Wearing the "Student Hat": Experiential Professional Development in Expeditionary Learning Schools

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This article explores findings from a two-year study of the Expedition-ary Learning (EL) professional development program for teachers. Using case study qualitative methods, we present findings about how EL meets the challenge of preparing teachers to teach in innovative ways. We in-vestigate how EL structures experiential professional development for its teachers, the strengths and challenges of these experiences, and how the experiences affect teachers' implementation of professional development in their classrooms.

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I n a public lecture, John Dewey once described an attempt to find classroom furniture better suited to the kind of teaching he envisioned at his school. After a puzzling conversation with a furniture salesman, the salesman finally responded, "You want something at which the children may work; these are all for listening" (1902/2001, p. 2). The salesman highlighted the kind of "learning" Dewey knew to be prevalent in schools—learning where it was assumed students would passively absorb information delivered by the teacher. Transforming that "delivery" model—from furniture to philosophy—was Dewey's mission, and many schools have embraced this mission over the last century. Such transformation is premised on the notion of constructivism, where learners actively build knowledge and skills (Dewey, 1938/1963). As Bednar, Cunningham, Duffy, and Perry (1991) elaborate, constructivism occurs when a learner constructs a personal representation of knowledge that may change depending upon experiences. Yet revisioning schools around a constructivist model of teaching and learning challenges teachers who themselves may never have experienced constructivist classrooms. Further, most professional development for teachers has been plagued by passive and irrelevant instructional techniques (Garet, Porter, Desimone, Birman, & Yoon, 2001; Loucks-Horsley, Love, Stiles, Mundry, & Hewson, 2003). But how can teachers begin to reimagine schooling when many of their own educational experiences emphasized rote memorization, compartmentalized knowledge, and surface understanding of content?

Despite roadblocks to implementing experiential designs for schooling, alternative models/visions of teaching and learning exist for students and teachers (Klein, 2007, 2008; Simmons, 1995). The premise of this research is that one necessitates the other; that is, for teachers to actively engage students, teachers must be actively engaged in ongoing professional development that mirrors such experiences. This article presents findings about how one such organization, Expeditionary Learning (EL), meets the challenge of preparing and supporting teachers to teach in innovative ways. We investigate how EL structures experiential professional development for its teachers, the strengths and challenges of these experiences, and how the experiences affect teachers' application of professional development in their classrooms.

EL's roots can be traced to the ideas of German-born educator Kurt Hahn,[1] founder of Outward Bound wilderness programs. Hahn believed that moral development should accompany academic learning, and he embraced a philosophy of helping students discover their true capabilities by impelling them into powerful experiences that involved students in taking leadership roles (Hahn, 1965). Building on Hahn's Outward Bound philosophy, EL involves students in learning through rigorous "real world" academic investigations that explore compelling topics (Expeditionary Learning, n.d.). EL promotes active teaching and learning by targeting its professional development on expanding teachers' pedagogy and assisting them in implementing experiential, community-based, authentic learning expeditions (deep, interdisciplinary units aligned to state standards).

The authors of this article are an educational researcher and a regional director of EL schools. Through our work with EL schools, we believed that key to EL's professional development is experiential methods that ask teachers to assume the role of student in learning how to translate the model to classroom practice, but we sought to explore these assumptions. Therefore, in our research, we asked the following:

1. How does Expeditionary Learning construct experiential professional development for teachers? What are the key components of experiential professional development?

2. What were the strengths and challenges of using experiential professional development, meaning how did it—and how did it not—support transfer to teachers' classroom practice?

3. How did teachers' experiences with EL professional development affect implementation of EL practices in their classrooms?

