, teachers changed their pedagogy by "letting go" of some control.

What I've learned most about is—I feel like I want to have control over everything, like every experience that the kids have. And I've learned to let go of that a little bit. . . . I think the more they own of it, the more they are actually going to think, "Yeah, this is a part of me. This is something that I'm interested in, and this is something that I could go into more later." (Teacher)

Many of the successes that have been discussed are due to teachers putting the responsibility for learning in the hands of the students—they focused on incorporating more opportunities for students to experiment with materials and ideas, they were more systematic about incorporating reflection into their lessons, and they allowed learning to be more inquiry based. One outcome has been that in three schools (one elementary, one middle, and one high school), the curriculum and pedagogy allowed students to become the teachers of their peers, demonstrating their learning in that way. For example, their research led to public presentations of their findings, or their culminating projects involved teaching about something they themselves had learned or produced. Often, students taught with the aid of technology such as PowerPoint or video.

Flexible Pedagogy

In the PSEED rubric, flexible pedagogy has two meanings: (1) classroom grouping structures vary, and (2) educational experiences include the possibility of learning from mistakes, risk taking, and unpredictable outcomes. Interviews supported both interpretations of “flexible.”

Flexible Student Groupings

First, teachers experimented with different classroom grouping structures, depending on the curriculum. Teachers paid attention to heterogeneous groups, how to support students with special needs, and promoting independent learning from their peers.

We had students and groupings that were so heterogeneous, that was amazing. Some students that are in a completely Spanish language classroom, and a room with students that have IEPs [individual education plans], and students that are going to take the test to go to the [exam] schools . . . all working together on one thing. (Teacher)

Flexible Instruction

Second, the nature of the curriculum ensured that teachers were open to the questions that students asked about their experiences and the ambiguous nature of what they learned through their field trips and other school work. Many of the learning experiences developed through PSEED were new and experimental. Teachers were open to the questions students asked and the connections they made. Teachers were also willing to reflect on how things had gone and revise their instruction accordingly. Examples include students planting seeds and growing plants or learning to sail a boat or conducting surveys about community resources. Without knowing the outcomes of their endeavors, teachers must be willing to go where the experience takes them and trust that learning will occur.

Challenges to Experiential Pedagogy

Curriculum and pedagogy are intertwined in practice. The biggest challenges to a different way of teaching and learning through PSEED have been discussed in the curriculum section. The emphasis on standards and testing means that teachers feel pressure for more classroom time devoted to traditional ways of imparting basic knowledge to students.

The challenge of changing teaching pedagogy was discussed by a few interviewees. Most of the interviewees supported the notion that teachers were actively reflecting on their pedagogy and changing it to help students engage more with their learning. A few interviewees from three schools remarked that a challenge of PSEED was getting teachers to change from a traditional teaching style.

One of the main challenges at any school is meeting the state standards. I think that it's hard for some teachers to see that they can meet those standards in a nontraditional teaching style. (Point person)

So that has been the challenge, getting teachers to really think about their pedagogy and how kids really learn things. And we are so stuck in our traditional methodology that we want to go back to—“This is the facts. This is the lesson.”
(Teacher)

Impact of PSEED on Students

This section explores what we learned during the documentation project about changes in students attributable to PSEED. Our information on student effects is primarily drawn from interviews with teachers, point people, and principals of the PSEED schools. We did not speak to students directly, except informally during site visits. Observations and documentation materials round out the information on student effects.

Changes in teacher practices are assumed to affect student attitudes, behavior, and skills and knowledge. As stated in the original Request for Proposals, the goal of experiential education is to provide hands-on experiences that link academic content and skills to real-world applications. One expected outcome of implementing high-quality experiential education, then, would be increased student engagement and performance. The documentation team explored perceptions of three types of changes in students: attitudes toward learning and engagement, behaviors such as discipline problems and school attendance, and actual attainment of skills and knowledge.

Student Attitudes toward Learning and Engagement

A number of aspects of experiential education might be expected to increase student engagement in learning. The change might be due to experiential education’s greater relevance to everyday life, alignment with student interests, hands-on learning opportunities, different roles for teachers and students, opportunities for leadership, greater responsibility for one’s own learning, opportunities for presentation and performance, and/or experiences of success due to varied learning styles:

It helps some students who already are starting to have different feelings about school or a certain attitude. . . So it gets students to meet the material at different areas. And I think that PSEED kind of helps people wherever you are, meets you where you are, and gives that little extra help, to make it a little more worthwhile.
(Teacher)

We found some support for all these potential vectors of increased student engagement. There was an overall feeling, however, that whatever the mechanism or mechanisms, students were more engaged as a result of their PSEED experiences. Based on the perceptions of teachers, point people, and principals, the greatest effect of the PSEED project was on student engagement. Increased student engagement was mentioned the most of any code, by 17 different respondents a total of 44 times (including 8 teachers, 5 point people, and 4 administrators from five different schools). At the two schools that did not comment on this effect, experiential education has been a core component of the educational design for many years, and therefore one would not expect to see changes attributable to PSEED itself.

There was a sense that engagement resulted in greater productivity and excitement about learning. As one teacher reported:

In the days when we worked in the ocean lab that week, I'd never seen kids produce more work. I'd hand kids something and think it was going to take them half an hour, and they'd be back in . . . ten minutes, "We did it!" . . . And I'd go over it and it would all be done. (Teacher)

At another school, a teacher referred to her students as “sponges,” commenting:

They just want to learn so much. And it's very powerful because they're requiring me to always be adding more on to it because they do want to learn. They're not okay with just . . . being sixth graders and doing sixth-grade work. They want to really . . . make a difference. . . . And they've really thrived off of this type of teaching. Because they're not used to it. . . . (Teacher)

Student and Teacher Roles in School and the Community

One of the key components of experiential education is a change in the traditional roles of teacher and students. While teachers plan and facilitate learning opportunities, students are not passive recipients, but rather co-creators, problem solvers, and in some cases, leaders in learning.

One instance of how students became leaders in a recycling project at the school illustrates this change in role:

We shifted that so now the students are the recycling team. . . . So it's great for them because they actually take such an interest in who's recycling, which classrooms aren't recycling, what people are putting in the box inappropriately. And they're really taking ownership and they're saying to us, "We need to go and let this teacher know that they're not using their box." (Teacher)

In another school, younger students became leaders through a pizza project:

When you listen to one of the third graders—you know, because they also solicit for customers—they'll come down and give me a spiel about what different pizzas they have to offer. . . . The way that they're talking about it, the excitement and the possibility, and the fact that they're fearless about going out there and talking to any adult in the building. (Principal)

In some cases, students became co-creators of the curriculum:

Once you put the planning in, the kids are running the show. They're doing it. They're in charge of it. . . . A lot of ideas that we've been doing, the kids have come in the next day: "Oh, wouldn't it be really good if, I know we're working on this, but if we took it to here next." (Teacher)

Or even teachers of the teacher:

The kid who ended up teaching my class, because I quickly ran out of knowledge—so one of my students took over—in a classroom that privileges paper and reading, a C student basically taught the class for a week—because he really understood how you make choices, thinking as a designer, as opposed to a writer. He sees himself that way. It was his gig. (Teacher)

Exposure to experiential education may build students' images of themselves as important contributors to the school and larger community. The projects had real meaning and gave the students a role in their school or the larger community, resulting in students who were more responsible, more empowered, and had more of an identity in the world.

I think they're a little bit more aware that they're a part of a larger community, because, first of all, they get to see everybody together once a week. So they get the sense that there [are] a lot of teachers and a lot of students, and even if they don't know everybody, they're part of this thing that's bigger than themselves. . . . (Teacher)

They did a survey of all the resources available in our neighborhood. What are all the options, the homeless shelters, the medical places where you can get dental care or mental health care. Places where you can get access to Social Security if you need to go and, you know, fill out forms, where is the welfare office, where are the grocery stores, what are the libraries. All of the potential community assets, and they have mapped all those assets. So the kind of work they're doing is pretty amazing. And it's real, and it matters, and they get it. (Principal)

Students Feeling Important

Presentations and performances to the larger community make students feel important and layer a new level of accountability onto the learning experience. One principal noted that the emphasis on public presentations made a difference:

And when the kids think that their work is public and important, it becomes more engaging. (Principal)

In schools where there is a focus on social justice curriculum, engagement with PSEED experiences led to a greater sense of empowerment for students:

They've looked at the assets and they're able to map the assets and then also looked at how this community's underserved. And what are some of the challenges. And some kids did a really moving piece around the violence that they're experiencing. And in a way, I think that makes them feel less helpless. So I think they're looking at things differently, in a way that they haven't before, and maybe even the adults in their homes haven't. And then taken the next step of,

“How can I impact this?” Or “How can I work with others?” And that’s just a great skill. (Principal)

Content Is Relevant to Students

A hallmark of experiential learning is relevance. When the learning experience, the curriculum, is embedded in real-world activities linked to student interests, increased engagement may result. Students see school as meaningful and helpful to them in their day-to-day lives. One teacher notes:

The biggest thing is it has to have relevance. They can’t just be studying something just because. They have to see how it connects with them and how they’re involved with it. . . . But it’s just really them taking control of their learning. (Teacher)

Another example of this is a distance-learning program at one school that helps high school students gain needed credits for graduation:

What Mr. D. tries to do is to figure out what they’re interested in and then find the math in that. So then he created the projects around that. One student right now is doing a project researching car loans and looking at interest rates and things like that. So she is not doing it here. She is out, whether it is online or talking to her dad or talking to other people. But she is finding out the best way she can buy a car. (Teacher)

Student Behaviors

While increased engagement was the most common student effect noted by respondents, some teachers and administrators pointed to positive changes in student behavior, such as fewer discipline problems and better attendance, which they believed were the result of the PSEED work at their school. One school documented a decrease in the number of discipline referrals by Year 3. Two teachers commented:

My students are emailing me over the weekend talking about, “I came up with this idea.” We’re making a list of the 100 best things about our community, and during the weekend, my students are emailing me: “I drove by this and we need to add it to our lists.” And it’s based on what we’re doing with our expedition. So they’re very excited. And they’re not absent a lot. My students, they’re there because they love what we’re doing. (Teacher)

I haven’t sent a child to the office this whole year. I haven’t had any of those problems, because they’re so engaged in what they’re doing that they don’t want to get in trouble. They don’t have the opportunity to act up because they want to be in the classroom. (Teacher)

One principal made the link between these changes in behavior and the increase in student engagement attributable to PSEED:

But in my opinion, student engagement has increased dramatically. So we've had an increase in student attendance, which is an indicator of engagement. We've had a decrease in student discipline referrals. Again, an indication of engagement. (Principal)

Behavior changes also resulted from changes in school culture. One teacher noted that moving to a more cooperative, less competitive approach made a difference:

I see more engagement of kids. . . . Not all middle school kids can handle competition well. . . . I definitely see a difference when I do the experiential ed type games. It gets more kids engaged. It's a lot of fun. They don't focus on points or score or who wins or who loses, because nobody's a winner and nobody's a loser. (Teacher)

Another teacher felt that children were working together better and treating each other better:

I do see more and more kids really complimenting each other on what a good job they did. I even heard someone asking, "What kind of things would you write, because I really want that job?" Which I thought was a really good strategy. (Teacher)

Learning requires risk taking, stretching beyond what one already knows or does well. As children get older, especially those who have not always succeeded in school, risk taking becomes harder. One school that included singing as part of its PSEED approach saw changes related to this:

We have more kids singing at Friday Share. Especially in that fourth through eighth realm that starts to get self-conscious, or they don't want to sing. And I've seen teachers talk about it with their class, and problem solve around it, and take the risk and sing with them, and have fun with it. So I think that just helps, helps the kids take those risks. (Point person)

Student Knowledge, Achievement, and Performance

Student engagement, and the motivation that it demonstrates, are precursors to increased academic achievement. However, the evidence regarding student learning and academic performance from our interviews is less clear and more anecdotal in nature, in part because the great variation in the content of PSEED at each school and in each classroom would make this difficult to document. Increased engagement happens in the moment, as students shift their attitude in the midst of a learning experience. If math achievement increases subsequently, it is difficult to attribute that change to experiential education in a school context that includes many other possible causal factors.

