

Curriculum, Coherence, and Collaboration: Building a Professional Learning Community Among Instructors in Initial Teacher Education

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Although there has been research on *professional learning communities* (PLCs) in schools, little attention has been paid to them in contexts of higher education. This article chronicles the development of a PLC, involving the 18 instructors who teach educational psychology each year to 1,400 preservice teacher candidates. Through questionnaires and interviews it illustrates how we established a coherent, shared conception of what teacher candidates need to learn and of how theory connects to practice. Finally, the authors describe a mature PLC in which there has been a substantive culture change and where group members have also established informal networks that have facilitated smaller joint-work projects.

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Vygotsky's (1978) concept of the "zone of proximal development," where children perform above their level of individual skill, "under adult guidance or in collaboration with more capable peers" (p. 86), and his general emphasis on culture and social interaction, have had a major impact on developmental theory and educational practice. His influence can be seen in Bruner's approach to education, where Bruner envisioned the classroom as a culture dependent on feelings of membership and acknowledgement by one's peers (Bruner, 1996; Olson, 2007), and in Brown and Campione's (1994) "Community of Learners." More recently, this idea has been extended to learning to teach within a *professional learning community* (PLC; Cochran-Smith & Lytle, 1999).

These cultural approaches stress the intersubjective nature of education in terms of interactions between teacher and student,

student and student, as well as between teachers. Although instructors in faculties of education advocate such communities for teachers, there is often little of this collaborative interaction among academic instructors themselves.

"Psychological Foundations of Learning and Development" is the required course in educational psychology for over 1,400 preservice teachers at a large Canadian university where we teach. The course is offered under the auspices of the department of human development and applied psychology. Each year about 18 instructors with diverse backgrounds and preparedness for teaching the course deliver it in almost 40 different sections. Some instructors have taught children and adolescents for many years, but others are tenure-track professors with research expertise in developmental psychology, cognitive science, or both, but with little experience teaching in schools.

There was a tradition of little interaction, little cohesion, no shared conception of what beginning teachers needed to learn, and no core syllabus in the program—problems that often befall large departments in higher education. Instructors individually cobbled together their course based on their own understanding of educational psychology as well as on their personal interests and expertise.

Our objective was to confront the challenges experienced in the teaching of this course by developing a PLC as the organizing structure and enabling mechanism for building connection and coherence. Although there has been a huge amount of documented work on PLCs at the school level (cf. Blankstein, Houston, & Cole, 2008; Hord, 1997), and many instructors espouse the benefits of PLCs to their teacher candidates, we believed that university-level instructors themselves could fruitfully adopt the model and profit in their own professional learning. In this article, we discuss its early progress, its later advancement, and its effect in fostering a culture of cooperation and professional growth for its members, as well as generating higher course satisfaction ratings for the students being taught.

Our goal is not an outcome evaluation but rather an ethnographic implementation chronicle that takes a descriptive form and has the potential to offer some concrete images to others faced with similar conditions when teaching educational psychology.

Initial Teacher Education: The Context

Given what we know about the contribution that quality teachers can make

to the learning and lives of our children (Cochran-Smith & Zeichner, 2005; Darling-Hammond, 2000), it seems a sensible priority to work to understand the conditions that inspire such development. In addition, although one could reasonably argue that the cultivation of such competencies is spread across the professional lifecycle of teachers, it is the initial teacher education program—and its mandate of intentional professional development—that constitutes the institutional context in which this journey begins.

Past research on teacher education programs (cf. Darling-Hammond & Bransford, 2005; Feiman-Nemser, 1990) highlights the problem of inconsistent and fragmented offerings both between and—within courses, as well as with respect to connections to the larger field. Programs and courses that lack a common conception of curriculum, learning, and teaching have been found to be of little influence in shaping the practice of beginning teachers (Howey & Zimpher, 1989; Zeichner & Gore, 1990).

In a study of teacher education programs whose graduates reported significantly higher feelings of preparedness for classroom teaching than their peers and who are more highly rated by employers (Darling-Hammond, 1999; Darling-Hammond & Bransford, 2005), several elements that characterize successful teacher education programs and courses were identified. Among these elements there is a focus on a shared vision of good teaching with consistent links between coursework and practice, extensive use of case-study methods, and a common core curriculum

grounded in substantial knowledge of development and learning and taught in the context of practice. The concept of a PLC seemed a particularly promising mechanism to jointly focus on these elements, and in doing so, to build connection and coherence within the educational psychology course.