Literature and Theoretical Framework

Traditional staff development has rarely involved teachers in designing their professional learning experiences, and this has often resulted in one-shot workshops on topics unrelated to issues of curriculum and instruction (Cohen & Hill, 2001). For schools such as EL that challenge teachers to rethink understandings of school structures, curriculum, and assessment, conventional professional development is inadequate to affect significant change in practice. Yet there is evidence that professional

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[1] Kurt Hahn founded Outward Bound in Wales in 1941. Hahn believed that placing people in challenging outdoor situations helped them to gain confidence, redefine their perceptions of their abilities, demonstrate compassion, and develop a spirit of camaraderie with their peers. Hahn spread his ideas of experiential education throughout Europe, and in the 1950s, Josh Miner, an American, began the process of bringing Outward Bound to the United States.

development can affect both teacher practice and student learning (Cohen & Hill, 2001; Garet et al., 2001). Educational researchers and practitioners have found that in order to transform practice, professional development must immerse teachers in content and pedagogy, involve extended time both in total hours and in span, include materials that support the vision of teaching being conveyed, allow teachers to both apply and reflect on new practices, and occur in a collaborative community of peers (Ball & Cohen, 1999; Cohen & Hill, 2001; Garet et al., 2001; Hawley & Valli, 1999; Lieberman & McLaughlin, 1992; Loucks-Horsley et al., 2003; McLaughlin & Talbert, 2001, 2006; Wilson & Berne, 1999). Additionally, EL faces a unique professional development challenge because it asks teachers to adapt and transfer ideas grounded in the field of wilderness education to school-based settings.

Although experiential methods have been used in training adults in numerous fields, including medicine, business, and social work (Andresen, Boud, & Cohen, 2000; Brooks-Harris & Stock-Ward, 1999; Maudsley & Strivens, 2000; Myers & Roberts, 2004), there is little research about how to use these methods in teacher education and how they transfer into teachers' curriculum and instruction. In particular, we were interested in EL's use of experiential professional development to implement its vision of schooling while developing and growing content and pedagogical knowledge. We knew that in order to understand how experiential professional development impacts student learning, we would need to first see how such professional development affects teacher practice (Guskey, 1999).

The theoretical framework used in our study is informed by two research strands. These strands frame professional development through the construction of learning experiences for teachers. The first borrows from the field of experiential education and student learning. We define experiential education as "a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values" (Association for Experiential Education, n.d., para. 2). In experiential professional development, experience is the cornerstone in developing constructivist teachers.

To frame the processes through which teachers engage in experiential professional development, we use Walsh and Golins's (1976) Outward Bound Process Model (see Figure 1). This model is the foundation for how EL designs its learning expeditions for students, and it therefore informs how professional development is created, making it a useful frame for this research. Specifically, in creating professional development for teachers, EL attempts to replicate key elements of the Walsh and Golins process: immersing teachers in a unique experience, creating curiosity or adaptive dissonance by offering challenging tasks that require development of skills, providing opportunities to demonstrate progress and/or mastery of tasks, and applying learning to other situations. Walsh and Golins's model

provides a holistic picture of how experiential education processes might be designed for teacher professional development and what it may look like in practice. Part of this investigation explored how EL used these particular elements in creating experiential professional development.