In addition, the goals and scope of PSEED varied a great deal, as we have discussed in previous sections. In the long run, a more enriched educational experience that includes, for instance, music classes or visits to a farm, may lead to increased engagement and, in

the long run, greater achievement, but it is not clear that either the level of PSEED at most schools, the duration of the project, or the depth of the experience would be likely to result in measurable changes in performance. To the extent that such changes did happen, we may not be able to capture them in the timeline of this project, since school achievement data is typically not available for some months.¹¹

Despite these limitations, our interviewees did note some changes in students' knowledge. When PSEED activities focused on connections with the larger community, students gained increased understanding of the world around them:

When we went out with kids to design the orchard, we went to other orchards in the city. And one of the kids said, in a genuine question, she said, "Are there different kinds of trees?" And she didn't know! "Is it just one tree?" I think kids . . . are not only getting outside as far as being outside in the natural world, but getting outside of what they know and what they're really familiar with. (Point person)

I think a major difference is that it's gotten our kids and staff out of the classroom and really educated them around looking at their community and defining community as a school community, as a neighborhood, as a city, as a region of the United States. I think we've been successful at that because our kids haven't done that to that point. (Principal)

In one case, middle school student work from an experiential education science unit led to two science fair projects that were eligible to compete at the state level, and in another case, a teacher made direct connections between students' experience hearing a community leader speak at their school and better cognitive skills:

When [Leader] came up the other day to be a guest speaker, they were so excited. It was great. And then they were writing, and their writing was so powerful after hearing about [Person] from [Leader] because they were such good friends that it was like—. We had read articles, and just having [Leader] out there for 45 minutes, their writing was that much stronger just from having that experience. (Teacher)

In addition to traditional content skills, experiential education is designed to build what have been called “21st-century skills” such as problem solving, oral communication, responsibility, and teamwork. As a direct result of their PSEED endeavors, one high school documented a notable increase in the number of its graduates accepted into college film majors. One teacher from another school noted the problem-solving skills gained by her students, while an administrator noted their poise and oral communication skills:

¹¹ CCE plans to analyze student engagement and achievement indicators for the PSEED schools from the year before PSEED through 2008 when the data is released from BPS.

I think that it's incredible the way it helps support kids to be comfortable with presenting themselves in a number of ways, whether it's MC-ing, doing some sort of theatrical number, doing some sort of recital of poetry or of an essay. We had a group of third graders, which is pretty young. We went to sort of a luncheon or dinner conference thing, and there were about 50 people there, and students were brought to this from grades 3 to 12. And we had 4 third graders. I really think, objectively, they were the most impressive presenters. They were so poised, so comfortable. (Principal)

Students learned responsibility—taking responsibility for their learning, as well as being responsible with each other and with hazardous tools and materials:

For example, these kids that have had these different roles: videographer, or like these picture takers or photographers, or ushers. . . . And I think Town Hall has given them this really applicable way to learn about responsibility . . . it wasn't happening before. And I think that they learned how to be responsible for their own learning through this avenue that was . . . really experiential. It was meaningful to them, and they saw why it was important to be responsible, because no one is going to do their job. (Teacher)

It took a lot for me when it came down to the pipes, when they had to be glued together. They had to be primed and cemented, and that cement is really dangerous. . . . Because of that, they really did step up to what the expectations were. (Teacher)

We did hear that students began to make connections between the learning that took place in classrooms and real-world applications:

Especially when the kids are doing a project like the wireless one. A real audience, a real purpose, data that mattered. They learned an enormous amount through the process. Graphing, geometry, a lot about using Google Maps, and so there was a tech piece and a performance piece, because they spoke in front of the governor and the head of I.T. for the entire city and a whole bunch of folks from the Neighborhood Wireless Initiative.

The effects were not necessarily the same for all students. In one school, a humanities teacher noted the effect on classroom culture and the role of certain students:

In my humanities classroom . . . [experiential education] challenges easy designations about who are the kids who can and who are the kids who can't. . . . So it messes up everybody's head in a really good way. Humanities as a discipline is still very much focused on language. "Can you do your reading, your writing, your talking," you are still processing language. And when I did an Adobe project or . . . a PowerPoint, also designing brochures with the kids, that kind of different modes of showing what you know. (Teacher)

It's flipped. Who are the kids in the room who are the leaders? Who are the kids in the room who are feeling most empowered to do well? Particularly made a difference with young men. . . . It is really a way to show what I know in a mode that I feel comfortable with. (Teacher)

The documentation project asked teachers, point people, and administrators to discuss their perceptions of the effects of the PSEED initiative at their school on students' attitudes, behaviors, and knowledge. While there was a great deal of consensus that experiential education was effective in building students' engagement in learning, there was less consensus about the mechanisms for these effects. A few interviewees noted that engagement had resulted in behavior changes, such as better peer interactions, fewer discipline problems, and higher attendance rates. There is less evidence that increased engagement translates into improved student performance, although this may be the case—our methods and data can provide limited insight on this point.

Sustainability of PSEED

One concern for many schools is how to sustain PSEED activities after the grant. Schools were asked by the Foundation to develop initiatives that could be embedded into the regular school day and into ongoing classroom curriculum. When and how schools began to focus on sustainability varied across schools: some did this during the grant-planning stage; some, during the initiatives; and others are currently developing plans. Schools that have identified a plan for sustaining programs have focused their efforts on building teacher capacity through teacher development and learning opportunities, creating and developing curricula that are utilized from year to year, promoting a school culture that will institutionalize PSEED activities, and/or initiating relationships with community partners that will outlive grant funding. For a few schools, the sustainability of PSEED work is unknown. For these schools, the amount of funding needed to sustain programming is currently out of their reach; hence, future programming is unclear.

Teacher Professional Development

Teacher professional development is an important aspect of creating a sustainable project. Teachers who have built their own capacity throughout the duration of the grant or principals who have supported teacher development through stipend-paying positions seem confident about the work continuing after funding ends.

I'm not concerned about maintaining the momentum, because a lot of it comes from me, too, that I'm excited about it. And the kids, if you're in a bad mood, the kids also become in a bad mood. And if you're excited about teaching something to them, they're excited to learn about it. (Teacher)

We are working on the sustainability part. . . . Part of what I did when we didn't hire the experiential education coordinator was give stipends to some of the people who had been doing the work for a while to take more of a leadership role. Trying to [build] some of that leadership more internally. (Principal)

Other schools have provided specific training or professional development opportunities to build teacher capacity.

The focus has been on doing the professional development and capacity building with the adults, so that then, when the funding's gone, we have the training of our phys ed person in Project Adventure, and in how to do ropes with kids, and in how to go out in the boats with the kids. We've built his capacity. (Principal)

School Culture

A few schools have been thinking about sustainability for an extended period of time. Schools that have included sustainability as a topic in their PSEED team planning meetings have framed their PSEED work as an aspect of what they are trying to achieve as a school. Schools that have institutionalized their projects or have built their school's culture around PSEED programs are further along in the sustainability conversation.

I didn't experience it as a grant. And I think that that really is an important part of a successful grant . . . it may start as something that feels very separate. You can put a box around it and say, "Oh, this is the 'this' grant." But when it is successful, over time, it becomes so infused into what we do in terms of generally teaching and learning that I can't put a box around it any more. And I think that is certainly true of how this initiative developed in this school. (Teacher)

I think some of it has just become more a part of the school culture. . . . So when it's a part of the culture, then it's more likely to continue. . . . It's just more likely to continue because it just becomes part of who we are and what we do. (Teacher)

Curriculum Development

Developing a sound and repeatable curriculum helps schools to sustain PSEED programming from year to year. Schools that focused on curriculum development are confident in their ability to continue the work after the funding. Developing a curriculum that can be passed from teacher to teacher helps teachers not to “reinvent the wheel” each academic year. In addition, curriculum development provides teachers, most importantly new teachers, with a toolbox of information to jump-start the academic year.

There's going to be a binder and a box of a kit, and something else for every classroom. And we're getting most of it! And examples of student work. But what we have now is K–8, a curriculum that really is laid out in terms of environmental, experiential, and social justice. I wasn't sure we could do that in these three years, but I feel that by the end of this summer, I mean, I think we'll have enough of it documented . . . that any new teacher walking in really has something to start with. (Principal)

To be able to see and share ideas. And that's one way to keep the maintenance up. . . . Just having tools at your disposal, I think, will make that experiential learning a lot easier, not like reinventing the wheel every single time, every year. (Teacher)

I've written the whole thing out. I use the expedition plan thingy that they gave us, and have even done a week-by-week [plan], and goals, and all the different resources and everything, and I'm putting it all together in one. (Teacher)

Community Partnerships

Many schools created community partnerships in order to execute their PSEED projects. For a few schools, the inclusion of community partnerships was a deliberate step in both implementation and sustainability.

Some of the partnerships that we have helped [sustainability], and I intentionally went out for partnerships versus hiring staff people. Urban Voices is an example of that; I can't afford to pay a choral director, but I can afford the yearly fee of Urban Voices. Organizations that will do the fundraising on their end so they can work with us are the folks I've been going after. (Principal)

So we've developed some new relationships that will be ongoing after PSEED, because a lot of these groups have their own funding, and they need the students. So we're matching up in ways that I think will continue to outlive the grant. (Principal)

Well a lot of it, for us, is already in place. Like, we have relationships with all kinds of organizations around the city that we use for our curriculum. (Teacher)

However, a couple of schools will not be able to continue their partnerships with community organizations due to the cost of programming activities.

Sustainability Challenges

Although all schools are concerned about sustainability, most have not developed a formal plan that will allow them to continue all or some of their PSEED projects after the funding ends. This conclusion is not a surprise, since the amount of money schools received over the three-year grant period was substantial. (See earlier History of PSEED section.)

The question becomes, how are we going to sustain those things if we don't have the funding? Well, that's interesting. Hopefully—[name] [is] a great grant writer . . . she can continue to write grants, because I think that not having those things as part of our curriculum will certainly hurt our curriculum in terms of who we are as an institution. (Point person)

A couple of teachers and point people spoke about how momentum and infrastructure can help sustain EE projects when funding sources are unclear.

We are good as a school at saying, "Okay, this is really working. We're going to keep it. We have to find a way to keep it." So I'm imagining that a lot of it, we'll find ways to make it continue. (Teacher)

It could fall to the wayside. I hope it doesn't, and . . . [i]f we don't have the funding, maybe there's a way that teachers themselves can try to keep the momentum going. (Teacher)

How do we create an infrastructure that is sustainable and that uses technology and that is reflective of our commitment to design? That's big. (Principal)

Discussion

The PSEED initiative encompassed a range of schools, serving different age groups, with different philosophies and very different histories in regard to experiential education. Some schools started out with well-developed experiential education opportunities in place, while others were relatively new to the concept. Each school was at a different point in implementing experiential education, but they will all begin the next school year further along the continuum of high-quality experiential education than they were at the beginning of the initiative. Not surprisingly, given that the PSEED initiative evolved continually over the three years of its existence and included seven diverse schools with very different goals and plans, it is not easy for the documentation project to summarize the complexity of all that can be learned from PSEED.

The decision to focus on experiential education was well aligned with the educational philosophy and goals of the PSEED schools. Leaders often commented that PSEED helped them to move in the direction that they wanted to go as a school. PSEED was seen as a vehicle for school improvement and development rather than an add-on project that would provide some amenities and then end in a few years. We found widespread teacher buy-in, commitment of leadership, and progressive embrace of experiential education as the norm for each school.

A stated goal of PSEED was to “demonstrably improve student engagement and achievement.” Triangulating interviews, rubric results, and observations, the findings suggest that student engagement increased, student behavior improved, and in at least individual cases, student achievement climbed as well. For example, teachers described students’ increased knowledge of their communities, more developed “21st-century” skills, and greater responsibility for learning. While we cannot prove that such changes are attributable to PSEED, or determine precisely their extent and depth, there is consensus that experiential education served to motivate, empower, engross, and support students.

While increased student engagement and achievement were primary goals of PSEED, changes in student attitudes, behavior, and knowledge are indirect results of the initiative, in the sense that they depend on transformations that have taken place in pedagogy, curriculum, and school culture. We have strong evidence that these school- and classroom-level outcomes were achieved at every school. One change that nearly every school identified to be a direct result of PSEED was a better understanding of and growing commitment to experiential education. A great deal of documentation of the process and products of PSEED provides evidence both of what occurred and the consequences in terms of school activities, student work, and new partnerships. In most cases, teachers and administrators felt that these changes would continue to develop, grow, and be sustained over time.

One of the strengths of the initiative was the Barr Foundation’s flexibility in response to an evolving sense of what was needed for successful implementation of the initiative as a whole, as well as the significant alterations in the school-level plans that took place after

the ups and downs of the first year of implementation. Rather than being prescriptive, PSEED was designed to respect the individuality of each school and its needs for implementing experiential education. Even before the project began, the foundation changed the focus of PSEED from afterschool to in-school work, in direct response to dialogue with the schools and CCE. Working with the Community Matters project managers, the foundation maintained an understanding of the needs and challenges at each school, and remained open to continuing to shift plans in accordance with what made sense at each school.