A PLC: The Mechanism

Despite different nuances of interpretation in the PLC literature, there is broad consensus that the term *PLC* suggests a group of people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, and learning-focused way, and operating as a collective entity. Mitchell and Sackney (2000, p. 9), for example, described a learning community as “a group of people who take an active, reflective, collaborative, learning-oriented, and growth-promoting approach toward the mysteries, problems and perplexities of teaching and learning.” Stoll (2004) consolidated the various characteristics of PLCs espoused in the literature as shared purpose, focus, and vision, in particular, an unwavering commitment to student learning; collective and organized responsibility for improvement (King & Newmann, 2001); collaboration extending beyond casual story-swapping to rigorous examinations of practice in intentional joint work (Little, 1990); collective and individual learning (Hakkarainen, Palonen, Paavola, & Lehtinen, 2004); and reflective professional inquiry (Earl & Katz, 2006; Katz, Sutherland, & Earl, 2005).

In the remainder of this article, we offer particular illustrations of how we, in an attempt to work as a connected and coherent *Psychological Foundations of Learning and*

Development PLC, have engaged with the model of an effective PLC outlined above. Specifically, we examine four areas of intentional work that underscore the very essence of a PLC. First, we describe our organizing “purpose and focus” in terms of the need to answer what it is that beginning teachers need to know and be able to do with respect to the domain of educational psychology, and we present the collaborative curriculum building process that functioned as our response to that question. Second, we provide an operational illustration of “distributed expertise” by way of a theory-practice mapping exercise that capitalized on individual expertise in the service of a collective goal. Third, we show how, through questionnaires, we intentionally harnessed “inquiry” as a systematic process to explore our collective learning needs. Finally, through a series of extensive interviews with members of our community we provide images of what it means to think, learn, and practice within the context of a PLC with a particular focus on our evolution toward becoming a mature PLC.

Purpose and Focus: What Counts as Competence?

Stoll (2004) suggested that having a fundamental and clear organizational purpose is critical to the success of PLCs. A shared vision is likely to have a more direct impact on teaching practices and student learning, if it is focused in ways that are concrete and useful (Timperley & Robinson, 2003), compelling, shared, and challenging (Bryk, Camburn, & Seashore, 1999; Firestone & Pennell, 1997; Lieberman & Grolnick, 1996). A challenging focus is one that involves reconceptualizing and making changes to existing practice and structures. The change process is legitimized by

making the status quo more difficult to protect and offering opportunities for joint attention to issues that are larger than any one person could address alone (Timperley, 2004).

However, simply changing one's focus is not enough to improve practice (Elmore, 2002; Wohlstetter & Smith, 2000). PLCs need to choose the "right" focus, given their particular context and history and what is explicitly known about practices that optimize student learning (Marzano, Pickering, & Pollock, 2005). The learning focus should set parameters and give PLC members direction for their learning and their work. As they proceed, they need to become knowledgeable about the core components of their chosen focus so that they can integrate them into their daily practice and ensure that they respect the intents of the focus rather than inadvertently eliminate or erode them (Timperley, 2004). This latter point is particularly important given Lieberman's (2004) findings that learning communities often struggle to hold onto a particular focus while participants want solutions to their current problems.

In developing a collaborative and supportive community among the diverse instructors who teach psychological foundations, we began with a shared purpose and focus suggested by a key question: What is it that beginning teachers need to know and be able to do with respect to educational psychology? We wanted our answer to the question to take the form of an artifact that would give us curricular direction and reduce the variability that had historically characterized the program. Group members read seminal publications such as *How People Learn: Bridging*

Research and Practice (Donovan, Bransford, & Pellegrino, 1999) that summarized, for instance, research in cognitive science and its implications for learning and instruction.

The resultant curriculum document took the form of a list of principles that grew from the collective expertise of our learning community. Each principle on the list was assessed, and the demands for justification led to an iterative honing. The key findings from Donovan et al. (1999) were incorporated into our core principles and can be seen in the Appendix.