Figure 1

The Outward Bound Process Model
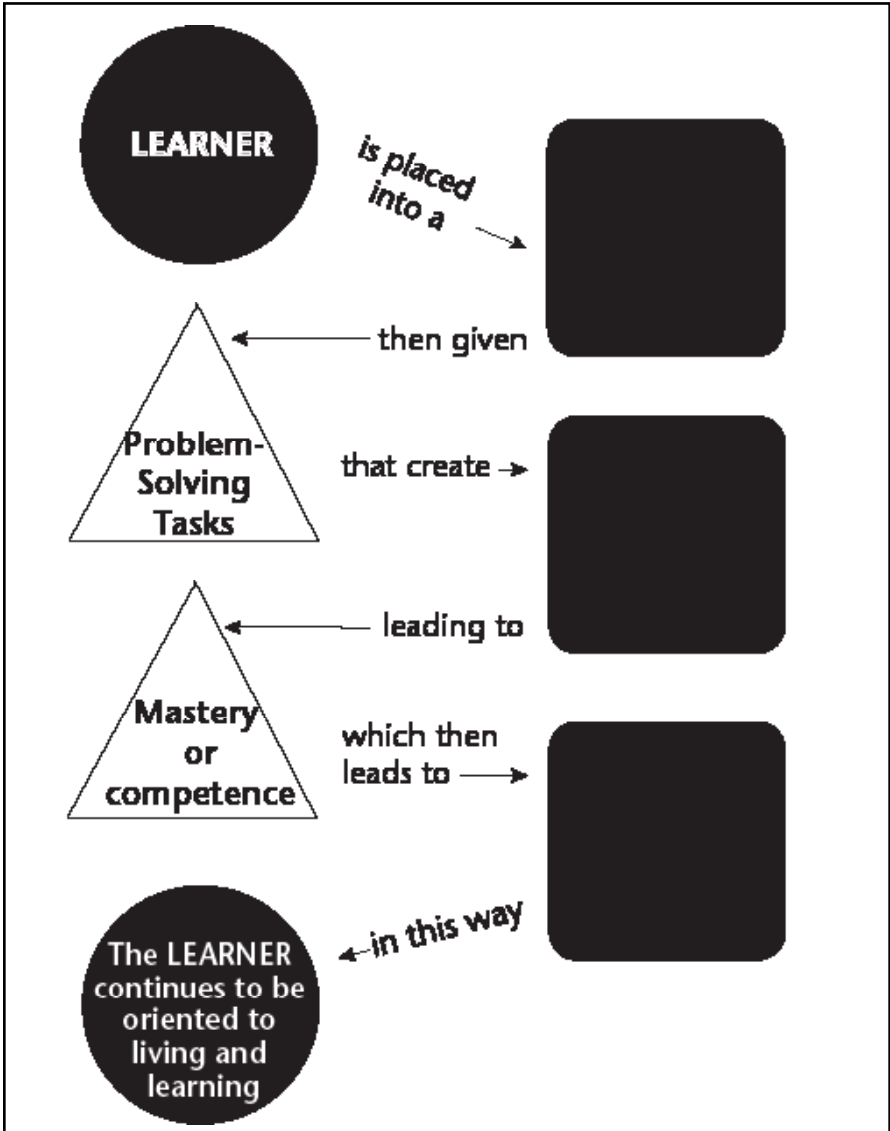
The second strand of our theoretical framework borrows from Putnam and Borko's (2000) work on situated cognition and teacher learning, which suggests that learning and knowing are situated, social, and distributed. Situated theorists believe both the location and the context of learning are essential for what and how learning happens: "For some purposes . . . situated learning experiences for teachers learning outside of the classroom may be important—indeed essential— for powerful learning" (p. 6). Social cognition (i.e., how individuals process interactions and the world around them) provides a frame for examining the ways EL initiates teachers into discourse communities that encourage their vision of reform. Because much of learning is socially constructed, Putnam and Borko (2000) suggest the importance of discourse communities in providing "the cognitive tools—ideas, theories, and concepts—that individuals appropriate as their own through their personal efforts to make sense of experiences" (p. 5). We focused on how EL reflects these understandings of learning and knowing identified by Putnam and Borko. Specifically, we wanted to know how professional development is situated to optimize adaptive dissonance, and how EL reflects an awareness of social cognition in building discourse communities to support teacher learning. We use the understandings of learning and knowing identified by Putnam and Borko to make sense of EL's professional development design and to understand how teachers translate those learning experiences into their classrooms.

The two aspects of our theoretical framework are integrally related. We locate experiential professional development within the context of Putnam and Borko's (2000) work on situated cognition in teacher learning. They write that "the physical and social contexts in which an activity takes place are an integral part of the activity, and that the activity is an integral part of the learning that takes place within it" (p. 4). Location and context—*how* and *where* teachers learn—matters. We use Walsh and Golins's (1976) model to make sense of that how and where.

Method

This study uses qualitative case study methods to delve deeply into the complexity of teachers' learning experiences within an organization. Qualitative case studies allow for a close examination of the complex experiences of a single instance (Stake, 1997). In formulating a case study, defining the unit and subunits of analysis are of critical importance, according to Stake (1997) and Yin (1994). Yin (1994) calls this an "embedded design" (p. 34); that is, the main case involves the experiential professional development design as conceived by EL, but the teachers' experiences, as well as the interviews, observations, and artifacts, aid in "connecting the dots" as embedded units of analysis. Although Yin

(1994) argues that a single case, if rigorously investigated, can provide points for application, he also suggests that "the evidence from multiple cases is often considered more compelling, and the overall study is therefore regarded as being more robust" (pp. 44–45).

