Pre-service Education for Experienced Teachers: What STEP Teaches Those Who Have Already Taught

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Nearly twenty years ago Buchman and Schwille (1983) observed that "teachers claim they have learned from classroom experience most of what they know about teaching." The perception that teacher education is of less professional consequence than classroom experience remains strong, both in and outside the profession. This perception raises particularly challenging questions for teacher education programs that have experienced teachers who return to school to earn their teaching credentials. However, very little research exists on this topic (Kunzman, in press).

Stanford's preservice Secondary Teacher Education Program (STEP) recently undertook a self-study to investigate how its credential candidates who had previous teaching experience perceived the value of returning for formal preparation. In addition, the study was an opportunity to hear from program participants whom we assumed would be both the toughest critics and most insightful analysts—those who had already experienced the teaching world we wanted to help them learn about. We suspected that they brought higher expectations and, in particular, a keen sense of where STEP converged and diverged from the world of practice. We hoped they could shed light on the questions of how learning from formal preparation is different from learning from practice (see also Johnston, 1994; Grossman, 1989) and what kind of learning from a

Robert Kunzman is the William R. and Sara Hart Kimball Graduate Fellow in the Stanford School of Education, and has both taught and served as a supervisor in the Stanford Teacher Education Program. program like STEP was unavailable to them through classroom teaching experience, if any. Was there any "value added" for experienced teachers by completing STEP requirements and, if so, what was it?

Using a semi-structured protocol, we interviewed 23 STEP graduates from 1999 and 2000, asking them about their teaching experience prior to STEP and any training they might have had; their year of STEP study; and for 1999 graduates, their first year back in their own classroom since graduation. Our data thus consists of teachers' perceptions and recollections of their teaching, not observations of their actual teaching; further research on the practice of graduates is under way in a separate study. Audiotaped interviews lasted an average of 75 minutes.

Analysis of transcripts involved an iterative process in which teachers' statements were grouped into 34 categories based on interview questions. These ranged from comments about specific courses and learning experiences (e.g., student teaching, year-long academic projects) to reflections on their own professional strengths and weaknesses before and after STEP, to pedagogical considerations such as assessment, classroom management and environment, and curriculum development. A process of conceptual clustering and open coding was then employed (Miles & Huberman, 1994; Strauss and Corbin, 1990) to generate a series of potential themes related specifically to learning experiences during the STEP year that teachers described as significant to their development as practitioners, and the degree to which teachers felt these experiences had been available from their previous teaching experiences alone. Consensual validity was sought through discussion with other program researchers familiar with the data, and a recursive process of coding adjustments followed in the form of additions and deletions.

A significant percentage of STEP candidates are already experienced teachers: 21 percent from the graduating classes of 1999 and 2000. For the purposes of this study, we defined "significant teaching experience" as having been responsible for classroom planning, teaching, and management for an extended period of time. Experience ranged from those who had taught five years independently as the teacher of record to one who had served as a long-term substitute on several occasions; the overall average teaching experience of this subset measured just over two years of full-time, independent classroom teaching. Subjects taught included English/language arts, mathematics, social studies, foreign languages, and the sciences. The types of schools varied widely: public and private, urban and rural, large and small. Their students, taken as a whole, also embodied wide demographic diversity, and had experienced a range of academic success, such as some from highly selective prep schools and others in a school for students expelled elsewhere for academic or behavioral issues.

Five themes emerged from interviews as vital areas of learning for these experienced teachers: (1) increased effectiveness working with struggling students; (2) greater sophistication in curriculum planning, particularly in identifying and matching long-term objectives and assessment; (3) greater appreciation for collaborative teaching and ability to nurture collegial support; (4) structured opportunities for feedback and reflection on teaching practice; and (5) development of theoretical frameworks to support teaching skills and learning. These themes are explored in detail elsewhere (Kunzman, in press). This article focuses more pointedly on what the study results suggest about STEP itself. How did the specific elements of STEP—coursework, field placements, major assignments, program structure—contribute to the five vital learning experiences described by this important subset of STEP candidates?