The collaboration involved in generating these principles not only resulted in a foundational framework that ensured deliberate alignment and coherence in the delivery of the psychological foundations course but also provided the beginnings of a substantive culture change. Our group of instructors transformed from isolated individuals who taught their cohort of students alone and somewhat guarded their teaching methods and resources to a community where best practices and resources were generously and openly shared on an interactive Web site we called "Excellence Through a Community of Instructors." Members contributed not only course outlines to the Web site but also detailed reading lists, audiovisual materials, their PowerPoint presentations, case studies, human resource contacts, Web site links, and classroom activities to support instruction. In our face-to-face meetings, experienced instructors presented their successful practices to new instructors. A "mini-library" for the course was established in the department, and it has grown to include a comprehensive set of course

readings, relevant books, textbooks, DVDs, and videos recommended by instructors. The following excerpt from a report prepared after a meeting 2 months into the process captures the growing attendance and the cooperative spirit within our group.

Fourteen instructors attended the meeting, and there was a great deal of enthusiasm and excitement about the new Web site and the idea of working as a community of instructors to collaborate in creating a cohesive course. By sharing with each other what we have each found to work really well, we can best prepare our students for competence as teachers, and, in turn, their own students will benefit.

The particular benefits of the Web site that we discussed are the following: (a) The Web site will be useful for new instructors so they won't have to "reinvent the wheel"; (b) it will stimulate experienced instructors to reflect on new ideas and improve their courses; (c) as we move closer to a core syllabus, all instructors can use the posted resources to fill in the gaps in their courses; (d) it will provide a place for reflection and discourse; and (e) we will later open it up to the other foundations course instructors, which will help with communication (and coherence) across the foundational courses. Students only get this course once each. Drawing from—and then improving on—the best of other instructors will make for the highest-level program for all 1,400 of our students.

At the next meeting we will again discuss the core syllabus. A draft copy is posted on our new Web site. Then Dona and Lesley will be talking about an approach to teaching that Dona had developed and that

Lesley, as a new instructor in our program, is now using too, with great success.

At this next meeting, Lesley described how she "stood on Dona's shoulders." She began with Dona's practice and other shared materials, and then she adapted them to suit her needs. After describing the improvements she made, the group (including Dona) asked that her refined version be placed on our Web site.

It became evident to our group of instructors that just as we taught our preservice students about the effectiveness of scaffolding new learning, our instructor PLC was experiencing the effects of being scaffolded by each other's expertise, not only in content knowledge but also in pedagogical awareness and application. Our collective or distributed expertise was effectively being used to support the learning and development of both new and more experienced instructors.

Distributed Leadership And Distributed Expertise

In recent years "distributed leadership" has emerged as a key concept in the organizational learning and improvement literature, and it has received substantial attention within the educational enterprise (Spillane, 2003). Copland (2003) described distributed leadership as an emergent property of a group of interacting individuals, contrasting it with notions of leadership that focus on the actions of single individuals. It involves recognizing expertise, rather than hierarchical position or formal role, as the basis of authority. The knowledge and skills necessary to exercise leadership for moving the improvement agenda forward reside within and are

distributed across the group. Decisions about who leads—and who follows—are dictated by the task, problem, or situation. This conception of leadership holds considerable appeal and applicability for the structures and practices of PLCs in general and, as we will see, for our PLC in particular.

The broad spectrum of psychology covered in our principles ensured that individual expertise would be distributed throughout the core syllabus. Our strategy was to harness this distributed expertise and

allow the group to benefit from an amalgam of knowledge.

Specifically, we embarked on a curriculum mapping project whereby group members took responsibility for particular core syllabus principles that were within their individual realms of expertise and then “mapped forward”—first to the relevant theories, concepts, and research, and then further on to practical applications in the classroom (see Table 1).

Table 1. *A sample of the project: Mapping Theory to Practice*

Psychological principles from our core syllabus	A sample of corresponding psychological theories, concepts, and/or research	A sample of pedagogical equivalents (practice)
People progress through stages of development	Concrete to abstract thought (Neo-Piagetians, Case; Microdevelopment, Fischer). Identity formation in adolescence (Marcia). Synapse pruning in prefrontal cortex during adolescence (Giedd).	Recapitulate concrete to abstract with all new material (initial concrete examples). Support active searches and commitment to values. Help to understand teenage risk taking and impulsivity.
Social interaction plays an important role in cognition	Scaffolding (Vygotsky/Bruner). Research on different contextual advantages of student-to-student vs. teacher-to-student teaching.	Modeling as in “Reciprocal Teaching” (Palincsar). Cooperative learning methods, e.g., Student Teams-Achievement Divisions (Slavin’s STAD) and Jigsaw techniques.
Learning is a constructive not a receptive process	Constructivism as a psychological theory (information processing and memory). Constructivism as pedagogy (Dewey’s emphasis on actively experiencing the world).	Starting with what the learner knows (e.g., if teaching Hamlet, begin by “imagine that your mother’s ‘new man’ was the cause of your father’s”; <i>How People Learn</i> , p. 46). Actively experiment (e.g., testing water in the school water fountains; <i>How People Learn</i> , p. 176).