Setting

Expeditionary Learning has over 140 schools, over 4,000 teachers, and over 50,000 students in 28 states across the country in urban, rural, and suburban settings. This study focused on the network of New York City (NYC) EL secondary schools located in Brooklyn, the Bronx, and Manhattan. These are public schools within the NYC Department of Education; Expeditionary Learning–NYC Outward Bound serves as the intermediary partner supporting implementation of the EL model. The professional development is designed by EL and is offered regionally in NYC and nationally across the country to all EL teachers and leaders.

Participants

All 80 NYC EL teachers were invited to participate in the study and interested teachers responded to an information letter. We selected eight teacher participants from the New York City EL network schools to study in-depth. The first eight to respond were chosen for the study. Participants ranged in age from 22 to 35, and included two males and six females. See Table 1 for details about participant background.

Table 1

Participant Information

Participants	Race	Gender	Age	Years of teaching experience	Subject area	School borough
1	Caucasian	F	30s	5	English	Manhattan
2	Caucasian	F	20s	5	English	Manhattan
3	Caucasian	F	20s	3	Math	Manhattan
4	Caucasian	F	20s	4	Social studies	Manhattan
5	Caucasian	F	20s	2	Math	Bronx, Brooklyn
6	Caucasian	M	20s	2	Math	Bronx
7	Caucasian	F	30s	1	English Language Learners (ELL)	Manhattan
8	Caucasian	M	30s	3	Music	Manhattan

Data Sources/Evidence

Interviews. Interviews are an important source of data in qualitative case studies as they help researchers understand the recounted experiences of the participants (Bogdan & Biklen, 1998; Lincoln & Guba, 1985). We conducted three one-hour semi-structured interviews with

each participant and single interviews with five staff members involved in professional development for a total of 29 interviews. Interviews were transcribed and uploaded onto ATLAS.ti, a program used for qualitative research data storage and analysis.

Site visits. We conducted site visits to observe approximately 20 days of professional development and networking activities throughout the year and a half of data collection. In addition, we spent two school days with each of our participants at a predetermined time of their choosing. We took notes during all observations. These notes were later transferred to an electronic format and loaded onto ATLAS.ti.

Documents and artifacts. Documents came from multiple sources and were used both to develop our understanding of how EL designs for, and supports, teacher professional development and to help us understand participants' experiences. We collected several years of monthly newsletters that illustrated the transfer of professional development into practice, materials given to teachers during professional development sessions, curriculum materials written by teachers, writing and project samples collected by teachers, teacher reflections from professional development sessions, professional development agendas and planning materials, and documents posted on EL's tool for documenting learning expeditions online and school designer updates.

Data Analysis

We began data analysis by creating initial codes as we loaded data onto ATLAS.ti. These codes represented our earliest theorizing about the data, and we used analytic memos to develop our understandings of these codes. This early writing and analysis helped us begin creating meaningful categories for the data. As we completed data collection, we returned to our data and solidified our codes, defining each. Both researchers reviewed all the data and codes. Triangulation of data, meaning that "the researcher employs various strategies and tools of data collection" (Lightfoot & Hoffman, 1997, p. 204), allowed us to find "convergence[s] of information" (Creswell, 1998, p. 213). Finally, as the literature recommends, we conducted member checks with our participants (Creswell, 1998; Lincoln & Guba, 1985). This served not only to confirm our findings but also to provide us with yet another source of data.

Findings

In this section we highlight the key components of EL experiential professional development, and then we explore the benefits and challenges associated with these components.

We identified four key components of EL experiential professional development that contribute to the success of EL and to teacher application of EL professional development: immersion in student experiences, initiation into discourse communities and networking, reflection of those experiences as teachers, and the acquisition of general strategies through specific content.

Immersion in Student Experiences

The balance of professional development that is situated in the classroom, through the use of instructional guides and school designers,[2] and professional development that takes teachers outside of their classrooms powerfully influences teachers' practice and student learning of content. Using experiential strategies, where teachers engage in intensive versions of expeditions they are expected to construct for their students, contributes to the successful teacher implementation of professional development. Our research found that teachers overwhelmingly attributed their application of professional development to these kinds of experiences, and participants also frequently mentioned their experiences in professional development when describing why they chose to implement a piece of the EL model. This finding is consistent with Putnam and Borko's (2000) argument that teacher learning must be removed from the context of the classroom to be powerful enough to affect change.