Another strength of the PSEED initiative was the decision to focus the effort on Pilot schools, where a strong foundation in collaborative culture, openness to change, and continuous improvement meant that there was both the commitment and the flexibility to reflect, revise, and make continual progress toward each school's PSEED goals. Two central issues made these characteristics critical to the success of PSEED. First, many schools encountered unexpected changes: key personnel left, major new initiatives arose, or in one case, a school moved to a new building and was developing a new pathway to align with another district school. Secondly, as the first year unfolded, schools gained new insight into the goals, strategies, partners, staffing patterns, and resources that would work best for them, and revised their plans accordingly. In nearly all schools, there was substantial midcourse revision of PSEED, even in cases where the larger aims remained the same. Despite the unexpected shifts in personnel and circumstances, schools made substantial progress in implementing experiential education.

Lessons Learned

While each school was different, the documentation team was able to find some common threads in their stories. The same six factors seemed most helpful as schools implemented PSEED over the past three years: clarity of goals, process, and strategies; leadership; adequate staffing; professional development; sufficient time; and finding a balance between test-oriented skills development and experiential education. Each of these factors is explored below.

1. Clarity of goals, strategies, and expectations

This finding can be summarized as: the greater the clarity of a school's goals, strategies, and expectations, the more efficient and effective the implementation of PSEED. The schools that began PSEED with a strong history of experiential education implementation, including a mission that was well aligned with the work, sufficient knowledgeable staff, high-capacity enthusiastic leadership, and very concrete plans regarding what they wanted to accomplish, made the greatest gains over the three years of the project. Although their plans sometimes shifted in response to changing ideas about best practices, the leaders at these schools were clear about their goals and what resources would be needed to meet them.

While the initiative began with a stated strategy—experiential education—and goals for improvements in student engagement and performance, beyond these general ideas there was a great deal about the PSEED initiative that evolved over time. This continual

evolution is not only a reflection of the initiative leadership, however. Experiential education in fact has many definitions, many components. It often takes a different shape at different schools, and requires time and practice to understand fully. However, as a result of the relatively general guidance provided, the first year became a de facto planning year at many schools, and it was not until Year 2 that PSEED implementation started to take hold. A number of teachers (selected because of their high involvement with the project) commented that they still did not have a clear understanding of what experiential education was, even toward the end of the third year of implementation.

Given the variable school-level interpretations of experiential education, supporting its implementation in each school was a challenge for the partners. Since the work was new to both the Barr Foundation and Community Matters, the process was more one of learning together than of providing structure or a road map. As one key stakeholder noted, “We made it up as we went along.” To the extent that a clear definition of experiential education was offered, such as in the Request for Proposals, it was not revisited systematically (for example, at early Knowledge Sessions), nor further developed to provide guidance to schools over time. The rubric provided the first concrete, detailed picture of high-quality experiential education, but it was completed in Year 3, too late to be fully utilized by most schools. The well-received Summer Institute in 2007 also served to provide a more developed understanding and demonstration of experiential education.

While the evolving nature of the initiative and the openness of the partners to change was a strength for the schools with strong histories of experiential education, at other schools, the very flexibility that was helpful in responding to changing needs also proved to be a challenge, as administrators and teachers often struggled with a lack of clarity, structure, processes, expectations, capacity, or even direction.

A related lesson for the foundation and its partners is that providing clarity of expectations regarding the schools’ proposed experiential education activities through an evaluation plan built into the initiative from the outset would address many of the issues stated above. Strong formative evaluation, using baseline and periodically collected data, would identify early on challenges to closing the gap between a theoretical understanding of experiential education and the practical nature of its implementation, both in individual schools and across the seven schools. In addition, public sharing of schools’ experiential education products, whether student work or teacher curriculum units, would promote conversations about shared goals, definitions, and expectations for the initiative.

2. Strong leadership

The importance of leadership team members, and in particular, a principal who has a strong vision of experiential education, cannot be overstated. Building a school culture that embraces, understands, and expects experiential education must come from the top, and be joined by a team of respected staff who can build ownership across the faculty. Experiential education is demanding; teachers succeed in building their capacity for the

work, finding the necessary time, and maintaining their enthusiasm in a context of ongoing support.

While the individual leadership or headmaster was critical, having a leadership team of teachers and other staff also proved central to success at those schools that made the most progress. The PSEED teams worked best in a context of a clear vision of experiential education, regular meetings, and continuity over time. The most effective teams represented the perspectives of a number of different groups in the school, including administration, teachers of different levels, and staff from key departments involved in implementation (e.g., technology services, if media is a key part of the initiative).

3. Adequate staffing

Schools benefited from a paid coordinator with strong content knowledge, sufficient dedicated time, and familiarity with school culture. Most of the PSEED schools struggled with how to staff the initiative over the three years, often trying a series of strategies. The most successful schools benefited from the consistency of a paid, integrated coordinator of the PSEED initiative to guide the work, maintain momentum, provide in-house professional development, and consult with teachers one-on-one. When this person had other roles in the school, there was the advantage of knowing the school culture and curriculum and having legitimacy with staff, but sometimes this also meant the disadvantage of having many other roles and responsibilities, weakening the focus on PSEED work. On the other hand, at several schools, coordinators were hired who did not have a strong history with the school and were not able to build strong relationships with leadership and staff, resulting in a failure to implement PSEED fully, as well as staff turnover in the coordination function.

4. Professional development and technical assistance

Professional development can take many forms, from individual coaching to whole-school or multischool workshops, but without this foundation, progress will be limited. While all the schools included professional development in their PSEED work, often through community partnerships, the quality, depth, and extent varied considerably both between schools and over time. Even in Year 3, many teachers were struggling to reach a clear definition of experiential education and a practical understanding of how to implement it in their classrooms.

As noted above, PSEED as a whole did not begin with a fully developed understanding of experiential education or create the professional development to achieve or share this understanding over time. Many respondents suggested that holding the Summer Institute prior to Year 1 would have supported much clearer and more timely implementation at the schools.

Ongoing professional development opportunities would also have helped schools with new teachers, and in many cases, new leadership, who entered PSEED schools every year. While in several cases professional development was to be provided by community

partner organizations, at times the fit or capacity of these organizations presented a challenge. For some schools, the Summer Institute was able to support this work in Year 3. The structures to share the ideas and approaches of experiential education with individuals new to a school must be in place from the beginning of an initiative like PSEED.

Group presentations and discussions can constitute part of professional development, but hands-on technical assistance and coaching is typically needed for such learning experiences to take hold. Without access to expert technical assistance at either the teacher or leadership levels in the first two years, schools that did not already have strong in-house capacity sometimes floundered. While CCE coaches were a logical choice for technical assistance to PSEED schools, historically CCE coaches develop their coaching agendas based on a school's overall improvement goals rather than on implementing initiatives. Using CCE coaches for PSEED would have required negotiating different ways of developing coaching agendas between school leaders and CCE coaches, as well as, in some cases, building the capacity of coaches to provide assistance in experiential education.

A clear lesson emerging from PSEED is the need to balance cross-school professional development opportunities with more individualized technical assistance to each school. Both are important to provide quality experiential education implementation.

5. Time

All the ingredients of successful experiential education—professional development, leadership team, curriculum development and documentation, constant reflection with subsequent revision, collaborative teaching, development of partnerships, technical assistance, presentation of student work—have one common factor. They require time. At every school, time was noted as a limiting factor and a challenge to successful implementation of PSEED work. In the case of professional development, the fact that their Pilot status enabled all the schools to set aside significant time for professional development and faculty collaboration was helpful, but there were many competing needs and interests for the schools to attend to.

The schools involved in PSEED are entrepreneurial in nature—their innovative practices depend in part on constantly adapting to new opportunities, developing new and better approaches, and enriching their offerings. On the one hand, this means that Pilot schools are adept at integrating new ideas and structures. On the other hand, some schools had difficulty keeping on track with PSEED work in the face of other adjustments, initiatives, and restructuring. In its reflection on the three years of the PSEED initiative, one school notes:

In the three years of the PSEED grant BDEA reduced its evening program by a half, expanded its distance learning program, and ramped up its day program enrollment from 100 to 200 students. Also during this period the staff rewrote and consolidated its set of competencies which all graduating

BDEA students are expected to know and be able to do. The staff also restructured the two-semester calendar into a trimester schedule with each trimester separated by an assessment period where students were determined to be independently competent. Finally, BDEA began an initiative of programming and professional development focused on making the school a trauma sensitive school in order to help our students cope with the impact of everyday violence, poverty, and institutional racism that created obstacles for their academic growth.

Finally, time for PSEED-wide activities was always at a premium. While many respondents voiced frustration with the lack of depth of sharing in the Knowledge Sessions and would have liked more professional development, they also acknowledged that creating the time for deeper sharing or trainings would have been difficult. The lack of utilization of the website, except for reporting purposes, is also a reflection of this issue to some extent; it did not fit easily into existing practices and tasks, and therefore required more time to use. Websites designed by schools for purposes emerging from schools might have encouraged more use.

6. Rigor and relevance

Creating an experience where students enjoy themselves is relatively easy; ensuring that they gain the desired skills and knowledge through this experience is a greater challenge. Integrating content (“rigor”) into experiential education and simultaneously ensuring that the lesson is engaging and relevant for students is an ongoing challenge.

A number of teachers voiced their sense that there was a trade-off between teaching skills such as grammar, which are required to pass state tests, and providing engaging, hands-on learning experiences through experiential education. Many of the respondents noted that they had to find a balance between teaching skills and providing engaging experiences for students. The Young Achievers Experiential Education Rubric (Appendix B5) captures the need for both mastery of grade-level standards and engaging students in holistic learning experiences through field investigation.

In the best of all worlds, rather than a balance between two types of education, students are able to benefit from integration—learning new skills and gaining knowledge through their experiential education opportunities.

Future Steps for PSEED Schools and Beyond

As noted in the section on sustainability, each individual PSEED school is moving ahead with implementing experiential education. In addition, there are a number of products and activities that have resulted from the joint work of the initiative, including: (1) refinement and dissemination of the rubric; (2) development of a network of Pilot schools working together on digital portfolio development; and (3) a Barr Foundation initiative to expand the presence of Expeditionary Learning Schools in Boston that will provide intensive, focused technical assistance on experiential education to a small group of schools. Each

of these outcomes reflects a deeper, more refined understanding of what experiential education is and what it takes to make it happen in urban schools.

The rubric provides a clear understanding of what it looks like when a school and teachers implement high-quality experiential education. Once the rubric is refined, it will be shared with all PSEED schools, some of whom have expressed an interest in continuing to use it, and appropriate administrators at the Boston Public School district. It also will be integrated into the benchmarks for the School Quality Review of Pilot schools in collaboration with CCE. In the long run, the rubric might be used as a tool for self-assessment and in discussion with coaches, as well as in visits to peer schools.

Another possible outcome of PSEED is a proposal currently under development and being considered by the Barr Foundation. A subgroup of PSEED schools that have developed an interest in sharing student work and performance assessments through digital portfolios across a common digital platform will be working together to learn, create common approaches, and develop new and improved assessments in their own schools.

Finally, with support from the Barr Foundation, five Boston schools (some of which may be Pilot and/or PSEED schools) will be working intensively with Expeditionary Learning Schools—Outward Bound (ELS) over the next four years. The project will include 30–35 days of coaching and a similar amount of professional development. In addition, the project will create curriculum maps that deliver the content of the Boston learning standards through experiential education projects (called “expeditions” by ELS). The maps will include examples of specific activities and units, so that teachers do not have to “reinvent the wheel” in order to include high-quality experiential learning opportunities in their classrooms.

Experiential education can be a very broad term, one that is difficult to define at best. Without intensive professional development and technical assistance, and in a context of school-level challenges such as multiple initiatives, limited time, and staff turnover, some schools had difficulty making progress, especially in the first year of PSEED. However, in the end, all the schools were clear about their goals and strategies, and were able to implement them with increasing effectiveness. The schools that had previously embraced deep work on experiential education were able to make real gains in areas such as technology, documentation, and assessment, while those just entering the field came away from the initiative with a much better sense of how to make experiential education work for them. Individual teachers were transformed, and in turn reinvented their classrooms. Schools embraced new visions of what experiences that combine content and engagement can look like. The next steps that schools and partners are taking—including the final revisions to the rubric, new work on assessment through digital portfolios, and intensive experiential education implementation—all reflect the powerful effects of the three years of the PSEED initiative.

Appendix

Appendix A: Instruments used in Documentation Project

A1: PSEED Rubric

Focus Area 1: Curriculum

Guiding Questions

- How is your curriculum authentic?
- How is your curriculum content rich and challenging?
- What are the indicators of student engagement? How do you know the curriculum is engaging to a range of learners?
- What kinds of performance based assessments or authentic learning do students experience?
- How does the curriculum support active reflection by teachers and students?
- How is the four-step cycle of experiential education evident in teaching and learning?