Helping Struggling Students: Recognition and Accommodation of Student Difference

"I had a particular style of teaching. And I was pretty impressed that I could do that! So, let alone think about whether kids matched that or not—I never really gave that much consideration." This admission from one of STEP's experienced teachers-turned-student represented a common thread in interview comments. As another put it, "I had some classes that gelled and worked really well and responded really well to my style. But I didn't have a lot of strategies for how to deal with the classes that didn't do that on their own." In the eyes of these teachers, STEP played a crucial role in making them aware of struggling students—whether English language learners, those with learning disabilities, or just students whose learning styles and preparation levels made the curriculum particularly difficult—and provided strategies with which to enhance their learning. Looking back at her STEP experience, one teacher remarked,

I'm very aware of things like, where is the kid sitting in the class? Should I switch their seat? Will it help if I check in with them about their homework before class starts? Should I teach this in a different way so that students who aren't getting it from discussions get it in another way? How do I give the kids more voice? It's just knowing that there are so many different ways and that one way is not going to work the same for each student.

The primary program components that candidates credited with helping them improve this aspect of their practice were required courses in Classroom Management, Teaching in Heterogeneous Classrooms, and Adolescent Development. Classroom Management helped teachers more fully understand their role in managing their classroom, often

using case studies to explore different strategies and then placing those strategies within a theoretical framework (see Darling-Hammond & Snyder, 2000). As an ongoing project, teachers were asked to develop their own classroom management plan that merged theory and practice. One experienced teacher remarked,

I think I had pretty good instincts about teaching. But you can't go on instinct in a high school classroom. There's too much. It's too heterogeneous to go on instinct. And if were to teach instinctively I'd reach maybe five students in each class. And so I think what [Classroom Management] taught me was, even though my classroom management plan in the beginning was probably a good one (instinctively, for those five students), by the time I got to the end of the year I realized that it had to be really different.

The notion of moving beyond instinctive teaching was a common refrain in these interviews; teachers valued many of the instincts developed through previous experience, but most saw them as insufficient.

One example of pedagogical skill that instinct had not provided was found in the class entitled Teaching in Heterogeneous Classrooms. This course helps teachers learn how to organize and support students to engage in intellectually challenging inquiry in academically heterogeneous classrooms, with a primary focus on groupwork as an instructional strategy. One teacher credited the course with helping her to "understand and organize my thoughts about how to bring equity in the classroom . . . [by] consciously organizing groupwork for that specific purpose, and also for meeting the needs of all the different kinds and range of learners in my class." Another admitted he had "no prior knowledge about how to structure a classroom and meet the needs of all students.... And just having a large repertoire of things that you can do and implement in the classroom strengthens my ability to do that." Implementing groupwork strategies was not an automatic success, however; many teachers quickly realized the challenges and complexities that accompany such a pedagogical shift. "It's not very easy," one teacher observed, "to actually come up with a task that requires students to work together and use each other and draw on each other's strengths, and where they're going to need the student who maybe hasn't always been academically successful." For many, however, the recognition of groupwork's potential value for struggling students was enough to encourage their ongoing efforts in this area.

A third key course for the theme of struggling students is Adolescent Development. This class explores how social experiences in the family, peer group, school, and broader community influence adolescent development, how adolescents learn and what motivates them to learn, and

how schools and teachers can make an important contribution to adolescents' growth by teaching in ways that "fit" the developmental and cultural needs of youth. Some of the key learning for these experienced teachers was at the theoretical level, such as motivation theory, which they could then apply to their own classrooms. As one teacher remarked, "That was good, just to be able to put some names and some theories to some of the behaviors I'd seen in class." Another observed, "Learning that students are at drastically different stages of development, and what those different stages might be, is helpful. Because you can have someone who's very intellectually mature but socially doesn't understand what's going on. And just recognizing . . . that these students are just at all these different places is really helpful."