A primary example of what this looks like in practice is the EL summer Secondary School Institute. For five days, new EL teachers gather on either the east or west coast to participate in this institute, which is the core of EL professional development. Teachers participate in a condensed version of an expedition, generally referred to as a "slice." During the summer of this research, in Portland, Oregon, science and math teachers engaged in learning about watersheds. Teachers hiked to the Tryon Creek watershed near Lewis and Clark College and used their field journals to sketch the environment they observed. Following this immersion, they participated in a "Building Background Knowledge" (BBK) workshop. They read articles, viewed videos, and analyzed data. Throughout the week, teachers revisited the site, at times meeting with expert scientists to conduct water and soil tests and to learn about restoration efforts, the positive impact of "green" design on watersheds, and city projects to prevent future erosion. Finally, teachers created and presented conceptual

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[2] Instructional guides (IGs) refer to on-site school coaches. Each EL school has one IG who supports teachers' implementation of Expeditionary Learning. School designers work with school principals and leadership teams (including the IG) to identify their needs and goals. In collaboration with the IG, school designers assist individual teachers and teacher teams in developing learning expeditiona, in implementing active and engaging instructional practices that promote equity and high expectations, and in establishing practices that build school culture and foster character. They also work to guide school leadership and develop school structures that support these practices.

models to illustrate their understanding of watersheds and to propose strategies to mitigate their deterioration.

In EL professional development, teachers experience themselves in the role of a student. This mirrors the Outward Bound Process Model, in which a motivated learner is placed in a situation that causes some adaptive dissonance, and the learner then acquires the content/skills necessary to master or to understand and overcome difficulty. EL provokes such experience via a "mystery piece," a BBK, and then the "creation of a product" tied to an authentic, real-world problem. Dissonance for teachers often reflects differences between the kinds of experiences they have during EL professional development and the kinds of experiences they have traditionally provided for their students.

We found a key strength of this strategy is related to motivation. The high level of engagement for the teachers in the professional development experiences appears to have positive implications for how they adopt or adapt the EL model to their practice. Most teachers in our study identified this summer institute as the most significant professional development experience with EL. The experience of "passion" seems a valuable one, even when it is outside of a teacher's content area. One math teacher in our study who attended an institute in Boston that centered on a science investigation into lobsters told us:

> Why am I so into this thing with the lobsters, because I am?! Everybody in
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> this group is crazy about lobsters! . . . And I think that we were just engaged.
>
> And so every time I was really engaged and then I thought about what made
>
> me engaged, those were the things that I want to do [with my students].

But the struggle to take back what is learned in these outside experiences was met with differing levels of success. In immediate conversations with participants after professional development sessions, researchers noted excitement and enthusiasm about implementing expeditions similar to the ones teachers participated in. And yet as Kolb's (1984) experiential process model indicates, a critical step toward implementation is "active experimentation," in which the teachers test their learning and generalizations, applying them to their own contexts. The degree to which EL professional development provides for such opportunities varies, resulting in differing levels of implementation at the classroom level. After attending a math institute that immersed teachers in an investigation on the 1918 flu pandemic, one teacher transferred experiential and kinesthetic pedagogical strategies (Marzano, Pickering, & Pollock, 2001) into classroom practice, including physical movement to represent thinking, "human bar graphs," and learning stations at which students engaged in various hands-

on, manipulative activities to understand content and statistics. Although this teacher was able to make the transfer from professional development to classroom practice, for others more active experimentation is necessary before they feel comfortable making necessary adaptations to both their classrooms and their content area.

Initiation Into Discourse Communities and Networking: Cognition as Social

A second strategy EL uses in its professional development is constructing learning experiences that emphasize induction to discourse communities, by which we mean instances where teachers use EL terminology to describe what they do and how they do it. We see this as an important component of experiential professional development because the use of common language is essential to reflection. Part of experiential professional development is helping teachers name their experiences and thus deepen both the original experience and their understanding of it. Putnam and Borko (2000) write that

> interactions with the people in one's environment are major determinants of both what is learned and how learning takes place. This *sociocentric* view (Soltis, 1981) of knowledge and learning holds that what we take as knowledge and how we think and express ideas are the products of the interactions of groups of people over time. (p. 5)

This is important for the organization because it provides a shorthand version to facilitate conversation and understanding among teachers. It also creates similar images and connotations in teachers' minds of ideas EL thinks are important: For example, after ongoing conversation and experience of what "active pedagogy" looks like, teachers are more likely to describe similar types of classroom activities as embodying active pedagogy.