Sample Evidence

This list provides examples of concrete things you would see if this focus area is being fully implemented. The list is not all inclusive, nor would one expect every activity to be happening in every school. The list is meant to guide evidence collection.

- Samples of student work from different content areas and grade levels
- Notes and videotapes of classroom and instructional approaches
- Course and curriculum descriptions
- Culminating projects and tasks for individuals and groups
- Teacher- and class-generated rubrics
- Reading material that covers a wide range of interests and levels
- Standardized test scores

Directions: Please circle the response, in each row, that best describes your school.

		<i>Most of time</i> 4	<i>Some of Time</i> 3	<i>Begin- ning to occur</i> 2	<i>Not at all</i> 1	<i>Don't know or Not applic- able</i> 0
Authentic						
1A	Classroom content is relevant to students' experiences.	4	3	2	1	0
1B	Content and projects are relevant beyond the classroom and school.	4	3	2	1	0
1C	Curriculum development and implementation uses the expertise of practitioners in the content area.	4	3	2	1	0
1D	Curriculum allows for intra- and inter-disciplinary experiences and inquiries.	4	3	2	1	0
1E	Curriculum implementation requires students to conduct field and community work outside the school building.	4	3	2	1	0
1F	Students and teachers use primary source materials in their inquiry.	4	3	2	1	0
Content Rich						
1I	Students understand key concepts through their experiences working in and across disciplines (as writers, mathematicians, scientists, etc.).	4	3	2	1	0
Engaging						
1Ja	Curriculum experiences expand student perspectives on diverse cultures.	4	3	2	1	0
1Jb	Curriculum experiences expand student perspectives on diverse learning styles in classrooms and content areas.	4	3	2	1	0
1L	Students understand the purpose for their work.	4	3	2	1	0
1M	Students develop and modify their theories through discussion.	4	3	2	1	0

Project and Performance Based						
1P	The process and outcomes of creating products and performances provide the structure through which students demonstrate understanding and make learning visible.	4	3	2	1	0
1R	Teachers and students reflect alone and in groups on what they learned through the process of creating meaningful products.	4	3	2	1	0

Focus Area 2: Pedagogy

Sample Evidence

This list provides examples of concrete things you would see if this focus area is being fully implemented. The list is not all inclusive, nor would one expect every activity to be happening in every school. The list is meant to guide evidence collection.

- Teacher portfolios
- Lesson plans
- Teacher assignments and project units
- Multiple forms of assessment
- Student and parent feedback through surveys, discussion, or focus groups

Guiding Questions

- Is instruction inquiry-based?
- How are students grouped for instruction?
- Are there flexibility in and a variety of instructional approaches?
- Is risk-taking encouraged?
- How is student leadership encouraged?
- How is reflection embedded in teaching and learning?
- How is assessment used to determine student achievement?
- How is the four-step cycle of experiential education evident in teaching and learning?

Directions: Please circle the response, in each row, that best describes your school.

		<i>Most of time</i>	<i>Some of time</i>	<i>Begin- ning to occur</i>	<i>Not at all</i>	<i>Don't know or Not applic- able</i>
		4	3	2	1	0
Inquiry-based						
2A	Instruction requires students to pose questions, solve problems, and construct meaning.	4	3	2	1	0
Flexible						
2D	Classroom grouping structures vary (individual, small groups, large group) depending on what the experience or product requires.	4	3	2	1	0
		<i>Most of time</i>	<i>Some of time</i>	<i>Begin- ning to occur</i>	<i>Not at all</i>	<i>Don't know or Not applic- able</i>
4	3	2	1	0		
2G	Educational experiences include the possibility of learning from mistakes, risk-taking, and unpredictable outcomes.	4	3	2	1	0
Active						
2H	Curriculum consistently provides opportunities for students to handle, explore, experiment, and work with materials.	4	3	2	1	0
Reflective						
2N	Student and teacher reflections address what they learned as well as what they did.	4	3	2	1	0
2O	A coherent system of assessment contributes to ongoing reflection and evaluation. The system is designed to include multiple forms such as performances, exhibitions, portfolios, conferences, tests, and quizzes.	4	3	2	1	0

Focus Area 3: School Culture

Sample Evidence

This list provides examples of concrete things you would see if this focus area is being fully implemented. The list is not all inclusive, nor would one expect every activity to be happening in every school. The list is meant to guide evidence collection.

- Notes and agendas from teacher collaborative planning time meetings
- Interviews and/or surveys of teachers reflecting on planning and professional development activities
- Agendas and meeting minutes from various groups, such as leadership teams, full faculty, grade level teams, parents, and community members.
- Explicit team missions, goals, and norms
- Peer observation protocols and notes
- Professional development schedule for the school year

Guiding Questions

- How are high expectations and standards communicated through the curriculum and pedagogy?
- Are student and teacher learning in and outside the classroom?
- What is evidence of staff collaboration?
- What is the quality of discourse between and among teachers and students?
- How are parents and community connected to the work of the school?

Directions: Please circle the response, in each row, that best describes your school.

		<i>Most of time</i>	<i>Some of time</i>	<i>Begin- ning to occur</i>	<i>Not at all</i>	<i>Don't know or Not applic- able</i>
		4	3	2	1	0
Quality-focused						
3A	Students engage in and discuss rigorous content through the experiential education learning process.	4	3	2	1	0
3B	Students create displays, presentations, and performances with significant care, preparation, and high standards.	4	3	2	1	0
Collaborative						
3D	Teachers and other staff and administrators use regular opportunities to expand and deepen their understanding of experiential education during their meeting times.	4	3	2	1	0
Visible						
3F	Displays of student work are accompanied by teacher and student reflections. This is visible throughout classrooms, hallways, and performance assessments.	4	3	2	1	0
3I	Students and teachers are responsible for communicating their learning to the community beyond the classroom.	4	3	2	1	0
3J	Parents and community members are actively a part of the learning and creation of products and performances.	4	3	2	1	0
3K	Community partnerships expand and deepen the experiential education curricula and authentic learning opportunities.	4	3	2	1	0

Focus Area 4: Structures

Sample Evidence

This list provides examples of concrete things you would see if this focus area is being fully implemented. The list is not all inclusive, nor would one expect every activity to be happening in every school. The list is meant to guide evidence collection.

- Governance documents
- Budget summary
- School improvement plan
- School professional development goals
- Description of governance bodies
- Decision making processes
- School partnerships
- School schedule and calendar (teachers and students)

Guiding Questions

- What is the evidence of shared leadership?
- How do schedules and school structures support experiential learning?
- How are classes organized to support quality learning experiences within and across disciplines?
- How does the budget support experiential education and the mission of the school?
- How does leadership ensure good communication within the school community?
- Describe the decision making bodies and processes in the school.

Directions: Please circle the response, in each row, that best describes your school.

		<i>Most of time</i>	<i>Some of time</i>	<i>Begin- ning to occur</i>	<i>Not at all</i>	<i>Don't know or Not applic- able</i>
		4	3	2	1	0
Supportive Leadership						
4Aa	School leadership promotes experiential education as an essential part of preparing students for high levels of achievement.	4	3	2	1	0
4Ab	Leadership defines student achievement as inclusive of multiple assessments.	4	3	2	1	0
		<i>Most of time</i>	<i>Some of time</i>	<i>Begin- ning to occur</i>	<i>Not at all</i>	<i>Don't know or Not applic- able</i>
		4	3	2	1	0
4B	The school leadership connects experiential education to school improvement goals	4	3	2	1	0
4C	The school's teacher evaluation processes encourage the integration of experiential education into their practice.	4	3	2	1	0
4D	Leadership is shared among administrators, staff, and other members of the school community in areas of decision-making and implementation of school goals.	4	3	2	1	0
4E	The school's budget supports experiential education.	4	3	2	1	0
4F	School partnerships are meaningful and support the vision and mission of the school.	4	3	2	1	0

Flexible Schedule						
4G	The schedule includes long blocks of flexible time for instruction and collaboration.	4	3	2	1	0
4H	The school day is structured for regularly scheduled opportunities for teachers to share curriculum, pedagogy, and dilemmas about practice.	4	3	2	1	0
Flexible Structures						
4I	The school calendar builds in time and structures for portfolios, exhibitions, and presentations.	4	3	2	1	0
Inclusive Student Groupings						
4J	Class size and student: staff ratios are low enough to allow for high quality experiential education experiences.	4	3	2	1	0
4K	Learning groups within classrooms are heterogeneous.	4	3	2	1	0

A2: Rubric Averages by School

Table 1: School Culture Rubric Means, by School (identified by numbers 1-7)

		1	2	3	4	5	6	7
Quality-focused								
3A	Students engage in and discuss rigorous content through the experiential education learning process.	2.63	3.83	3.00	3.33	2.78	3.60	2.86
3B	Students create displays, presentations, and performances with significant care, preparation, and high standards.	2.50	3.83	3.07	3.50	3.22	3.14	3.00
Collaborative								
3D	Teachers and other staff and administrators use regular opportunities to expand and deepen their understanding of experiential education during their meeting times.	2.88	3.67	3.10	2.67	2.89	3.00	2.80
Visible								
3F	Displays of student work are accompanied by teacher and student reflections. This is visible throughout classrooms, hallways, and performance assessments.	3.38	3.33	2.66	2.33	2.78	2.14	2.83
3I	Students and teachers are responsible for communicating their learning to the community beyond the classroom.	2.88	4.00	2.62	2.67	2.67	3.50	2.83
3J	Parents and community members are actively a part of the learning and creation of products and performances.	2.13	3.33	2.81	2.00	2.33	3.67	2.33
3K	Community partnerships expand and deepen the experiential education curricula and authentic learning opportunities.	2.25	3.67	3.08	2.33	2.67	3.43	3.20

Table 2: Curriculum Rubric Means, by School (identified by numbers 1-7)

		1	2	3	4	5	6	7
Authentic								
1A	Classroom content is relevant to students' experiences.	3.38	3.83	3.29	3.67	3.33	3.71	3.00
1B	Content and projects are relevant beyond the classroom and school.	3.25	4.00	3.15	3.50	3.22	3.43	3.14
1C	Curriculum development and implementation uses the expertise of practitioners in the content area.	1.88	3.17	2.55	2.67	2.67	3.57	3.00
1D	Curriculum allows for intra- and inter-disciplinary experiences and inquiries.	2.88	4.00	2.95	3.33	3.44	3.57	3.00
1E	Curriculum implementation requires students to conduct field and community work outside the school building.	2.00	3.33	2.69	2.67	2.78	2.67	2.71
1F	Students and teachers use primary source materials in their inquiry.	3.33	3.67	2.76	2.60	3.00	3.40	2.50
Content Rich								
1I	Students understand key concepts through their experiences working in and across disciplines (as writers, mathematicians, scientists, etc).	3.38	3.83	2.94	2.67	2.89	3.71	2.86
Engaging								
1Ja	Curriculum experiences expand student perspectives on diverse cultures.	2.25	3.67	3.00	3.00	2.89	3.80	2.50
1Jb	Curriculum experiences expand student perspectives on diverse learning styles in classrooms and content areas.	3.00	3.50	2.87	3.17	3.22	3.67	2.50
1L	Students understand the purpose for their work.	3.13	4.00	2.98	3.00	3.11	3.71	3.29
1M	Students develop and modify their theories through discussion.	2.63	3.67	2.64	2.50	2.78	3.86	3.00

Project and Performance Based								
1P	The process and outcomes of creating products and performances provide the structure through which students demonstrate understanding and make learning visible.	3.00	3.83	3.03	3.17	3.22	3.86	3.17
1R	Teachers and students reflect alone and in groups on what they learned through the process of creating meaningful products.	3.00	3.33	2.66	3.00	3.00	3.83	2.86

Table 3: Pedagogy Rubric Means, by School (identified by numbers 1-7)

		1	2	3	4	5	6	7
Inquiry-based								
2A	Instruction requires students to pose questions, solve problems, and construct meaning.	2.88	4.00	3.18	3.33	3.50	4.00	3.29
Flexible								
2D	Classroom grouping structures vary (individual, small groups, large group) depending on what the experience or product requires.	3.88	3.83	3.61	3.20	3.70	3.71	3.50
2G	Educational experiences include the possibility of learning from mistakes, risk-taking, and unpredictable outcomes.	3.63	3.67	3.10	3.17	3.50	4.00	3.29
Active								
2H	Curriculum consistently provides opportunities for students to handle, explore, experiment, and work with materials.	3.50	3.83	3.21	2.83	3.20	3.86	2.86
Reflective								
2N	Student and teacher reflections address what they learned as well as what they did.	3.00	3.50	3.03	2.33	3.00	3.83	3.00
2O	A coherent system of assessment contributes to ongoing reflection and evaluation. The system is designed to include multiple forms such as performances, exhibitions, portfolios, conferences, tests, and quizzes.	1.63	3.67	2.74	3.00	3.00	3.71	3.14

