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Professional Development Schools: Preservice Candidates' Learning and Sources of Knowledge

The purpose of this study was to explore the experiential learning of preservice candidates when they are involved in professional development schools and in conventional practice teaching placements. It was found that the lessons they believed they learned were categorized into four groups: curriculum planning and evaluation, pupils and pupil-teacher interactions, discipline and classroom management, and professional knowledge. Their stated sources of knowledge were personal reflections, mentor teachers, other teachers, professors, and other supportive people. Student teachers in professional development schools also learned through weekly seminars and discussion with their peers.

Cette étude a analysé les acquis expérimentiels de stagiaires pendant leurs cours dans des écoles de développement professionnel et pendant leurs stages. Les résultats indiquent que les étudiants répartissaient ce qu'ils croyaient avoir appris dans quatre groupes: la planification du curriculum et l'évaluation; les élèves et les rapports enseignant-élève; la discipline et la gestion en salle de classe; et les connaissances professionnelles. Les étudiants ont identifié les sources de leurs connaissances comme étant les suivantes: les réflexions personnelles, les enseignants-mentors, d'autres enseignants, des professeurs, ainsi que d'autres personnes qui les appuyaient. Les stagiaires dans les programmes de développement professionnel ont ajouté qu'ils apprenaient également par le biais des séminaires hebdomadaires et des discussions avec leurs pairs.

Many student teachers believe that the practicum provides the only real learning of their teacher education programs (Britzman, 1991). They perceive that a simple relationship exists between the amount of learning and the quantity of school experience: the more experience, the greater the learning (Johnston, 1994). Preservice candidates also apply a single criterion to the value of their own work: a successful class is one that proceeds through the required lesson on time in a quiet and orderly manner (Zeichner, 1980). Faculties of education, school administrators, classroom practitioners, and teachers' federations also regard the practicum as a central component of teacher education. However, as traditionally conducted, the practicum has been criticized. Despite its obvious potential, in its present form it is not always an occasion for teacher education (Feiman-Nemser & Buchmann, 1987; Johnston, 1994). One reason for this is the absence of structures that support the development of peer support (Chamberlin & Vallance, 1991). In traditional practicum arrangements a single student is

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placed with a veteran teacher in a school for a few weeks and is visited periodically by a faculty supervisor, providing little opportunity for peer support and discussion among student teachers. However, clustering student teachers in a single school facilitates the opportunities for mutual exchange in which they share perceptions and discuss the relevance of their shared experience (Weinstein, 1988). Deal and Chatman (1989) also emphasize the need for these discussions as they help to reduce the feeling of isolation experienced by many student teachers.

A second problem is the lack of training and support for mentor teachers in the supervision of preservice candidates (Bourdages & Boudreau, 1996). Researchers point to the importance of the relationship between the student teacher and his or her supervising teacher in determining the amount and nature of professional development growth experienced by the novice (Chamberlin & Vallance, 1991; Jacknicke & Samiroden, 1991; Kagan, 1992). However, schools are busy workplaces where it is difficult for a supervising teacher and a student teacher to find time to engage in reflective discussions. Nevertheless, it is argued that mentor teachers must be actively involved in ongoing discussions with student teachers to create a concrete sense of pedagogical thinking and acting (Feiman-Nemser & Buchmann, 1987). It is also suggested that mentor teachers talk about what they do and why, demonstrate how to assess and extend children's thinking, teach student teachers how to probe for understanding or misunderstanding, and encourage them to talk about their reasons for decisions and actions (Feiman-Nemser & Buchmann, 1987; Kagan, 1992).

A third problem with the conventional practicum is its tendency to validate uncritically educational structures and understandings that may severely hamper professional growth (Hargreaves, 1994). One instance of unquestioned structures in secondary schools are subject-specific departments that tend to balkanize knowledge and norms, encouraging inflexibility in the use of human and technological resources. Hargreaves argues that

Induction into a subject or other subculture is induction into a particular tradition with its own common understandings about teaching, learning, grouping, and assessment. Where cross-membership of subgroups is rare, induction into one tradition means exclusion and distancing from other, different ones. Communication between staff and consistency of expectations among them are the casualties. (p. 214)

However, if novice or preservice teachers are placed in cross-departmental settings to reflect on educational practice before their subject-specific norms have ossified, there may be a greater likelihood that traditional structures and values will be more critically assessed and possibly breached.