As a check on the validity of our core principles, we also mapped backward—from practice to theory. Using the meta-analysis by Marzano et al. (2005) that provides the nine instructional strategies—for instance, identifying similarities and differences and providing nonlinguistic representations—that intervention studies show to be most effective, we collaboratively made connections to the various possible conceptual underpinnings and then to the principles of our course. Every one of the instructional strategies mapped to at least one of our principles, and every principle connected to at least one of the instructional strategies.

Though valuable in the production of the culminating document in its own right, the strength of this activity was in further building community and directing curriculum improvement. For example, the process brought us to the realization that although we understood and subscribed to the importance of building metacognitive awareness among students, we needed to work harder at explicating the practical implications of this insight in strategic classroom terms.

Inquiry: The Engine of PLCs

The cognitive architecture of human beings operates by preserving existing understandings and interpretations. This cognitive bias toward confirmation of one's existing beliefs is unavoidable, as people use what they already "know" in order to make sense of new knowledge and ideas (Karpov & Bransford, 1995; Schwartz & Bransford, 1998). For the most part, individuals trust what they know and search for support for their beliefs, but transcending the blissful ignorance of Plato's paradox (i.e., not

knowing what you don't know) is a fundamental prerequisite for knowledge construction and new learning (Donovan et al., 1999; Katz et al., 2005).

Little (2005) referenced a large body of research, suggesting that conditions for improving professional practice are strengthened when practitioners collectively question ineffective teaching routines and examine new conceptions of learning. Systematic inquiry is the engine by which PLCs can counter the cognitive biases and entrenched beliefs that people hold. Strong PLCs are built around members who regularly interact with colleagues to examine their work. By placing beliefs under scrutiny, members' assumptions about practice can be reviewed in a way that leads to deeper understandings (Bryk et al., 1999; Hudson-Ross, 2001).

Within our Psychological Foundations of Learning and Development PLC, we are making intentional and systematic collective inquiry a part of our improvement-directed work. We began by designing a short questionnaire to investigate what instructors believed we needed to learn more about. For each of the principles in our core syllabus, we asked instructors to (a) rate the importance of the principle; (b) rate their levels of expertise with the associated concepts, theories, and research, as well as the practical implications of the principle; and (c) rate their desire to learn more about the related concepts and corresponding practical implications of the principle. There was also room for explanations and comments on the ratings.

Although three of the part-time instructors who taught elementary-level

teacher candidates mostly off-campus made no attempt to join our PLC, all of the instructors who taught secondary-level teacher candidates were involved, and every one of them completed the questionnaire. They also all clarified or elaborated their responses, thereby, providing us with both quantitative and qualitative evidence and guidelines. The results provided a picture of where we stood at the time and suggested directions for future professional development.

In terms of importance, all nine principles were highly rated. The principles that were considered the most important, that is, “motivation is a critical aspect of student engagement” and “learning is a constructive, not a receptive process,” had the lowest variability. Similarly, the principle that was rated the lowest of the nine, that “an understanding of behavioral principles can help teachers support learning and manage their classrooms,” had the highest variability. Participants’ comments illustrated this variability. For example, an instructor’s response accompanying a high rating read, “I like this probably more than many other people. I think it is foundational and useful.” Whereas another comment qualifying a low rating read, “Little to do with learning/teaching except for activities related to manipulative physical skills—piano scales, multiplication tables, spelling. . .” However, in the latter part of the questionnaire, this respondent showed a sincere desire to learn more; next to his low rating of his knowledge of behavioral concepts he added, “Allowing for my bias, I have to give behaviorism a better hearing; tend to be too dismissive of it perhaps.” Finally, when filling in the final section on “desire to learn more,” he gave behaviorism

the joint highest rating, noting, “I can be persuaded, perhaps.” This last comment demonstrated his openness to our collective intentional inquiry.