A3: Documentation List

For as many of the three years as possible, we would like to collect the following documentation:

- Calendar of meetings about experiential education
- School-wide professional development plan and schedule for the year
- Minutes and agendas of meetings about experiential education, including dates, times, attendees, if they exist
- Explicit experiential education team mission, goals, and norms, if they exist

In order to prepare a description of the PSEED work at your school, the following types of documentation would be helpful to the team. If you have any of the items in the list below, please allow the team to review them:

School-wide documentation

- Media stories (print and video) about EE at the school
- School and community newsletter stories about EE at the school
- School documents that describe the school's instructional philosophy and practice
- Agendas and meeting minutes from various groups, such as leadership teams, full faculty, grade level teams, parents, and community members

Staffing

- Job descriptions of staff for EE
- Names and information about consultants that provide EE professional development or services

Teacher practice

- Teacher portfolios
- Peer observation protocols and notes
- Interviews and/or surveys of teachers reflecting on planning and professional development activities
- Notes and videotapes of classroom and instructional approaches
- Course and curriculum documents such as unit descriptions, standards developed by the school
- Teacher- and class-generated rubrics
- Sample lesson plans, assignments, and assessments
- Reading lists (that cover a wide range of interests and levels)

Student work, reflection, and feedback

- Photographs of students engaged in EE work
- Photos, scans, or artifacts of student work and relevant context information (about students, learning goals, assessment, rubrics, etc) from an experiential unit, lesson, or project. We do not need student names.
- Culminating projects and tasks for individuals and groups—assignments and student work
- Student and parent feedback through surveys, discussion, or focus groups.

A4: Teacher Interview Protocol

Thanks for making the time for this interview. As you know, the goal of the Documentation Project is to capture what happened over the course of PSEED and why. I'd like to ask you some questions about how PSEED has played out, how things have changed over time, and where you see it going. Your comments will be kept confidential in the full report on the documentation project, which will be shared with others (Barr, other grantees, etc.) However, in the optional, internal report that we will prepare for your school at your request, it may not be possible to keep confidentiality. Therefore, please let us know if you would like to be sure that any of your comments are kept confidential in your internal report as well.

Implementation

1. What is your role in the school? How long have you been at _____ (school)?
What has your role been in PSEED? Have you been involved all 3 years?
2. Could you talk about your own definition of experiential education? Has it changed over the course of the PSEED project?

Next, I would just like to hear a little bit about the “story” of PSEED at your school.

3. My understanding is that your school's plan was to focus on _____. Is that correct? How did this focus manifest itself in your classroom?
4. Could you give some examples of projects or expeditions that you have implemented since PSEED? What was the most and least successful about them? What experiential education work/units are you planning currently?
5. What were your goals for focusing on _____? Why did your school choose this approach? How did it fit with your teaching goals?

6. Fill the table out together. Looking for trends, not exact information unless easy.

	Year 1	Year 2	Year 3
Did you work with consultants, specialists, volunteers, parents, community organizations and if so, how?			
Did you work with other teachers involved in implementing PSEED and if so, how?			
Did you participate in professional development for PSEED (includes Knowledge Sessions)?			
What was your experience of technical assistance for PSEED, from CM, CCE, other orgs?			
What structures in your school supported the implementation of PSEED? (leadership, schedule, student groupings, etc.)			

7. What are the major challenges you have faced in implementing PSEED in your classroom?

- Expectations from the Foundation, CM, and others
- Other teachers' resistance to the PSEED work? (If yes, describe why you think some staff were resistant)
- Resources (money, professional development time) to carry out your work?
- Multiple other initiatives
- Embedding EE rather than having it as an add-on
- Other

Inputs

This section addresses whether or not you received the support you needed to implement your PSEED goals.

1. What role, if any, did CCE coaches play in your PSEED work? What was the content of the coaching? How has this gone? Has the coach been helpful to you? What else might have been helpful to you in terms of coach support for PSEED?
2. What roles have Lainy and Andrew from Community Matters played? Has this been helpful to you? What else might have been helpful to you in terms of CM support for PSEED?
3. Have you attended the Knowledge Sessions? About how many? What do you see as the purpose of the Knowledge Sessions? In general, were they helpful to you in your teaching practice? Think about one that was especially good—what do you remember about it?
4. Did you attend the Summer Institute? If not, why? If so, tell me about how it went. Do you feel that it was useful to you? If so, what did you get out of it? Did you do anything differently this year as a result of the Summer Institute? Was it useful for staff? What might have made it more useful for your school?
5. What about the website? Have you used it? Has it been useful?
6. What other supports (people, professional development, resources) have you received related to implementing experiential education? How and to what extent have they been helpful to your practice?

Changes

Now I'm going to ask some questions about changes have occurred as a result of your involvement in PSEED, and what's likely to last or continue to change over the long run.

7. If you think back to your teaching before you first became involved in PSEED, is your teaching practice different as a result of PSEED? If so, how?
 - a. Do your assignments differ? Examples?
 - b. Do your students create different products? Examples?
8. How is your experience of the school culture, for example the collaboration among adults, or the tone of respect among teachers and students, different as a result of PSEED, if at all? Examples?
9. Are these changes likely to be maintained over time in your classroom (*refer to changes noted above, in curriculum, pedagogy, school culture*)? If so, what would maintain them?

10. What strategies and products have you used to assess the progress of your PSEED work?

- a. Sharing student work (describe)
- b. Portfolios
- c. School presentations/fairs/performances
- d. Staff discussions/PD
- e. Rubric
- f. Other

11. Would you say that your PSEED teaching activities and approaches have had an effect on student engagement? If so, in what ways? How can you tell?

12. Would you say that these changes have had an effect on student performance? If so, in what ways? How can you tell?

13. What have you found are the most successful ways to embed experiential education in your teaching (curriculum or pedagogy)?

A5: Principal/Point Person Interview Protocol

Thanks for making the time for this interview. As you know, the goal of the Documentation Project is to capture what happened over the course of PSEED and why. I'd like to ask you some questions about how PSEED has played out, how things have changed over time, and where you see it going. Your comments will be kept final in the full report on the documentation project, which will be shared with others (Barr, other grantees, etc.) However, in the optional, internal report that we will prepare for your school at your request, it may not be possible to keep confidentiality. Therefore, please let us know if you would like to be sure that any of your comments are kept confidential in your internal report as well.

Implementation

1. What has your role been in PSEED? Have you been involved all 3 years? How long have you been at _____ (school)?

First I would just like to hear a little bit about the “story” of PSEED at your school.

2. My understanding is that your plan was to focus on _____. Is that correct?
3. What were your goals for focusing on _____. Why did you choose this approach?
4. *Fill the table out together. Looking for trends, not exact information unless easy.*

	Year 1	Year 2	Year 3
Staffing for PSEED, including newly defined staff roles, consultants, specialists, volunteers, parents, community organizations			
Teachers by grade and subject involved in implementing PSEED			
Professional development for PSEED (includes Knowledge Sessions?)			
Technical assistance for PSEED, from staff Barr staff, CCE, other orgs			

5. What are the major challenges you have faced?
 - Expectations from the Foundation, CM, and others
 - Staff resistance to the PSEED work? (If yes, describe why you think some staff were resistant)
 - Resources (money, professional development time) to carry out your plans?
 - Multiple other initiatives
 - Embedding EE rather than having it as an add-on

Inputs

This section addresses whether or not your school received the support it needed to implement your PSEED goals?

6. What role did CCE play in your PSEED work? What was the content of the coaching? How has this gone? Has the coach been helpful to you? What else might have been helpful to you in terms of coach support for PSEED?
7. What roles have Lainy and Andrew from Community Matters played? Has this been helpful to you? What else might have been helpful to you in terms of CM support for PSEED?
8. Have you attended the Knowledge Sessions? About how many? What do you see as the purpose of the Knowledge Sessions? In general, were they helpful to you? Think about one that was especially good—what do you remember about it?
9. Did you attend the Summer Institute? If not, why? If so, tell me about how it went. Do you feel that it was helpful to you? To staff? What might have made it more useful for your school?
10. What about the website? Have you used it? Has it been useful?

Changes

Now I'm going to ask some questions about changes have occurred as a result of your involvement in PSEED, and what's likely to last or continue to change over the long run.

11. How is your school different as a result of PSEED, if at all? (Tell them that these are the categories of the rubric)
 - a. curriculum (project-based, content rich, authentic)
 - b. pedagogy (reflective, inquiry-based)
 - c. culture (collaborative, visible)
 - d. structures (supportive leadership, flexible structures)
 - e. teacher and student products
12. Are these changes likely to be maintained over time (*refer to changes noted above, in curriculum, pedagogy, school culture, and structures*)? If so, what would maintain them?

13. What strategies and products have you used to assess the progress of the PSEED work of teachers and students:
- Sharing student work (describe)
 - Portfolios
 - School presentations/fairs/performances
 - Staff discussions/PD
 - Rubric
 - Other
14. Would you say that your PSEED activities and approaches have had an effect on student engagement? If so, in what ways? How can you tell?
15. Would you say that these changes have had an effect on student performance? If so, in what ways? How can you tell?
16. What have you found are the most successful ways to embed experiential education in your current school curriculum and practices?
17. What is your definition of experiential education? How, if at all, has that changed over the course of the past 2 years?

A6: Observation Guide

Observation essentials

- Know as much as you can about the program you are observing before the observation
- Observe broadly, all the events and activities, not just the formal activity
- Be sure to document what you observe immediately and transcribe it soon

Other Observation guidelines

- Note who is engaged and not engaged, level of participation
- Write quotes as much as possible
- Distinguish judgment and interpretation from what actually happened by using parentheses or other marker
- Setting includes description of room, arrangement of desks and people
- Describe all groupings, large, small, spontaneous

PSEED Observation for Documentation Project

Date: _____

School Name: _____

Event: _____

Location, describe
setting: _____

Number of participants (by role—students, teachers, administrators, family, other staff):

Observation Notes (include times at intervals):

Time at beginning:

Time at end:

Appendix B: Documentation Exemplars from Schools

These documentation exemplars were chosen from many others, in part because they do not identify individual students in photos or by other means.

B1: Lee Academy Wheelock Professional Development

Workshop # 5

Ellie Friedland

Wheelock Family Theatre-Lee Academy Pilot School Drama Partnership

Year One: Workshop # 5: *Enlivening Curriculum Through Drama and Movement*
Instructor: Dr. Ellie Friedland, Wheelock College and the Wheelock Family Theatre
Thursday, April 13, 2007 3:00-5:00pm
Lee Academy Pilot School, 144A Talbot Ave., Dorchester, MA 021234

Agenda

3:00-3:10 Sign in, meet and greet

3:10- 3:25 Warm Up and Games

3:25-5:50 Examples of drama and movement games, structures and techniques to enliven dry curriculum and engage children actively:

- Magic Box
- Transformation Box
- Sound and Motion for action verbs, spelling words, punctuation
- Color My Words
- Movement to teach verbs and adverbs
- Statues of historic moments
- Body Sculptures of Letters and Spelling Words
- Creating a Character Who Knows Less Than the Children
- Character Interviews
- Commercials for Historical Events, Science Concepts, Verbs and Nouns
- Math Through Movement
- Texture Walk
- Environments Walk
- Movement for Paying Attention and for Teaching Opposites
- Pre-Writing Character Profiles
- If I Had My Way Scenes

4:50-5:00 Teachers fill out written feedback forms and discuss follow-up visits

Handout: Please read this article for the next Workshop:
Story Dramatization: More Than a Fun Activity by Ellie Friedland

B1: Lee Academy Wheelock Professional Development

Workshop 5

Warm Ups and Games

Ellie Friedland

Sound and Motion

Possible Objectives/Curriculum Applications

Warm up bodies and increase expressiveness
Gain comfort expressing yourself physically and verbally
Nonverbally express the meaning of Action Verbs
Nonverbally demonstrate nouns, punctuation, animals, environments, etc.
Assess children's knowledge in any of the content above.