Finally, faculty supervisors have been faulted for not taking their role seriously (Feiman-Nemser & Buchmann, 1987). Too often student teachers are sent out into the field and "orphaned" by the teacher education institution. Faculty supervisors should support learning by helping to connect foundational knowledge to particular actions and decisions and to reinforce important concepts and orientations developed in the teacher education program (Duquette & Cook, 1995).

The organization of conventional practica with their short time frame, isolated student teachers, limited inservice of mentor teachers, and inconsistent involvement of faculty supervisors may contribute to the lack of effective teacher education during the practicum. Professional development schools (PDS) offer an alternate structure for student teaching and school-university partnerships (Holmes Group, 1996). In the PDS structure preservice candidates have a greater involvement in the schools, where they are supported by peers, mentor teachers, and faculty advisors. Moreover, teachers are provided inservice and ongoing support in their roles as mentors by the faculty supervisors who are frequently present in the school (Duquette & Cook, 1994).

Purpose

The problem as reported in the literature is that conventional practice teaching placements are not always an occasion for authentic teacher education. A partial explanation for this, it has been argued, is that the organization does not allow for all of the conditions necessary for professional growth. However, the structure inherent in professional development schools may offer an improved opportunity for experiential learning. Therefore, the purpose of this study was to explore the experiential learning of preservice candidates when they are involved in conventional and PDS practice teaching placements. The objectives were as follows:

- to explore the sources of learning for student teachers in conventional practica and in PDS sites; and
- to examine what student teachers believe they learn from their school-based experiences.

One PDS Model

Professional development schools have been a major component of the teacher education program at the University of Ottawa for several years. They have met the many objectives of the schools and the Faculty of Education: to create a realistic practicum experience for student teachers, to induct them into the teaching profession, to develop links between the university and the schools, and to provide inservice and support for classroom teachers-mentors. During the practicum the candidates are clustered at different PDS sites where they are assigned to one or two mentor teachers. Weekly reflective seminars are led by a professor; here student teachers are provided an opportunity to share their experiences and support one another. Inservice sessions are given to mentor teachers, and ongoing support is provided. The preservice candidates are encouraged to assume a large portion of the teaching duties, to perform the classroom administrative duties, and to become involved in the life of the school by coaching teams or supervising clubs. The training and support provided to mentor teachers, the weekly seminar for student teachers, and the expectation of involvement in the life of the school differentiates the PDS placements from conventional practicum placements. This model of the PDS is unique as it responds to the specific needs of the schools and the faculty. It also attempts to remedy the deficiencies of the practicum as previously noted in the literature.

This study involved three professional development schools located in high schools in the university's catchment area. The schools were selected on the

basis of the principal's interest in professional development schools and the mentor teachers' agreement to work with student teachers during both practica. From the pool of candidates who applied to the PDS project only those whose "teachable subjects" matched those of the mentor teachers were selected.

Method

The experiential learning of student teachers during the practicum was explored using methodological procedures for conducting qualitative research. The sample consisted of 23 student teachers registered in a secondary teacher education program comprising three groups:

1. students who had served two practica in a PDS site ($n=9$);
2. students who had served one of two practica in a PDS site ($n=9$);
3. students who had served none of their practica in a PDS site ($n=5$).

All student teachers completed a survey consisting mainly of open-ended items relating to what was learned about adolescents and teaching, the people who assisted them in their learning during the practica, and the role of the weekly reflective seminar. Students who had completed one or both of their practica in a PDS participated in focus groups following the procedures outlined by Morgan (1988). The purpose of the focus groups was to explore how the weekly seminar assisted the students, to discuss what the students learned during the two practice teaching sessions, and to probe more deeply into the experiential learning of the student teachers. The focus groups were held in the schools near the end of the second practicum and were audiotaped. In sum, this study used mixed qualitative methods of data collection with three groups of student teachers.

Data from the questionnaires were listed by item and analyzed descriptively. Data from the focus group interviews were coded and categorized according to the methods outlined by Miles and Huberman (1984). The categories were examined for similarities and differences; themes emerged from these categories. The validity and reliability of the findings were established based on criteria set forth by LeCompte and Preissle (1993).

Findings

The sources of preservice candidates' learning during the practicum were analyzed by group to determine if professor involvement in the PDSs through the weekly seminars supported student learning. However, the data on what student teachers learned were examined in a single group as the purpose was to determine the sorts of knowledge candidates believe they learned in the schools.