The questionnaire as a concrete artifact revealed our beliefs and clarified our priorities. Respondents clearly expressed that they knew more about the theories and concepts covered in the course than about the classroom implications of these theories—laying bare the academic orientation of many instructors and their commensurate lack of firsthand experience in teaching young people. It was here that collective inquiry and professional development could be focused in future planning. As one instructor noted in her comments, “Interested in learning more about practical implications. Always looking for activities, etc. that make these concepts more salient and useful to teacher candidates. What do the candidates need, and what will help them?”

Extending this latter point, our group prepared and administered a second questionnaire; this time an examination of our teacher candidates’ perceived needs from the course. Again, the group members’ various responses pointed to particular issues and questions with which they were wrestling. Two of the core principles, in particular, emerged as subjects worthy of further exploration. First, in addressing the principle that expertise involves knowledge and deep understanding, which takes time and effort, respondents asked questions such as, “What happens if students (and/or teacher candidates) have a poor knowledge base to start with? How can one learn if there is no knowledge to build on?” Second, the principle that a “metacognitive” approach to instruction can help students

learn elicited passionate responses, for instance, (a) “Believe this deeply, just wish I knew more how to do it and make it stick.” (b) “We tell our students this but it’s hard to implement. How then can we expect teacher candidates to use this approach with their students?” (c) “Huge gap between knowing and doing here!” and (d) a more specific query, “How do we teach students at the appropriate developmental level to be metacognitive?”

The intentional inquiry captured in the two questionnaires helped to frame our group needs. The next step involved identifying the PLC members with specialized knowledge in the prioritized areas, who became the facilitators of later discussions.

Thinking, Learning, and Practicing: The PLC as “Experienced”

The most recent initiative that arose from our PLC was a series of personal interviews of psychological foundations instructors. The purpose of conducting these interviews was twofold: first, to examine what it means to think, learn, and practice within the context of our PLC; and, second, to investigate the joint work that members, who have now become habituated to a culture of collaboration, are pursuing in smaller groups and how these efforts can support learning when brought back to the larger community.

To examine the experienced aspects of working within our PLC and track the informal collaborative projects now in place, we interviewed 10 instructors. All of the interview participants have been community members for at least 2 years and 5 of them had been involved with the group since its

inception 5 years ago. We hoped that these instructors would be able to bring scope and perspective to their recollections. The interviews lasted approximately one hour; they were taped and then transcribed. Participants were asked to respond to questions about 1. their relationship with our PLC (e.g., benefits drawn, contributions made, and how they value collaborative learning); 2. perceived ways the PLC has benefited the students they teach; 3. the impact of the PLC on their personal feelings and confidence; and 4. whether they are engaged in joint-work projects with other community members.

The transcripts from the interviews indicated that our group is indeed a mature PLC. They offered abundant evidence that new members continue to be welcomed and offered guidance, whereas more experienced members take pleasure in working together and sharing materials, new projects, and inquiry. For instance, Mike, an experienced high school teacher, who had recently received his PhD in psychology, described how in his first year of teaching the course he was invited to sit in on classes taught by veteran instructors, received encouragement and direction, as well as course outlines and complete lesson plans including readings, case studies, and assignments. However, his engagement with the group changed over time. Initially he considered himself “a thief more than a contributor. I was there to get, now I want to give.” Mike’s impression was universally shared; every respondent spoke of receiving generous support and valuing the now entrenched culture of collaborative learning.

The interview transcripts clearly show our psychological foundations PLC to be

coherent and connected; that is to say, instructors think about the course in terms of the core principles and rely on the expertise of colleagues when they are uncertain about how to proceed. Without exception, the instructors who were interviewed expressed virtually identical views about both a shared purpose (to improve teaching and learning for the benefit of both teacher candidates and their future students) and the focus of the course (what teacher candidates need to know). Marina spoke for the group when she observed, “this foundational framework ensured deliberate alignment and coherence in the delivery of a course” given by so many instructors. She pointed out how “a common vision and consensus was established around content” and that “in our many conversations over the years, the emphasis has always been on how to facilitate the development of deep understanding that promotes fluency in applying principles of cognition into classroom practice.” John, a former dean of our faculty of education, stated that he hadn’t seen this degree of coherence and continuity in other foundations groups: “Our community is unique and admirable.”