Helpful Rules

Stay in your spot in the circle
No talking
No touching others

Procedure

All stand in a large circle
Each person will take a turn
First person goes into the center and lets a movement come from her body, whatever her body feels like doing, and let it become a repetitive movement, with a repetitive voice sound.
Everyone around the circle does her movement with her, matching it as closely as possible.
She moves around so all can see her facial expression, details of her movement, and she checks that each person has her movement and sound accurately.
Then she moves out of the circle, still doing her sound and movement. All are still doing it—the movement and sound never stop in this game.
She moves toward a person in the circle, indicating it is that person's turn next.
He then moves into the circle still doing her sound and movement.
Then he allows the movement and sound to gradually change into a new repetitive sound and movement; all do it along with him the whole time.
He checks everyone, continues the cycle.
Toward the end of the game leader can ask those who haven't had turns to put their hands up so the mover knows who to pick from.

Add your own extensions and variations:

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Silent Verbs and Adverbs

Possible Objectives/Curriculum Applications

Learning what verbs and adverbs are
Comprehension of specific verbs and adverbs
Learning interesting verbs and adverbs for more colorful expression and writing
Learning verbs and adverbs in another language
Learning to read words by sight

Helpful Rules

Silence
Move in a designated space
No touching each other
Keep your feet on the floor

Procedure

Leader makes up large signs ahead of time with selected verbs. Hold each verb up so all can see. They move the way it says to move.
Same with adverbs except you decide one way to move for every word—we will always walk but the words will tell you how to walk.
Leader can say the words or not, or call on individual children to say each word

Add your own extensions and variations:

Magic Box

Possible Objectives/Curriculum Applications

Increase nonverbal expressiveness
Understand concrete objects –weight, size, shape
Practice or review letter sounds or letter combinations
Practice, review, or assess content knowledge in various categories: healthy foods, beginning or ending sounds, consonant or vowel sounds, everything in the box is something you'd see or use in an environment, a product of a country, etc.

Helpful Rules

Make an audience space and a stage space
Each person takes a turn when he or she has an idea; go as soon as the person before you puts her object back
No talking when you take your turn
Everyone's box can be different
Make sure your box opens facing the audience
No talking when you are audience except to guess the object
Calling out what you think objects are is fine
Things you find in the Magic Box can be bigger than the box

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Procedure

Leader creates a Magic Box, demonstrates opening it facing the audience
Each person will find something in the box that fits the category, and will take it out and use it.
You do not need to create it—it exists already. Show its general size, weight and shape as you take it out of the Box; then use it (silently).
Audience says what it is, and when they are correct, put your object back in the box.

If children are reluctant to take turns, each person can point to the person to go next after she puts her object back into the box.

Variation, with same basic structure, rules, and procedure: Packing a Suitcase

Possible Objectives/Curriculum Applications

Same as for Magic Box
Learning about environments or countries: pack what we would need to go to a rain forest, or to Alaska, or a space mission, etc.
Pre-writing activity: plan for details about a place or trip you will be writing about, etc.

Add your own extensions and variations:

Color Your Words

Possible Objectives/Curriculum Applications

Increasing verbal expressiveness
Increasing expressiveness, clarity and projection (being loud enough) in reading and speaking
Increasing comprehension of words through verbal expression
Learning new words to make writing more expressive

Helpful Rules

Try not to use your body to express the meaning of the words
Exaggerate with your voice
Stay in your spot in the circle or with your partner

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Procedure

Structure can be in a circle, everyone repeats each word after the leader, all at the same time; or in pairs.

Leader can say the words or just hold up large paper with each word written on it.

The guidelines are: leader will count 1-2-3 and on 3 say the word so that you express the meaning of the word by how you say it. Do not express the meaning with your body, even though we usually do—this is to exaggerate expression with your voice.

Say each word one time. If in pairs, say it to your partner, then he says it back to you.

Some good words for this game:

cold	stormy	parched	harsh
warm	calm	soggy	sad
freezing	thunder	giggly	smooth
sweltering	weepy	wavy	brisk
breezy	grim	relaxed	crunchy
still	stern	spongy	tender
windy	rustle	happy	angry
frightened	warm	soft	proud

Add your own extensions and variations:

Listen to Move

Possible Objectives/Curriculum Applications

Practice listening and paying close attention

Keeping track, remembering multiple facts at once

Quick thinking/responding in the moment

Learning opposites

Helpful Rules

Silence

Move in a designated space

No touching each other

Keep your feet on the floor

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Procedure

Walk around the room and listen for leader's instruction.
Leader says walk, run, etc a few times to warm up the group.
Then: leader says: When I say "walk," you stop. When I say "stop," you walk.
Do that a few times.
Now add to this: When I say "say your name" you jump. When I say "jump" you say your name.

Do this with opposites, any instructions you want to add.

Add your own extensions and variations:

Group Counting

Possible Objectives/Curriculum Applications

Voice control and modulation
Practice being loud
Learning to count by 1's, 2's or any #
Learning any sequence you need to memorize

Helpful Rules

All sit or stand in a circle
Listen carefully, no talking except the counting

Procedure

We will all count together by two's or whatever the sequence is: start when leader says 1-2-3.
Tell the group how high to go.
Start as soft as you can and still be speaking, gradually get louder and louder till at the last number or word in the sequence you are at top voice, the loudest you can be. Be careful not to get there too soon.

Add your own extensions and variations:

B1: Lee Academy Wheelock Professional Development

Rock Star Nursery Rhyme

Possible Objectives/Curriculum Applications

Increasing verbal expressiveness

Increasing expressiveness, clarity and projection (being loud enough) in reading and speaking

Increasing comprehension of words through verbal expression

Understanding a character in a story (express like that character)

Helpful Rules

Focus on your partner

Use your body and voice full out

Exaggerate and have fun

Procedure

Group decides a nursery rhyme or ditty everyone knows – if there isn’t one, leader can give the group an easy rhyme

Everyone stands facing a partner

Pick an A and a B in each pair—just to know whose turn it

A’s or B’s go first

When leader says Go, A sing the rhyme to your partner one time all the way through

As soon as A finishes, B sing it to A. Leader will give you the way to sing it—each will be your own version of the expression

Ways to sing:

Like a rock star

Like a Marine sergeant

Like a opera singer

Very very softly

Like a radio announcer telling a suspense story

Like a preacher

Like your favorite first grade teacher

Like an extreme character in a story or play you have read

Add your own extensions and variations:

B2: YA Curriculum Development

Running Summary of YA PSEED Related Projects, 2006-07

School/Town:

Site name

Last updated:

Date

Grade(s)	Unit/ Curric. Area/ Standards	Project or Activity	Partners/ Who all is Involved?	Time Frame	What type of support is PSEED providing?	<i>What are the most interesting results of this project? (NOTE: Specific details and complete sentences make this data more useful for now. It can be edited for clarity and brevity later.)</i>
K	Social Studies, Literacy, Art	Family Story	Children's Families, Local building contractor	Early Winter	Curriculum planning, materials support, class support for project	Families told their stories of social justice during family presentation, powerful sharing about how the many families in the class have been impacted by social justice
K	Science	Field experiences connected to curriculum	Local building contractor, Boston Nature Center, Forest Hills Cemetery	Fall	Curriculum planning, field trip curriculum and planning support	Students visited BNC connected to its Butterfly unit if study and followed up with visits to Forest Hills cemetery. Students visited housing construction across the street as part of its buildings and structures unit.
1	Social Studies, Science, Literacy, Art	Farms and Markets	Several local farms	Fall into spring	Facilitating small "study groups", curriculum planning	Students begin a year of study with several trips to local food growing places. Students are broken in to small study groups to study one aspect in particular (compost, cows etc.) These are written about in a big book and presented during family presentations.
1	Social Studies, Science, Literacy	Social Justice	Re-Vision House	Winter	Relationship Building with Re-Vision House, Curriculum planning	Students visit Re-Vision house to understand the social justice issues associated with food. Students produced a book about the issues.
1	Social Studies, Science, Literacy, Math, Art, Music	Gardens	School Yard Garden, Re-Vision House	Spring	Relationship building with Re-Vision House, Curriculum planning, Materials and Supplies help, Study group support	Students created a schoolyard garden, used Re-Vision house gardens as model. Project culminated with the eating of a salad from the garden at end of year. Signs were made, math was used to plan garden, human connections to food were studied.
2	Art, Social Studies, Literacy, Music	Neighborhood Studies	Urban Edge, DSNI, Villa Victoria, Boston Duck Tours, Prudential Center	Year Long	Curriculum planning, field trip scheduling and staff support, curriculum materials	Students studied 3 different Boston Neighborhoods, and looked as the issue of affordable housing specifically as a social justice issue. Students worked with Urban Edge to do a role play about affordable housing and presented their work at the school's MLK social justice assembly. The year culminated with a spectacular song they composed about Boston Neighborhoods.
3	Social	Wampanoag	Plimouth	Year Long	Curriculum planning,	Students visited Plimouth plantation Arnold Arboretum

COSEED Project Summary, Page /

B2: YA Curriculum Development

	Studies, Literacy, Art	Studies	Plantation, Arnold Arboretum, Native American Speaker, Maparium	field trip scheduling and staff support, curriculum materials	to look study native Americans. Students created plays during their club times and presented at family presentation about their research on native Americans.
4	Art, Social Studies, Literacy, Science	Early Colonization	Home Depot, Plymouth Plantation, Maparium, Harvard Natural History Museum, Blue Hills Reservation, Game of Village Program	Fall	Students interviewed early settlers from Plymouth. Based on these interviews they chose a Plymouth character and made a small doll version in art. They then settled the vacant lot across the street and built scale homes. In language arts students wrote character sketches about their dolls. This culminated in a family presentation.
4	Social Studies, Literacy, Science	Electrical Circuits	Northeastern	Winter	Curriculum planning, field trip scheduling and staff support, curriculum materials, support with design and construction of homes
5	Science, Literacy	Ecosystem Studies	Forest Hills Cemetery, Children's Museum	Fall/Winter	As part of their study about the 13 original colonies, students made a large map. For their science projects on electrical circuits they made push button light indicators for key places on the map of the 13 original colonies.
5	Social Studies, Literacy, Science, Art	Early Am History	Field trips to numerous Boston Early American History Sites	Spring	Students explored the ecosystem of Forest Hills Cemetery and then built 4 ecosystems at school - Pond life, wetland, underwater plants and an outdoor pond. They presented their findings along with ecosystem research during science night.
5	Social Studies, Literacy, Science, Art	Simple Machines		Spring	As part of their early American history studies, students visited numerous Boston sites including the Constitution, Faneuil Hall, Constitutional Hall, Tea Party Site etc.
6	Social Studies, Literacy	Ancient Civilizations	Courageous Sailing, Boston Harbor Islands, National Parks Service, Appalachian Mountain Club Re-Vision house, Local	All Year	A small group of students created a water wheel in the schools outdoor water feature. Curriculum connected to science simple machines unit and social studies early industrialization units.
7	Social Studies,	Sustainability and Recycling		All Year	Students spend the year studying different ancient civilizations. Field based experiences are used to help students understand what early explorers and settlers of ancient civilizations experienced, felt and had to deal with. Students spent the fall sailing on Jamaica pond and in the spring did an overnight trip to one of the Boston Harbor Islands.
					As part of their year long unit on sustainability, students implemented a school wide recycling program. This

CO-SEED Project Summary, Page 2

B2: YA Curriculum Development

	Literacy, Science, Art	recycling center,			
8	Social Studies, Literacy, Science, Art	Blue Hills, Forest Hills Cemetery, Local Haitian, Kenyan and Sudanese groups, Urban Ecology Institute, Boston Nature Center,	All Year	Curriculum planning, field trip scheduling, and staff support, curriculum materials	culminated with a presentation to families about the work they did and what families can do to recycle in their own homes.
All	Science, Literacy	Science Night	Early Spring	Curriculum planning, field trip scheduling and staff support, curriculum materials, science night set up	As part of a year-long study looking at how a country's environmental condition and specifically deforestation impact the people who live there. Students interview people from these countries, visit local resources to understand deforestation. This culminates with the student's portfolio presentation, which they much accomplish at high standards to graduate. Students also finish written research projects about two of these countries.
All	Social Studies, Literacy, Science, Math, Art- all case specific	Family Presentations	Throughout the year	Curriculum planning, field trip scheduling and staff support, curriculum materials, family presentation set up	Whole school presentation for what is happening in science. All exhibits had elements of hands-on experiences and learning. Many were culminating or ongoing exhibitions about what students were learning in science through experiential education. Grades k-5 are required to do family presentations, Grades 6-8 have the options. All grades presented their work to families, all projects were the culminating work of the experiential curriculum classes have been involved in doing. There is a noted improvement in the quality of these presentations and the engagement students have for presenting their work since experiential education has been integrated throughout the school.
All	Social Studies, Literacy, Science, Math, Art, Music	MLK Celebrations	Winter	Curriculum planning and materials support	All grades presented some aspect of their experiential units during the school's annual social justice assembly. All units explained the connection between social justice and their experiential units.
All	Social Studies, Literacy, Science, Math, Music	Step Up Day	Late Spring	Curriculum planning and materials support	At the schools year end celebration, to honor students moving up to the next grade, presentations all summarized their experiential work.
Clubs	Social Studies, Literacy	Integration with core class curriculum	All Year	Curriculum planning and materials support	Clubs at certain grade levels took steps toward connecting club curriculum to class curriculum. This was particularly successful at grades K, 1, 2 and 5.
All	All	Rubric	PSEED design team	Design, facilitation and writing support	To guide curriculum planning school staff felt strongly that the PSEED design team create a curriculum design rubric to assist teachers with understanding the qualities