But it was the "hands-on" level of the Adolescent Development course that seemed to have had the greatest impact for these experienced teachers. A major project for the STEP year, tied to this course, is the adolescent case study. Teachers conduct an in-depth inquiry into a selected student (ideally one with whom the teacher does not strongly identify), including observations, interviews, shadowing, and examining student work. As one teacher put it, "It forced me to get to know someone whom I probably would have let slip." Many of those interviewed spoke passionately of their case study experience, gratified at the level of insight they gained into a student's successes and failures at school and how that allowed them to identify ways to help. One teacher spoke of a boy with outstanding test scores but academic failure since elementary school; she realized that, "for a lot of reasons, he just didn't match with the school system," and she helped facilitate his acceptance into a special early-admission college program that better met his needs.

Interestingly, the theme of helping struggling students was also identified as an area in which STEP could do more. In spite of the many ways in which these teachers felt the program helped them in this area, they felt more needed to be done, particularly in learning to work with English language learners and special education students. This perception speaks to the immense challenge that teachers face in meeting the needs of a diverse group of learners. Since this study, greater efforts have been made to strengthen and extend the coursework in these areas, particularly as part of Practicum² and the course on Language Policies and Practices.

Improving Curriculum Planning:
Awareness of Objectives and Attention to Detail

While all the teachers interviewed had been responsible for planning their own curricula prior to STEP, most related that they had enjoyed little or no guidance and support for structuring course content and pedagogy. Many identified this area as a vital facet of their STEP learning, particularly in the areas of long-term goal setting and coordination with assessment, and the related strategies of backward planning and scaffolding. Many of these experienced teachers spoke of their lack of long-term vision in curricular planning, such as one who admitted, "I didn't have a big vision for where my class needed to go, what was my end result, where did I want to be at the end of the semester, both in content and in skills, so I couldn't work cogently toward those goals." Another teacher described her former planning process:

I would sit down and I would plan things, but I never knew how long it was going to take or really thought, "Okay, what is it that I want them to know? How are they going to know it? And how am I going to know that they know it?" I never did that kind of stuff... Time would go by and I'd say, "Well, I'd better do an assessment here. Or a test. Or I'd better have some sort of project here." You know what I mean? It's kind of just a natural feeling.

During STEP, the drawbacks of relying solely on "natural feeling" became apparent, and teachers were eager to learn skills to enhance their curriculum planning. The two program components that figured most prominently in this theme were the subject-specific Curriculum & Instruction courses and another required course entitled Principles of Learning for Teaching.

Curriculum & Instruction courses are offered for each subject area, and are held all but the final quarter of the year. While each course is taught independently, they share several goals in common, including an exploration of the relationship between theory and practice, attention to the needs of diverse learners, and techniques of lesson and unit planning. According to these experienced teachers, valuable learning included techniques as simple as "the rudiments of lesson planning and what elements of instruction your lesson should encompass" to more complex skills: "a thematic type of organization of curriculum where there's a central question and a lot of scaffolding involved in getting them there and backwards organizing of a unit so that you assess them on this—how are you going to get them there?"

Those interviewed felt that their orientation toward long-term planning was almost entirely lacking prior to STEP. The emphasis on subjectarea pedagogical content knowledge provided by STEP—three full quarters of Curriculum & Instruction coursework is quite unusual for a one-year teacher preparation program—seemed to meet this crucial need, even for experienced teachers. One teacher learned that "you really need a tighter purpose. You really need to know where you're going You know, look at the works as a whole. 'What do I want out of this year?' and then breaking them up into units." A major assignment for Curriculum & Instruction courses is the development of a long-term unit plan, and

many experienced teachers found this challenging and even frustrating, but ultimately quite rewarding. One commented,

It was a grueling process. They were huge things, and they were more detailed than I think you would ever make a real unit plan as a teacher, because you don't usually spend two months working on one. But I had never gone through that before. And to really see how it all fleshed out and what different things I was using and methods of assessment and have it all down on paper, not just sort of in my head, was also a very enlightening experience.