Although thinking within the context of our PLC can be said to be unified in purpose, focus, and content, in terms of expertise it is distributed and independent minded. The group has expertise spread across the domains of educational psychology. For instance, as Marina noted, “The group is quite complementary. I brought a particular perspective as I was trained in cognitive psychology. There is quite a lot of variability and expertise in the group as everyone brings different backgrounds to the table. The variability makes it interesting.” Diverse expertise

allows for flexibility in how the core principles manifest themselves both in our own learning and in how we teach our students, thus sanctioning healthy academic freedom and ensuring core content is covered.

The interviews also revealed that the learning process within our PLC has shifted, a change noted by every one of the respondents: Initially, support revolved around the sharing and refining of materials either at formal meetings or on the community’s Web site, with PLC coordinators, Steve and Joan, sharing primary responsibility for setting the agenda and facilitating activities. However, over time other instructors have developed the confidence to take leadership roles, bringing forward areas of inquiry and presenting their own theoretical, technological, and applied knowledge to the group. For example, at a meeting last year Carol brought forward for discussion three anchor questions with which she had been wrestling: (a) What does constructivism mean in terms of a theory of learning? (b) How might instructors address or clarify the relationship between teacher candidates’ personal experience and the accumulated findings of published research? and (c) How does “all students learn differently” reflect what we know from cognitive psychology and cognitive neuroscience?

It is more significant to note that members of the group are reaching beyond scheduled meetings to fashion informal networks. Every instructor who was interviewed described how sharing in the larger PLC meetings has facilitated the formation of smaller joint-work projects. Small groups of instructors are now meeting

for their own purposes in configurations that are flexible and responsive to their needs. Hazel, Carol, and Barbara all described how the culture of sharing developed in the large group, has evolved into intentional joint work around a table having “animated” discussions about theoretical papers while attempting to distil the practical applications. As Barbara noted, “We discuss the article and then argue about our understanding.” Carol insisted, “The experience (is) organic. Learning is an ongoing process, and I am committed to this thinking.” Each joint-work project has taken on a shape of its own: (a) Anita and Donna are creating internet-based resource areas for students; (b) Barbara, Hazel, and Anita are working to establish a PLC at a city high school; (c) Hazel and Becky are carrying out research on teacher candidates’ perceptions of educational psychology (McBride & Chen, 2006); (d) Connie is visiting Anita’s class to give an anger-management workshop. Afterwards, Anita gave Connie feedback and pointers, and Connie reflected, “Anita’s comments were really interesting to me because I have been doing this for years, and I’ve never had a colleague that gave feedback. That was just a wonderful experience.”

Small group collaboration seems to have been particularly effective in supporting the innovative use of technology in teaching the educational psychology course. Anita provided her expertise in using an online database (Knowledge Forum® 4.5) where students (monitored by the instructor) have online asynchronous conversations about concepts in educational psychology. A joint-work project emerged in which videos were made of expert teachers thinking aloud about the case studies that instructors were

assigning in their courses. Joan and her graduate students made the videos, and Barbara then combined technologies by providing one of the videos on Knowledge Forum and the students reflected and conversed online about the case study. As Joan observed, “The students’ notes that they posted to each other gave us an idea of how effective this expert video method is. We’ve just presented it at AERA [American Educational Research Association], and it generated a lot of interest.” More recent research assessed how secondary students used these videos (Nirula & Peskin, 2008).

On one level, this interest in smaller collaborative efforts on the part of several experienced instructors reflects a preference for more intimate discussion of curriculum and instruction with trusted colleagues. No doubt, every PLC in a postsecondary setting is susceptible to the inescapable problem of not having enough time (because of conflicting schedules and diverse demands) to meet more frequently. However, by all accounts the psychological foundations PLC has managed to steer clear of the kinds of problems that undermine efforts to create deep conversations about teaching and learning. We explicitly recognize operational pressures (such as grade submission and practicum visitation deadlines) and build practical problem solving into the work of the PLC, while at the same time we take care not to conflate an operational focus with a learning one. Although collective wisdom is our vehicle for continuous professional learning and improvement, we explicitly recognize that learning together in a meaningful way does not always mean the same thing: Sometimes it is learning from one another, at other times it is learning with one another, and on

occasion it is even learning on behalf of one another.