CO-SEED Project Summary, Page 3

B2: YA Curriculum Development

CO-SEED Project Summary, Page 4

B3: BAA Curriculum Development

BOSTON ARTS ACADEMY**Digital Art/Design 2 Teacher**

Ms. Prentiss
sprentiss@
bostonartsacademy.org
617.635.6470 ext. 317

Class time

TERM 1: 2007
Period 2
Tu, Wed, Th - 9:05-10:10 am

Class location

Mac Lab, Room 317

After school help

By individual appointment

Typographic Self-Portrait

DESIGN & TECHNOLOGY GUIDELINES FOR SUCCESS

- _____ 1. Write 3 different descriptions of the *mood, emotion, or key idea* you want to communicate in your self-portrait.
TIP: Think about including a significant detail, object, or symbol that connects to your identity.
- _____ 2. Make 3 sketches of your self-portrait based on each of the above descriptions, also known as your *concepts*.
- _____ 3. After critique, select one of your self-portrait sketches to develop into a typographic illustration on the computer.
- _____ 4. Create a new *Adobe Illustrator* document measuring 14.2083" wide x 10.6667" high (1023 x 768 pixels)
Name document with appropriate name
"Portrait" + "Your name abbreviated" + file extension ".ai"
EXAMPLE: Portrait_JLi.ai
Do not exceed 15 characters including spaces before file extension; abbreviate if necessary

- _____ 5. Use only text and typographic characters (letters, numbers, punctuation) to make your self-portrait.
- _____ 6. Use text and typographic characters that connect to your CONTENT. Specifically, use text that connects to the *mood, emotion, or key idea* you want to communicate.
- _____ 7. Use text and typographic characters that connect to your FORM. Specifically, choose text and characters that match the shapes you are drawing.
- _____ 8. Create a composition that integrates foreground and background.
- _____ 9. Select and apply a background color that supports your chosen concept (*mood, emotion, or key idea*). With the foreground being black, your final illustration will be two colors.
- _____ 10. Export as JPG file
File > Export
Format > JPG Image
Quality: Maximum Format
Method: Baseline

Each guideline is worth 10 points for a total of 100 possible points. Earning part of a requirement does not guarantee the full 10 points.

_____ TOTAL

JPEG (JAY-peg) stands for Joint Photographic Experts Group and is a popular file format that compresses photographic images. You will notice that the file name remains the same with the exception of the file extension which is now "JPG".
http://en.wikipedia.org/wiki/Joint_Photographic_Experts_Group

Your Name _____

Concept (mood, emotion, or key idea) _____

Background Color _____

B3: BAA Curriculum Development

Digital Art/Design 2
Term 2, 2007 Ms. Prentiss

Typographic Self-Portrait Sketch

Your Name

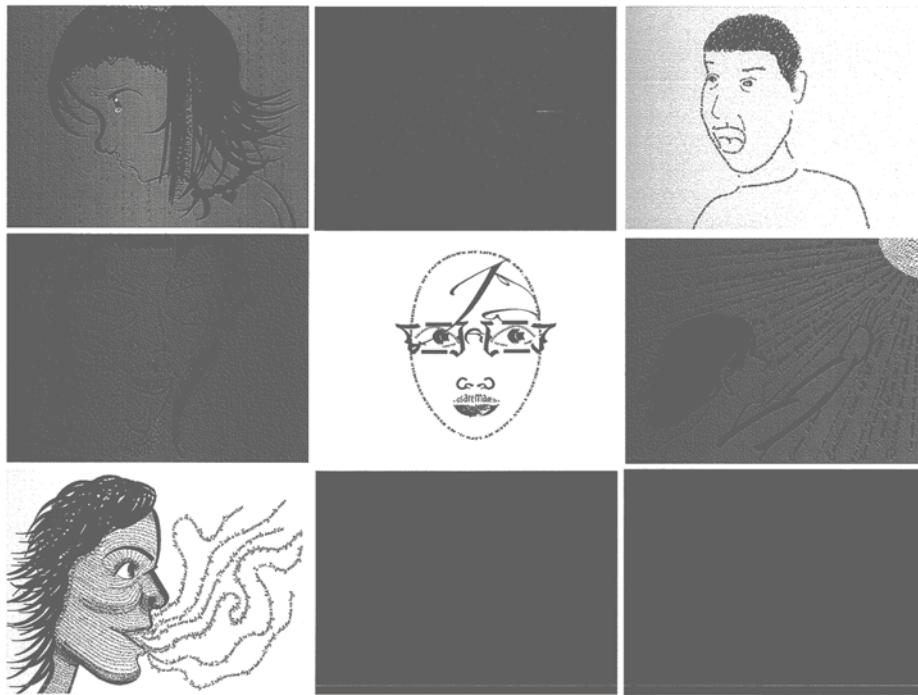
Concept > Write a description of one of the following: a key aspect of your identity, an emotion you connect to, or a particular mood you want to communicate in your self-portrait.

Sketch > Now make a sketch that communicates your concept.

B3: BAA Curriculum Development

Typographic Self-Portraits

BOSTON ARTS ACADEMY | Digital Art/Design 2 | Ms. Prentiss • sprentiss@bostonartsacademy.org



PROJECT BRIEF

These Typographic Self-Portraits were created by 10th grade Visual Artists in Ms. Prentiss' Digital Art/Design 2 class. First, students developed a concept for their piece, highlighting a key aspect of their identity or expressing a specific mood. Based on their concepts, students wrote descriptions then sketched possible layouts. After critique, students created their portraits in Adobe Illustrator, "drawing" with text that connected to both the FORM and CONTENT of their subject. Specifically, students selected fonts and individual letters, numbers, or punctuation that matched shapes in their sketches. In addition, students "drew" with text that they had written about themselves. Their final self-portraits measured approximately 14.5" w x 10.5" h.

Digital Art/Design 2 10th Grade Visual Artists

Top row
Anica Buckson, Joao Fernandes, Miguel Mejia

2nd row
Jahvon Goodwin, Stacy Arman, Jasmine Lee

3rd row
Simona Clausnitzer, José Lopez, and
Katrina Colonna

B4: Mission Hill School Curriculum Outline

Chernobyl- Raising money for the organization and possible exchange program.

“Challenging Minds
challenging homelessness project”

Interviews and data collection for homeless project in conjunction with C. Johnson in the Math department

Diabetes Project

Students first learned about diabetes, its symptoms, causes, and treatments through classroom instruction, research, guest speakers. Students then designed a neighborhood survey with this question in mind: if you live in Dudley Square and are at risk for diabetes, what should you avoid? What local resources are available to help people at risk for diabetes? Students surveyed restaurants, schools, exercise facilities, and supermarkets, and rated these establishments as healthy or unhealthy. Students then demonstrated their knowledge with a project, either a diner's guide to Dudley, a diabetes fact sheet, or a Managing Your Diabetes board game.

Garden Project

Students learned by doing. A crew of 8 students spent 4 weeks earning science competencies while they planted and cultured the school's new community garden. Students cared for the vegetables, used math skills to build a small storage shed, conducted tours of the garden for visitors, reflected on their learning in journals which overall fostered a genuine appreciation for contributing to the school by creating something beautiful. The work was hard on many of those hot July days and students saw quickly the rewards of their hard work. Teachers and visitors remarked on construction of their shed, the flavor of the vegetables and the beauty of the transformed garden. Students continued to harvest crops

through out the fall in a Friday elective. Some took the vegetables home but students also made fresh salads for staff and home fries for Christmas breakfast.

Genetics/Human Bio- field trips

Soil Testing:

Water Testing

Murder and Medical Mysteries

Anatomy and Physiology

Recycling and Mural projects:

Genetics Case Study

collected data in Boston and then analyzed that data in class

used books and curbs to model and discuss slope

planned for a party using measurement

modeled life-size whales from scale drawings and drew a door to scale

modeled parabolas with tennis balls applied the Golden Ratio to human bodies

used G.I.S. to geocode maps of their neighborhoods

designed dream houses and went to Home Depot to choose paint and decide how much was needed

used parabolas to design a satellite dish

designed a Multipurpose Room with movable storage above Distance Learning

created an equation to determine the ideal fabric for individual women based on body construction

B4: Mission Hill School Curriculum Outline

- Students will learn about child labor

Ongoing Assessment

How will students demonstrate what they know and can do?

I will assess students understanding through the work songs they write, documented conversations, the connections they make through their research and field trips, etc.

Final Assessment

How will you and students know whether the learning goals have been met? By what standards will you and the students define and assess quality work and achievement?

- Songs they write should reflect their thinking the struggle of work.
- Their research/writing (along with being grammatically and mechanically sound) will display critical thinking – including some Habits of Mind – about the subject.
- Art work will be thoughtful and reflect what they have learned and/or concluded about the topic
- How they work their jobs and what adjustments they make during the process should reflect what they've learned.
- WOW Potluck – work songs, presentations of jobs, dream jobs, field trips

B5: YA Experiential Education Rubric

Young Achievers Experiential Education Rubric – Final DRAFT				
<p><i>Definition of Experiential Education: A philosophy and process in which educators purposefully engage with learners in direct, relevant experience and focused reflection in order to increase knowledge, develop skills, and clarify values and ways of thinking. – The Association for Experiential Education</i></p>				
<p>This is a tool to be used for developing an experiential education unit and to assess your self as a professional learner engaged in the process of developing experiential education curricula. As a part of your goal setting we will use this to reflect on your experiential unit design, determine where you are in the process and name steps to move you to the next level.</p>				
<i>Unit Elements</i>	<i>Beginning</i>	<i>Developing</i>	<i>Accomplished</i>	<i>Documented for Dissemination</i>
Guiding Questions/Big Ideas – Questions that guide the design and implementation of your experiential education unit.	The experiential unit (of whatever length) has guiding questions identified that are meant to lead to lesson plan design.	Guiding questions and big ideas form the foundation for designing the unit and are regularly referred to during learning experiences.	The unit has a well thought out sequence of guiding questions and big ideas that steer the direction, planning, implementation, reflection and revision of the curriculum.	The role and purpose of guiding questions are easily understood when reading the documented curriculum. Guiding questions and big ideas are clear enough so both teachers and students are able to articulate them and their connection to the unit of study.
Standards -- Content	Unit design reflects a separation between experiential learning and academic learning.	Unit design reflects an understanding of the opportunity for integration between experiential and academic learning, some are realized in the curriculum design and implementation.	Core academic standards/concepts are strategically taught through interdisciplinary connections throughout the experiential unit. Unit experiences are directly tied to the core academic standards for a particular grade level.	Teacher curriculum and student final products show evidence of interdisciplinary learning and mastery of grade level standards. Students and teachers are able to show evidence of this in culminating exhibitions.

B5: YA Experiential Education Rubric

<i>Unit Elements</i>	<i>Beginning</i>	<i>Developing</i>	<i>Accomplished</i>	<i>Documented for Dissemination</i>
<i>Processes -- Skills</i>	Independent activities are planned for students to engage in hands-on learning.	The experiential unit is designed so that students can take part in some field and real world investigations. Unit design and instruction reflects an understanding of the tools and resources kids need to learn from the experiences.	The experiential unit is designed for students to take part in field and real world investigations throughout the year. Instruction thoughtfully connects unit design, class instruction, field experiences and skill development.	Experiential learning, field investigation and academic learning are connected to build on each other and create a holistic learning experience.

B5: YA Experiential Education Rubric

<i>Unit Elements</i>	<i>Beginning</i>	<i>Developing</i>	<i>Accomplished</i>	<i>Documented for Dissemination</i>
Assessment	Students display work in class and teachers critique and grade work according to standards and published criteria.	Teachers develop the criteria and rubrics to define high quality work and communicate them to the students. Feedback is provided to students by other people besides the classroom teachers. Students use rubrics and feedback to self evaluate and revise work for display to an audience beyond the classroom. Students see the teachers as the primary resource for assessment and feedback.	Teachers and students collaboratively develop the criteria and rubrics to define high quality work. Periodic critique sessions (teachers, students, community members and relevant professionals) assess work in progress against rubrics and criteria. There is evidence that work is revised using the feedback provided. There is a culminating public exhibition or publication that assesses work and provides feedback.	Criteria, rubrics, resource people and exemplars are included in the curriculum documentation.
Products and Exhibitions	Students produce work that is exhibited in class	The quality of student work is high and is displayed throughout the school	Students actively seek assessment feedback from more than just the teacher.	Students produce publishable work, performances or exhibitions that can be shared in the community outside of the school.