EL uses several strategies to support induction into discourse communities, and these range from direct instruction into EL terminology to protocol-based discussions. Every year EL hosts a national conference where teachers, principals, school designers, and instructional guides offer workshops and examples of best practice. In various workshops, teachers were prompted to offer examples of when they saw and experienced EL core practices, such as "active pedagogy" and "culture and character." In one instance teachers did a word search of EL terms and then further investigated these terms through a jigsaw reading and conversation activity. In all sessions teachers were exposed to examples of EL terminology and asked to use it to describe their experiences. Terms such as "protocols," "learning targets," "Socratic Seminars," "Gallery Walk," "spirit read," and others percolate throughout the national net-

work, spreading during professional development. Such engagement in these communities is making some transfer from nationally based conference activities to regional schools, to individual classrooms, and to discourse communities created for students. Teachers' literacy and writing practices seem significantly influenced by participation in these communities, and teachers have created learning experiences for students that are consistent with the professional development they received.

One of the challenges EL faces with this strategy is the matchup in terminology among teachers as well as EL staff. Although teachers used EL terminology comfortably and increasingly over time, both in their interviews and in the classroom, nailing down a shared understanding of the EL philosophy seemed tricky. School designers in different locations often offer varying levels of understanding and articulation. Terms change over time and need constant revisiting even among those who work together on a regular basis. One school designer observed a teacher use the word "expedition" to describe the work happening in the classroom; however, though the teacher demonstrated active pedagogy and engaging lessons, the "expedition" did not include three in-depth investigations (case studies), fieldwork, or experts from the community. This teacher had applied concepts from her professional development experience, but implemented them mistakenly in her own classroom practice. Further, even among school designers nationally, there are different understandings of terms. Novice versus veteran experience accounts for some of the difference, but other variance is a result of deep understanding of the model. For instance, different school designers understand and explain terms such as "compelling topic" or "expedition" differently. Increasing exposure to these terms as well as direct discussions and models/exemplars of their meanings might help educational or professional development organizations to tighten definitions of key terms and thus teachers' practice.

Reflection

A third experiential professional development practice is engagement in reflection. Reflection in EL involves structured debriefing geared toward making sense of experiences and deconstructing the professional development experience in order to understand what actually happened prior to transferring and applying it to classroom practice. Reflection on professional development is a key requirement of "reorganizing meaning" in Walsh and Golins's (1976) experiential model. Without reflection on the meaning of what happened in a professional development experience, there is a danger that the experiences will be "misunderstood," not be applied to classroom practice, or be implemented in ways that are not aligned with EL philosophy.

All EL professional development activities structure time for reflection—but the amount of time varies depending on the facilitators. An example of a formal debrief occurred after the first day of the summer institute. Humanities teachers had spent the afternoon doing a Building Background Knowledge workshop about Sacco and Vanzetti, American immigrants and anarchists who were convicted of murder after a controversial trial. At the end of the afternoon participants began an extensive process of reflection that began by listing the steps of what they had experienced during the workshop. After noticing the structure of the workshop, participants were asked to reflect on the purpose of each step. These were charted and debated amongst teachers, and the teachers were then asked how they might adjust the steps when implementing them in their own classrooms. Teachers debated the use of the "mystery" piece as a means of introducing the topic: "This activity didn't have enough background for us" noted one teacher, while others felt that "it would have taken away from the experience of the Building Background Knowledge if we had known what the learning targets were." Quickly teachers began to make suggestions: "I wanted a graphic organizer; the web we were working on wasn't enough," said one. "Maybe it would help to have a list of all the questions and maybe a word wall. There was so much new vocabulary," suggested another. Others wanted to know if certain adaptations were acceptable: "Can there be some learning targets big enough not to ruin the mystery?" At this point facilitators mostly noted questions and reminded teachers that they would see different versions of the workshop throughout the week. The debrief described here hints at one of the challenges EL experiences in delivering professional development—that is, when asking teachers to reflect on the pedagogy and processes of an experience, teachers often become so immersed in the content that they lose sight of the processes through which skills are built (and which are transferable across content areas). For example, although teachers experienced a Building Background Knowledge workshop, they were unable to "pull back," reflect, and identify the steps they experienced, which is a necessary piece to transferring or recreating the process back at school. EL's reflection session may need to go further by offering an opportunity for teachers to actually practice delivering a BBK. Turning the reflection into action—or as Kolb and Fry (1975) suggest, "active experimentation"—is the next step in the Outward Bound Process Model.