That said, two interview respondents were troubled that we were not bringing insights and initiatives back from smaller joint-work groups to the larger PLC as quickly and effectively as we might. This is our latest area of focus. At our three most recent meetings, teams of instructors who volunteered to take responsibility for leading various structured seminars presented a summary of research (and implications) on selected topics, including individual differences, motivation, and metacognition, to the PLC. The intentional marshaling of our distributed expertise created a forum for members of the PLC to reflect on foundational, theoretical, and practical questions in educational psychology.

PLC: A Model Worth Sharing

We believe that we have built our capacity—both individually and collectively within the PLC—in ways that have enhanced the learning, development, and experience of tomorrow’s teachers. A source of unplanned evidence was provided by an annual, institution-wide survey of our graduating teacher candidates that has recently included satisfaction ratings of our psychological foundations course: For the group of students taught by the PLC team of instructors, satisfaction ratings with the course increased first by 5% and the following year by a further 6%, a total increase of 11%.

The “ratchet effect” in comparative psychology (Nelson, 2007; Tomasello, 1999) refers to cultural advances made by providing members of a group with an artifactual base to work with and improve

on. In this way the group culture is increasingly “ratcheted up a notch.”

Although Tomasello wrote about this from the perspective of comparative psychology and the cultural origins of human cognition, it is precisely what we aimed for in our major activities, and at least in some measure, we seem to have achieved. For new instructors teaching the educational psychology course, there is now, for instance, a consistent and explicit conception of competence: The curricular document, the mapping of theory to practice, and the shared materials and best practices are the artifactual foundation on which they can improve their teaching. Concomitant with the creation of this resource base, building a PLC has inspired a culture of sharing, cooperation, and professional growth that pervades the department.

The idea of building a PLC in initial teacher education in particular and in higher education more broadly is now of interest to many educators looking to improve praxis. Our experience described in this article might serve as a model: The initial steps in inspiring this culture of sharing and cooperation could involve, first, a project that is integral to the endeavor and involves a shared focus and joint inquiry, for instance, ensuring coherence in the teaching of the course; and second, the intentional sharing of successful practices, both in the group meetings and by means of an interactive Web site set up for this purpose. Thereafter, the group may jointly decide their future directions, for instance, determining domains of expertise, clarifying students’ needs and setting priorities, deciding on the content of structured seminars, and facilitating small group projects.

Indeed, instructors faced with similar conditions who teach other courses in our faculty of education have already begun to emulate our process as they attempt to build PLCs of their own. Furthermore, our mapping project now forms the basis of coherence between all foundational courses in the program. As Steve pointed out,

I've taken the knowledge created in the Psychological Foundations PLC and injected it into a bigger conversation designed to map the graduate outcomes across the complete initial teacher education program . . . Other program components are looking at our model and thinking about what the equivalent would look like for them

Recent developments within our PLC have evidently helped with communication and coherence throughout the program.

In this article we provided an argument for establishing PLCs within a higher learning setting. We described a pedagogical innovation, the initial stages of implementation, and the benefits of community building for those of us involved in teaching the course. Establishing a PLC created an opportunity to investigate ideas and practices through a number of lenses, to put forward hypotheses, to challenge beliefs, and to come to an understanding of practice that went well beyond the large group effort. Early indicators suggest a PLC committed to a culture of collaboration has the potential to make a significant impact on the teaching of educational psychology.

We express special appreciation to the "Psychological Foundations of Learning and Development" community of instructors. It is on our collective behalf that we tell this story.

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Appendix

Our Nine Core Principles

1. People progress through stages of development.
2. Social interaction plays an important role in cognition.
3. Learning is a constructive not a receptive process.
4. People come to learning with conceptions about how the world works. If their initial understandings are not engaged, they may fail to grasp the new concepts or may revert to their misconceptions outside the classroom.^a
5. Students must have a deep foundation of knowledge, understand facts and ideas in the context of a conceptual framework, and organize knowledge in ways that facilitate retrieval and application.^a
6. A metacognitive approach to instruction can help students learn to take control of their own learning by defining learning goals and monitoring their progress in achieving them.^a
7. Motivation is a critical aspect of student engagement (and thus learning).
8. An understanding of behavioral principles can help teachers support learning and manage their classrooms.
9. Educators must be aware that learners have different capabilities and different preferences and needs.

^aPrinciples from Donovan, et al., 1999).