B5: YA Experiential Education Rubric

<i>Unit Elements</i>	<i>Beginning</i>	<i>Developing</i>	<i>Accomplished</i>	<i>Documented for Dissemination</i>
Habits of Mind	Habits of mind are considered in the design of the unit	There is a direct connection to more than one habit of mind as part of the unit design. There is some evidence of the habits of mind in the student and teacher work.	Many habits of mind are clearly incorporated into the design of the unit and are evident in the student and teacher work.	Habits of mind are demonstrated in curriculum documentation, student work and exemplars.
School Mission	As the experiential unit is created, there is an understanding that it connects to the school's mission.	Science, Math and Social Justice are incorporated into the design of the experiential education unit and are evident in some student outcomes.	Demonstrated evidence of the school's mission is embedded throughout student and teacher work.	The strategy for incorporating the school's mission into the experiential education unit is documented in rubrics, curriculum design and exemplary student work. Methods and strategies to use the local environment to teach are articulated.
Teacher Planning	Activities are planned for students to engage in learning experiences that connect to the curriculum.	A comprehensive and collaborative planning process results in documentation using the YA Experiential Education Curriculum Map.	Use of the local environment is woven throughout the unit as content, tool and theme for instruction.	New teachers are able to pick up documentation materials and find most of the necessary information to teach an experiential education unit of study for that grade.

B5: YA Experiential Education Rubric

Unit Elements	Beginning	Developing	Accomplished	Documented for Dissemination
Seamless Day	There is understanding of the seamless day and communication between staff members about how academic classes and other learning experiences can be integrated.	There is understanding between staff for how different disciplines and experiences can be coordinated to enhance learning. Curriculum plans reflect this understanding. Some coordinated learning experiences are planned and implemented.	The design of the seamless day for each grade level is fully coordinated to support student engagement and achievement.	The experiential curriculum documentation will include descriptions, models and exemplars of the learning experiences students will have in all aspects of their seamless day.
Community Partners and Outreach	Students visit places in the community and guests visit the classroom to share information.	Community partners and resources are included in the curriculum plan after staff has met with them and discussed instructional collaboration.	Staff make culturally relevant connections and meaningful long-term relationships with community partners.	Community partners, resources and students work collaboratively to learn together and improve the local community.

B6: Boston Day and Evening Academy Experiential Projects

Experiential Education at BDEA

When is a BDEA Teacher “Doing” Experiential Education?

When a teacher introduces an idea or a unit of study by **first** providing students with a concrete experience, **second** guiding students through a process of reflection on what they learned during the experience, **third** generalizing and abstracting ideas as a part of comprehending their learning, and finally (**fourth**) extending that newly comprehended knowledge to other contexts, **then that teacher is doing experiential education.**

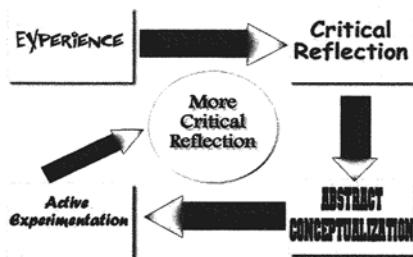
It does not matter if a math teacher is having students walk on a taped line to teach the idea of fractions, or if a science teacher is having students build a submarine to study marine biology, when ever a teacher employs the experiential education cycle, that teacher is “doing” experiential education.

The PSEED Project

For the past two years BDEA has been engaged in an environmental education project that focuses on the urban environment of Roxbury. The project, a whole-school experience, has the overarching goal to deepen the BDEA community’s understanding of the impact of environment on quality of life.

Through this project BDEA offers students the opportunity for in-depth exploration of its local environment. This is accomplished through an *urban neighborhood strand* that involves community mapping and oral history; a *gardening strand* which involves environmental science and hands-on gardening; and an *environmental impact on health strand* which addresses the public health challenges associated with the urban environment.

The project also involves discourse on environmental justice, working closely with community based organizations, and design of a campaign to make a positive impact on the community. The school has worked to integrate its PSEED efforts into its ongoing commitment to craft and refine a competency-based curriculum for all students, and to provide teachers with the professional development opportunities necessary to develop mastery of this approach.



B6: Boston Day and Evening Academy Experiential Projects

Examples of BDEA Experiential Activities 2006-2007

An online-magazine was developed, that focused on topics that were “ESSENTIAL” to each student. Because prospective graduates chose relevant topics for the Capstone Project, their written work was also included in the magazine. Some topics include parenting, local violence, education, advertising, auto repair and the Iliad.

Math / Science project that focuses on the physics and the use of math in the design of satellite dishes.

Math and Science project that demonstrates how those sound waves function in the music we hear.

Math / Science project that compares a car’s “systems” to the “systems” of the human body.

Mother’s Journal where young moms write about day to day experiences of parenting and then will explore an “issue” for further study.

One student is exploring the science and mathematics of textiles in fashion design.

One Capstone Project focused on defining SIDS as well as informing young moms about the issue.

An AIDS project which not only studies what the disease is, but examines the social impact the epidemic has on the United States as well as in Africa.

Combining all the different projects and topics and posting them in an online magazine, otherwise known as a blog.

Web project that includes a History report, Science lab presentation, data analysis and capstone project.

A program wide project focused on the study of the brain; students explored their own learning styles, compared their own

data to the data of classmates, examined how their different styles impacts individual learning as well as the personality of learning within the program.

A fieldtrip to Umass Boston to meet Michael Patrick McDonald (the author of *All Souls* and *Easter Rising*) in the conversation with a writer series.

Mock trials to analysis European exploration

Pequot Museum (a field trip)

A PowerPoint presentation – researching Indigenous tribes

Have begun an oral tradition unit through some experiential learning- interviewing family members to construct their personal stories.

Media project: Students evaluated various advertisements and the structure of the “propaganda” through the media messages. They have been engaged in deconstruction of local advertisements through magazines and posters. Students were involved in a field trip where they gathered data on local advertisements. They had to analyze how the advertisement changes depending on a community: its variety and subjects vs. where the advertisements are located and in what multitude. Students traveled through Roxbury, Brookline, and Boston. The data collection was also focused on the environment of each community- Science connection. Outcome- The students will create petitions to criticize some of the offensive advertisements located in the communities. (Pre-Post activities were planned; data sheets were created and discussed; photos were taken)

A Field trip to Gulag exhibition at Boston University.

Creating a diary from the perspective of a Gulag survivor.

B6: Boston Day and Evening Academy Experiential Projects

Chernobyl— Raising money for the organization and possible exchange program.

“Challenging Minds challenging homelessness project”

Interviews and data collection for homeless project in conjunction with C. Johnson in the Math department

Diabetes Project

Students first learned about diabetes, its symptoms, causes, and treatments through classroom instruction, research, guest speakers. Students then designed a neighborhood survey with this question in mind: if you live in Dudley Square and are at risk for diabetes, what should you avoid? What local resources are available to help people at risk for diabetes? Students surveyed restaurants, schools, exercise facilities, and supermarkets, and rated these establishments as healthy or unhealthy. Students then demonstrated their knowledge with a project, either a diner's guide to Dudley, a diabetes fact sheet, or a Managing Your Diabetes board game.

Garden Project

Students learned by doing. A crew of 8 students spent 4 weeks earning science competencies while they planted and cultured the school's new community garden. Students cared for the vegetables, used math skills to build a small storage shed, conducted tours of the garden for visitors, reflected on their learning in journals which overall fostered a genuine appreciation for contributing to the school by creating something beautiful. The work was hard on many of those hot July days and students saw quickly the rewards of their hard work. Teachers and visitors remarked on construction of their shed, the flavor of the vegetables and the beauty of the transformed garden. Students continued to harvest crops

through out the fall in a Friday elective. Some took the vegetables home but students also made fresh salads for staff and home fries for Christmas breakfast.

Genetics/Human Bio- field trips

Soil Testing:

Water Testing

Murder and Medical Mysteries

Anatomy and Physiology

Recycling and Mural projects:

Genetics Case Study

collected data in Boston and then analyzed that data in class

used books and curbs to model and discuss slope

planned for a party using measurement

modeled life-size whales from scale drawings and drew a door to scale

modeled parabolas with tennis balls applied the Golden Ratio to human bodies

used G.I.S. to geocode maps of their neighborhoods

designed dream houses and went to Home Depot to choose paint and decide how much was needed

used parabolas to design a satellite dish

designed a Multipurpose Room with movable storage above Distance Learning

created an equation to determine the ideal fabric for individual women based on body construction

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Pupils help city test WiFi in neighborhood

By MARTINE LOUIS

SPECIAL TO THE REPORTER

After months of testing the city's first WiFi network, students of the Lilla G. Frederick Pilot Middle School on Columbia Rd. demonstrated their findings this week. The students were given the task of mapping out locations stretching from Grove Hall to Dudley Square where they would check for signal strength of the still-wireless network. Mayor Tom Menino and other officials joined the students on Monday morning as they showcased a project that "works to improve students' 21st Century skills."

"This project has given our students unbelievable resources," said Deb Socia, principal of the middle school. "They are learning how to problem-solve and look for solutions — life skills valuable in any situation. I am amazed at the complexity of what they have accomplished during these four short months."

"Our students are very technology savvy and we are providing them with another avenue for learning. This project is a means of communication between teachers, students and parents, which improves the qual-

ity of education for our youths."

Using iStumbler, GoogleMaps, and Movie, the students led Mayor Menino through their Dorchester streets where they demonstrated the success of the network signals. Back in the classroom, the youths presented their findings before openairboston.net CEO Pam Reeve, City of Boston CIO Bill Oates and representatives from Galaxy Internet Service.

Since late August,

adapting the school's "ex-

peditionary learning"

approach, computers have

been largely integrated

into the Frederick's cur-

riculum. For both their

math and social justice

classes, students have

the opportunity to re-

ceive increased academic

guidance on-line. Teach-

ers have set up home

pages where they can be

contacted and websites

such as mygradesbook.

com allows students and

their families to keep

track of their progress.

"I find learning to be a lot easier when you are working with computers," said Tania Guerrero, 14. "We are able to do research, grammar-check our assignments and better communicate with our teachers by email to get help with homework."

By PETE STIDMAN
News Editor

Violent crime is down citywide, but Andy Barros would say the numbers are up in Bowdoin-Geneva, where he co-owns a bar on Bowdoin Street called Gigi's Palace. Recent events have made Barros, a father of five, fearful for his life. The bar may be sold or relocated.

"It's a very tough decision," said Barros sitting on one of his bar stools at Gigi's. A widescreen-TV in the back is belting out the news in Portuguese, and a small crowd of older Cape Verdean men is gathering at one end of the bar. These are my father's customers. It's the young kids that (expletive) it up around

a legitimate need that exists in our neighborhood."

Fourteen-year-old Crystal Quinones says this has been an exciting experience for her.

"I have never really gotten the chance to work with computers much so everything was pretty new to me. I do feel there has been a difference with those students to benefit. It asks our students to be hands-on problem solvers and responds to

here. How do you win when these people don't value life?"

Looking down from a shelf behind the bar is Adriano "Gigi" Barros, Andy Barros' father. Michael Hardy murdered the elder Barros in 1992, a sick revenge for Barros throwing him out of his Harvard Street liquor store earlier the same evening.

That past echoed into the wee hours of Saturday, Oct. 20, when Andy Barros stopped 22-year-old Miguel Perez who had just walked into Gigi's Palace. Barros told Perez to leave. He suspected Perez of being connected to a shooting that happened earlier that month.

Moments after Perez



Lilla G. Frederick School students Julian Sanchez Cruz and Troy Newton showed Mayor Tom Menino how they track WiFi signal strength on their laptop computers on Monday outside the school. Photo courtesy Mayor's office.

Bar owner may leave Bowdoin-Geneva

Police Department policy doesn't require officers to take details.

"Here you are in a gun-ho type of area and no cops want to come around," said Barros. "When I pick up the phone and call, they are there like that [he snaps his fingers], but when I need that officer here to do some good business instead of closing at eight or nine o'clock, I can't get it."

Barros said even private security companies won't come. If the Barros' do decide to move out or sell, the space will definitely not remain a bar, said Barros.

"I know the headaches involved," he said. "I wouldn't put that on anybody."