It seems unlikely that any district-offered inservice on curriculum planning would provide anything close to the time devoted to developing these curriculum units. STEP provided the structure and impetus necessary for these teachers to engage in such in-depth learning.

The other STEP component identified as central to learning about curriculum development by these experienced teachers is the class entitled Principles of Learning for Teaching. This course addresses the relationships among the subject matter, the diverse capabilities of students, and the teacher's responsibilities to design and implement instruction; teaching is depicted as the creation of bridges between the knowledge embodied in the subject matter and the minds and motives of students. The obvious links between this material and Curriculum & Instruction courses emerged for some teachers. One remarked,

It's made me think about what are the concepts I really need to get across to the students, and how do I structure my curriculum to get that across . . . And it's something I need because while there were a lot of positives to my experience teaching with my CT [cooperating teacher], she was very much activity based. This activity will work, this will, this will, this will. I really want to get to the heart of things and I want to have certain principles that I structure my teaching around.

The strong presence of theory here served as an important counterbalance to this particular student teaching experience which was focused largely on utility. This interview comment points to an ongoing challenge for STEP, the uneven quality of student teaching placements. A greater degree of integration between the hands-on learning in teaching placements and the coursework learning in curriculum theory and technique is the ideal that STEP continues to seek.

Fostering Collegiality:
Peer Support and Collaborative Assignments

Most of the experienced teachers interviewed had entered the profession in a severely isolated context; only five of the 23 graduates inter-

viewed described their pre-STEP teaching experience as collaborative and supportive. Perhaps for this reason, the benefits of collegiality and collaboration garnered as much enthusiastic praise as any aspect of the STEP experience. Unlike the other four themes discussed in this research, this vital learning emerged from the whole of the STEP experience rather than from any particular components (with the exception of the student teaching experience, discussed more specifically below).

The relatively small size of STEP and the deliberately designed collegial interactions provide a fertile environment for the development of peer support. "One of the best things about this program," one teacher stated, "is the colleagues we have." They provided encouragement with the heavy course workload and often emotional challenges of student teaching. Some experienced teachers already felt comfortable with classroom logistics, but found peer support valuable in other ways. "I didn't necessarily need the classroom day-to-day stuff," one recalled, "I needed to talk with very good, smart people about the underlying philosophies and where we need to go in terms of education So those needs were very much fulfilled." One way in which the program structure encouraged collegial relationships was the requirement that teacher observe their peers' teaching, which created rich opportunities for sharing and learning from others. One teacher summed up the benefits of peer support, "The colleagues here are amazing. And no matter how much external things got in my way, I learned to maneuver by creating friendship and doing projects where we pushed each other."

This synergistic orientation was built by a collaborative environment that was encouraged structurally through the frequent requirements for teaming on coursework. Some of these collaborations were required to be across disciplines and school settings. As one teacher remarked, "I think I have a more holistic view . . . because I was talking with people who teach different subjects." Another concurred, lauding the value of "getting to talk to teachers who are teaching at such different levels and in such different places. That was something I hadn't really had prior to coming to STEP." While some of these experienced teachers entered STEP with a desire for greater collaboration, others needed to be convinced:

I came into STEP thinking (a) I don't want to deal with the peculiarities of another personality, knowing my own, and (b) it's kind of a thing you do on your own. It's your classroom, you're the one who's in there dealing with the consequences. I don't want someone else helping me form my lessons when they're not going to be there. Then I came out of STEP thinking, "Wouldn't it be nice and wouldn't I be lucky if I could find someone that I could work with to do that?" It really changed my point of view as far as how useful my colleagues were, other than just taking their lessons and adjusting them.