One challenge EL facilitators face in structuring reflection is how much time to allow teachers to engage in actual reflection. As the title of this paper suggests, the facilitators are clear to differentiate when participants are wearing the "teacher" or the "student" hat during a workshop. While wearing the student hat, teachers are encouraged *not* to think about how to implement a workshop or to reflect on its purpose

or effectiveness. Instead they are asked to immerse themselves as students would in the Outward Bound Process Model (i.e., as motivated and ready learners placed into a prescribed physical and social environment), then they are given a set of problem-solving tasks that create a state of adaptive dissonance. Wearing the student hat engages teachers in the very process EL wants teachers to place their own students in. Time is usually spent at the end of the workshop for participants to don their teacher hat and make sense of the experience; however, many participants expressed an interest in more teacher-hat time and wanted opportunities to think more explicitly about how to transfer professional development to their own content and contexts. One teacher told us:

> I think . . . that there's not as much need as they think there is for the student
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> hat. I think if we've joined EL it's because we buy into the approach and I
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> think it's important—for example, it was very important to have the experi-
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> ence . . . but I think, I would it say it would have been more valuable on
>
> some level to talk about how you actually go about planning an expedition.

This quote resonates with Knowles's (1972) theory of adult learning, also called "andragogy." Knowles suggests that adults "enter into education with a problem-centered orientation to learning" (p. 36). This orientation means that adults become involved in educational activities to solve current problems, and professional development for teachers should take this orientation into account when planning the time allocated for the teacher hat—similar to Kolb and Fry's (1975) description of active experimentation described earlier. It is this stage of Kolb's model that EL might use to enhance its professional development by creating time for teachers to experiment and practice. EL has begun to build in additional time to its professional development workshops to encourage planning for particular contexts (be it for schools or for individual classrooms). We urge others using experiential professional development to provide time and structure for teachers to return to the planning context after implementation to further reflect, conceptualize, experiment, and plan. Such time encourages both follow-through and accountability after the planning stage, and it supports teachers in implementation efforts where there are often unforeseen outcomes and issues.

Acquisition of General Strategies Through Specific Content

A fourth strategy EL facilitators use is to help teachers learn general strategies through specific content. By this we mean that all pedagogical strategies from the BBK workshop, and also from the writing and reading

process workshops, are taught through science, humanities, or math case studies. This strategy is based on the concept that skill building is most effective within a real context (Brown, Collins, & Duguid, 1989) and is an essential component of experiential professional development because it draws teachers into the experience of students and helps them envision how experiential learning can be transferred to a subject-specific classroom. Steeping learning in an authentic experience—such as learning about a "green roof" or a watershed by physically going to observe, experience, and research one—is also supported by Putnam and Borko's (2000) research into situated cognition and Outward Bound's roots in experiential learning. EL hopes that by embedding pedagogical methods inside content it becomes more likely for teachers to transfer professional development experiences to the classroom.

For example, teachers at a summer writing institute began their investigation of teaching writing with an immersion experience in the content of the Triangle Shirtwaist Factory Fire. Participants engaged in a Gallery Walk, examining images and documents related to the historical event while listing "powerful words" the pictures and text evoked. Next, teachers wrote a journal entry in response to question prompts. Later, participants continued to learn about the historical context of the Shirtwaist Factory Fire through primary source documents in addition to learning about EL's philosophy and practice related to the teaching of writing. In line with experiential education, teachers learned about the *teaching* of writing through the *experience* of writing, sharing, and revising their own writing about particular content.