While the overall structure and ethos of STEP contributed to this collegial learning, the student teaching experience was identified as a specific, central influence. Extending three quarters, there are several components to student teaching at STEP: placement with a cooperating teacher, a graduated induction into the teaching role, weekly meetings with supervisory group (3-4 peers and a university supervisor), and thrice-per-quarter formal observations by the supervisor. This strongly interactive structure provided varied opportunities for support from colleagues in the wider sense of the word: fellow student teachers, cooperating teachers, and university supervisors.

Teachers pointed to supervisory groups as perhaps the most consistent source of program support. "We definitely discussed pedagogical hypotheticals, and [our supervisor] would throw questions out at us and we would have a lot of meaningful conversations about different ways to teach things in our classes," one teacher commented, "I feel like I learned a lot, not only from my supervisor but from my colleagues in my supervisory group, about different ways to see things, different ways to approach different books, and things like that." Several teachers valued this arrangement so much that they were determined to find it once they re-entered the profession.

I know that a lot of the things that we talked about, such as reflecting on lessons, with both my supervisor and group, I know I carried those into my teaching. And I think what I'm seeking . . . is more of a teamworking relationship. I understand that as a teacher you're in the classroom by yourself, but it just seems like it's better for the teachers and better for the students if teachers are working together.

Depending on the placement, cooperating teachers sometimes played a major role in providing collegial support, but the variation in quality of mentorship did not result in a consistent source of learning across STEP candidates' experiences.

Thinking Deeply About Practice: Structured Opportunities for Feedback and Reflection

Full-time teaching is an exhausting, consuming experience, especially for beginning teachers. Since most of the teachers interviewed for this study had only a few years' experience, this had certainly held true for them in their teaching prior to STEP. Perhaps as a result, many expressed deep appreciation for the opportunity to stop and reflect on their practice. "That was why I thought STEP was so fun," one teacher remarked, "because I had all that time to think about my teaching." Part of the value here stemmed from the regular requirements during STEP

that they record reflections. As one teacher remarked, "It's one thing to have thoughts flit across your mind. It's another thing to have to try to explain them to a third party."

The STEP components that teachers identified as supporting their thinking deeply about practice were the Portfolio and Portfolio Conference and the student teaching experience. The STEP Portfolio and Portfolio Conference serve as the cumulative activities for the STEP year. The portfolio—now often compiled on CD-Rom—includes statement of educational philosophy, teaching evaluations, professional goals statement, classroom management plan, detailed curriculum unit, adolescent case study, and many other artifacts and documents from the STEP year. One teacher remarked, "I think pulling together the portfolio was really helpful in terms of helping me see where I'd come over time and reminding me of that process. And it was sort of like a self-assessment, a meta-cognitive thing to me, and so I think that was valuable. I took a lot of time going back and rereading and rewriting what I'd done. I took time with the portfolio."

Not everyone felt they had sufficient time for such an iterative process, however, reflecting a common regret for the STEP year—too much to do in too little time. The actual conference occurs in the final weeks of the program, and consists of Portfolio displays as well as formal presentations by STEP candidates on educational topics of particular importance to them, such as formative assessment, enabling student voice, uses of various classroom technologies, and many more. The end of the year is a particularly hectic time for STEP candidates because their schools are wrapping up the year at the same time they are finishing spring coursework at Stanford and assembling their portfolios. Nevertheless, these teachers viewed the Portfolio hearing as a valuable close to the year. "The conference is nice," one teacher recalled, "Because you spend so much time on it, you want to be validated. You want to have a chance to talk about it and have somebody agree with your strengths and your weaknesses."

Appropriately, the student teaching experience also provided these experienced teachers with rich opportunities for thinking deeply about practice. STEP requires numerous classroom observations followed by written reflections. One teacher spoke of the insight gained "from the opportunities I had just to observe other teachers. I mean, if you're just teaching all the time, you don't get much of an opportunity to see other teachers." This allowed her consider her own practice as well: "Basically I spent a year on, 'How can I improve myself?'"

Many teachers pointed to the simple benefit of having another set of eyes in the classroom. One teacher remarked that observations helped her with

thinking through a lot of decisions that I make in any given lesson, sort of through the questions [my supervisor] asked me. You know, "Why is it you did this?" and realizing I did have reasons for the zillion decisions that you had to make during one lesson. So it was really helpful just talking through kinds of purposes of a lesson with someone else who actually witnessed it.

Some candidates contrasted the quality of feedback and reflection they received at STEP with the formal administrative evaluations they had received as full-time teachers, noting that most administrators had little time for sustained dialogue.

Reflection on one's teaching is not of value, however, if it doesn't prompt necessary growth. This may be particularly salient for these experienced candidates, some of whom admitted to entering the program with a fairly selective sense of purpose. This allowed them to navigate more efficiently the multiple, sometimes overwhelming demands of the program, but may have foreclosed on potential and necessary opportunities for growth; such an approach points to what Grossman (1989) calls the "largely idiosyncratic and potentially miseducative" (p. 202) experience of teachers with no formal preparation. Nevertheless, STEP's strong emphasis on reflection seems to have encouraged at least some shifts in beliefs and practices among these experienced candidates. One explained how it helped her to confront her pedagogical shortcomings:

That was a weakness of mine, pulling back from something you've just done and saying, "Okay, what worked? What didn't? How can I make this better for next year?" And you do that, I think, all the time when you pull out your last year's stuff and say, "Okay, how can I improve this?" or "Oh, I remember that didn't work really well." But I don't think I ever got deeper, like, "Okay, well why didn't it work very well? Or what are the things that I want to work on in myself as a teacher?" I hadn't had that time to think about those kinds of things.

One might expect that experienced teachers would balk somewhat at the requirements of submitting and discussing lesson plans and detailed long-term curricula, but this seemed largely tempered by its corresponding benefits. As one teacher recalled, "Knowing that my curriculum was going to be evaluated, turning in lesson plans—some of it felt invasive but I think in the end it was really valuable Accountability forces you to be a little more explicit in terms of explaining what you're doing and why you're doing it." In fact, one teacher identified this opportunity for reflection and feedback as the single most valuable aspect of her STEP experience:

Just because I hadn't taken time to do that before. And I'm a very fast teacher. I work very quickly. And watching myself on videotape and talking to my university supervisor about it when she came to watch me, it was eye opening, you know? It was like, "Oh my god! My pace!" If there were a kid who was having trouble...

This observation hearkens back to the theme of improved effectiveness with struggling students, and underscores the value of the interrelated STEP curriculum even for experienced teachers.

Developing Professional Vision: Construction of Theoretical Frameworks

While having had substantial practical experience, many teachers felt a need for theoretical grounding to inform their practice. As one teacher commented, "Well, I really value the theory. A lot of [STEP candidates] bemoaned the rigor of theory and criticized the emphasis on theory. They wanted to know how to handle class tomorrow, and I completely understand that." Now having been exposed to theory, she continued, "If I need help, like with differentiated learning, I know it's out there, I know who some of the key authors are, some of the key concepts. If I want to pull out a resource, I know it's there and I can do it." Sometimes the research provided both confirmation of past practice and the ability to extend it further, as another teacher recognized: "I came to understand more deeply the reasons why my other tricks were working . . . If you have a deeper understanding then you can apply it in different situations."

This appreciation for theory also contributed to the development of a broader professional vision that some teachers had felt they were lacking in their teaching prior to STEP. One teacher valued the opportunity to examine "some of the larger questions about education and the system and its purpose that I don't think I ever got a chance to address as a teacher." Another echoed this sentiment: "I think the reality is that once you immerse in the day-to-day workings of a large classroom, the big picture is something that you just don't have time to think about."