One of the challenges EL faces in using this strategy is catering to diverse content areas. Unlike other organizations that use this strategy, such as the American Social History Project and the National Writing Project, EL works with teachers in every subject area background. Although attempts are made to make explicit how different strategies are applicable to different content areas, inevitably for some teachers the gap is too wide. One math teacher who attended a summer reading workshop found little that she could take back to her classroom. When asked to spend some portion of the professional development session designing a reading workshop for her classroom, she felt that it wasn't authentic to her actual teaching:

> Researcher (R): Did you get a sense of what you do—how this would work for you in a math class?
>
> Participant (P): No, no, no . . . I mean, look, I'm all for doing reading in my math classes, all for word problems and all that stuff, but it just wasn't realistic . . .

R: Yeah, what kind of mini-lesson did you design?

P: I ended up doing it for my crew . . . because it really would have been farfetched to plan all that for a math class.

Given the belief that pedagogical skills are best learned through relevant content, it begs the question of how relevant the content must be for it to effectively help teachers transfer professional development to their classroom. For those attempting to think about how to meet the needs of diverse content area teachers, this issue is particularly urgent. Noting the urgency, in 2008, EL engaged in a study of math content and textbooks in use throughout the national network in order to devise quality content-rich institutes to help close the gap experienced by math teachers and promote greater transfer into classroom practice.

Our data suggest that although the experiential methods helped teachers see value in expeditions and the EL model, they often fell short of helping them implement professional development in the classroom. In designing professional development for teachers, EL may not be explicit enough about what teachers are (or should be) experiencing. Within the experience, EL facilitators need to pull out the small skill steps of the pedagogy. Immersed in content, participating teachers may not be internalizing the "behind the scenes" what-it-takes-to-do-this understanding. For instance, one researcher observed that although the EL facilitators led teachers through the process of a writer's workshop on "editing," they could have been more explicit about *how or what* was occurring at each step. This level of transparency can be achieved by saying, "Now I'm doing this . . ." or "Remember that after we did that, our next step led us to this . . ." Otherwise, EL and other school design organizations risk teachers having the experience *only* as students. Consequently, teachers are often unable to transfer the "teacher-moves" to practice because when deeply involved in content, teachers may not *understand the pedagogy*. EL can make more explicit the skills being taught through the vehicle of the content.

Using real content had the added benefit of allowing teachers with similar content areas to "borrow" from the actual workshops for their own class. A number of teachers used identical materials and methods from professional development workshops with their students. Although most professional development seeks to help teachers internalize and transform professional development experiences, we found early implementation efforts often relied on this kind of exact replication (Klein & Riordan, 2009). We believe such experimentation scaffolds teachers emerging understanding and knowledge of new methods. For teachers who are not familiar with constructivist, project-based teach-

ing, steeping professional development in specific content has the added benefit of helping them try new teaching strategies that they have already experienced as effective.

Implications

This research draws attention to the challenges of helping teachers to learn to implement unconventional models of teaching and learning. Transmission-based professional development may not sufficiently provide learning experiences powerful enough to encourage changes in practice. Few teachers come to EL classrooms having been trained in the experiential methods required to bring the EL school design to life. But for the organization to survive, it must find ways to help teachers learn to create significant and deep learning expeditions for students, even if they were not taught in this style. A powerful tool in this work is the experiential professional development highlighted in this article. Despite the challenges EL faces, our research suggests experiential professional learning strategies can be instrumental in supporting teachers in making sense of a teaching model that requires them to rethink conventional methods of curriculum design, pedagogy, and assessment. We believe this has implications for others engaged in trying to affect teacher practice through professional development.

Although there is some research about engaging teachers in student experiences (Loucks-Horsley et al., 2003), the particular components of experiential professional development as described here make it distinct from simply engaging teachers in student activities. For immersion in student experiences to be an effective tool in helping change and deepen teacher practice, it should be paired with initiation into discourse communities and networking, reflection of those experiences as teachers, and the learning of general strategies through specific content. We highlight these key components of experiential professional development in an attempt to add to the growing body of literature on reform professional development.

Finally we highlight the benefits and the challenges facing those engaged in experiential professional development, in an effort to assist program designers, teacher education programs, professional development leaders, and principals in their work. In particular, we would like to call attention to work on adult learning that suggests teachers should be engaged in personally relevant work. Finding ways to engage teachers in active experimentation building on reflection will do much to support implementation of new content and experiential teaching methods.

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