Two STEP courses were identified by experienced teachers as central to their development of professional vision and theoretical frameworks. The first of these, Educating for Equity and Democracy, was offered as an elective for the class of 1999, but since then has been required. As the title suggests, this philosophical foundations course encourages candidates to recognize the realities of inequality in schooling and consider how they can help make their classrooms and schools more equitable and democratic environments. "This course," one teacher remarked, "made me think really hard about why I was doing this, what the purpose was for kids." Several commented that it pushed them to think in entirely new ways about education, "thinking in channels and

bandwidths that I hadn't even thought about before." Offered in the opening summer quarter of STEP, it asks teachers to develop their own philosophy of education, and as one graduate put it, "It was nice to have that at the beginning of the year to think, 'You know, I need to develop one!' Otherwise I'm going here and there and not able to set that line so I could say, 'This is what I'm trying to do.'" Equity and Democracy helped provide a framework with which to measure one's growth as a practitioner.

The second course that experienced teachers pointed to as integral to this theme is entitled School Reform and Equity. Developed as an elective extension of the Equity and Democracy course, it examines current reform efforts—structures, pedagogies, and personnel roles—and encourages candidates to consider what role they might play in their future place of employment. This final objective emerged strongly in the interviews and again echoed the theme of professional vision. "That was a really great class for getting, 'What should I look for in a school? What are some things to consider? Why do a lot of schools not work?'" commented one teacher.

This class also helped teachers to navigate the potentially disheart-ening realm between the real and ideal; a class with an unwavering focus on the ideal would likely ring a false note with these experienced teachers. One teacher recalled her frustration with developing a philosophical vision that was unattainable given the limitations she had faced as a teacher. As she put it, "There's no way I can do it with 33 kids in a classroom for 50 minutes." School Reform and Equity conveyed a different message to her, however: "Instead of throwing the baby out with the bathwater, okay—here I have my philosophy, here I know the limitations. There is a spark for the future."

Conclusion

A program that helps teachers navigate the already familiar world of the classroom equipped with theory that speaks directly to their experiences—while also nurturing new vision—is a powerful opportunity. In the eyes of these teachers, STEP provided vital learning that had been unavailable to them through the lens of experience alone. Much room for improvement still exists, of course, and our graduates have ideas about that as well.

The results of this study do not discount the value of classroom experience in the preparation of teachers, but they clarify the value of formal preparation as well. Of the 23 teachers we interviewed, each believed that STEP was a valuable learning experience, and all but one indicated they would do make the same decision again to return for formal preparation. It appears that the way in which STEP allows theory

and practice to inform each other is a vital component in learning to become a highly effective teacher of all students. STEP seeks to avoid the front-loaded coursework model of most undergraduate programs, in which candidates take numerous courses before getting a chance to experience theory in action, but as these teachers have suggested, experience alone is not sufficient. For many of them, STEP was an opportunity to gain vital perspective. As one teacher's concluding words made clear, STEP offered a way to see the broader picture of her work: "All of a sudden, what I'm doing now has a context, it's so much more meaningful, so much more intellectually stimulating. It's not just about developing a lesson, but there's a larger, more complex purpose."

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Notes

 $^{\rm I}$ The other four previously experienced teachers from those two classes were unavailable for interviews.

² Practicum has evolved as a course experience perhaps more than any other in STEP. Lasting all four quarters, it touches on a wide variety of issues, including assessment, special needs learners, and portfolio development (see below). It also serves as the connection between STEP curricula and the school internships, providing time for meetings with supervisory groups as well as "debrief" time about student teaching experiences.

References

Buchmann, M. & Schwille, J. (1983). Education: The overcoming of experience. *American Journal of Education, 92* (1), 30-51.

Darling-Hammond, L. & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16 (5-6), 523-545.

Grossman, P. L. (1989). Learning to teach without teacher education. *Teachers College Record*, *91* (2), 191-208.

Johnston, S. (1994). Experience is the best teacher; or is it? An analysis of the role of experience in learning to teach. *Journal of Teacher Education*, *45* (3), 199-208.

Kunzman, R. (in press). From teacher to student: The value of teacher education for experienced teachers. *Journal of Teacher Education*.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques.* Newbury Park, CA: Sage Publications.