Candidates' Perceived Sources of Knowledge During the Practicum

The preservice candidates involved in the research identified five variables that contributed to their learning of teacher competences: personal reflections, mentor teachers, other student teachers (only for those involved in at least one PDS), other teachers (usually in the same department), and faculty involved in the PDS who conducted weekly reflective seminars (only for those involved in at least one PDS). Student teachers in all three groups perceived personal reflections as the most important means of learning from their school experi-

ences. They reflected while in the process of teaching. One candidate stated, "I'm constantly thinking about it during the class; I'm thinking, you know, whatever I just said didn't work." They also critically examined their work after class. A student said, "That's probably the reason this placement is so exhausting for students—because you are always in a constant reflection on it. I lie in bed at night and the next thing you know, I'm not sleeping." Personal reflection about their emerging practice was an important means of self-assessment and learning about how to teach.

The second source of learning reported by preservice candidates was the mentor teachers. One student not in the PDS program noted, "it was my [mentor] teacher [whom] I had to rely on for all classroom support." The mentor teachers were depended on to be models of good practice, to provide learning resources, to give feedback to the student teachers, to back up candidates' efforts in classroom management and discipline, and to provide sufficient emotional support to develop and maintain reasonable confidence. When the mentor-student teacher relationship thrived, student teachers felt validated and comfortable in their learning and teaching. When the level of support proved to be inadequate, the consequent disappointment, discomfort, and loss of learning were the more striking for student teachers.

Preservice candidates involved in a PDS were clustered in one of three schools and participated in weekly reflective seminars conducted by a faculty member. The difference in perceptions of those students involved in a PDS and those in a conventional placement was their reporting of the importance of their peers and the weekly seminars in developing their experiential learning. For those in PDS placements other candidates provided an immediate support group. The structure of the seminars gave legitimacy for peer-based bonds that had already been created, allowing also for regular interaction with a faculty member who presented no evaluative threat and who helped them to link theory and practice. Student teachers said the following about the weekly sessions:

I think it helps in this way too, that you can go to the other student teachers with a question that you might not feel as comfortable as with your mentor. And then, they may have encountered the problem already and solved it or whatever, and then ... because you don't feel as anxious or whatever, or that you think you're asking, you know, a stupid question ... or you're not sure where something is.

The seminar also encouraged divergent and creative solutions to common problems that could be immediately implemented. A student teacher wrote, "discussing problems and sharing each others' perspectives helped to see different angles of situations." The reflective seminar also seemed to be supportive of learning through storytelling. Several candidates pointed to the value of narrative in helping them make sense of their experiences. Finally, the seminars offered a cross-departmental perspective of teaching. Student teachers spoke about the refreshing experience of moving beyond their departmental confines by weekly, and sometimes daily, discussions with their peers who were teaching in other disciplines.

Faculty Supervisor: That process, of talking to the other people, because they were in the school, very often in the prep ... room, where you were working at the

time, did that, therefore, make this seminar terribly important? Or were you able to do that elsewhere?

Student Teacher 1: Well, I didn't get to see everyone. I was in the science department by myself, so if I needed to see the other people, I had to [come to the seminar] ... And [now] it's just myself and Karen in the math department, so I think that having the weekly sessions were still important because we got to see everyone. Like last semester, Glenn was in English and ... we didn't see Glenn other than here on the Friday.

Student Teacher 2: I think for getting other perspectives, you know, other people who are in the same situation as you. Like all the student teachers. It is very important, even if you don't know the other people very well [because] ... I don't think that I was in any classes [with them at the university], but you know, I still valued everybody's opinion, and I figured that part of it was really good.

In sum, a difference between the PDS and non-PDS student teachers was the importance of the weekly reflective seminar and the discussions about teaching with their peers for those in professional development schools. Student teachers not involved in a PDS did not have the same level of support provided through the weekly seminars. They relied mostly on their mentor teachers, friends, family, and the pupils to provide feedback and advice. Candidates involved in only one PDS showed a similar pattern of support for their conventional practicum, but for their PDS placement they reported that their peers and the seminar helped to advance their learning. Hence in professional development schools the learning of student teachers may be furthered through regular faculty-led seminars that provide a forum for reflective discussions among the candidates and the professor.

What Preservice Candidates Believed They Learned

The study sought to examine what preservice candidates believed they learned during practice teaching regardless of the type of placement. Although each student teacher learned different things, the statements of learning from all the candidates were grouped into four categories: curriculum planning and evaluation, pupils and pupil-teacher interactions, discipline and classroom management, and professional knowledge. These are shown in Table 1.

Curriculum Planning and Evaluation

Candidates noted their recognition of the necessity for careful lesson preparation if they were to be successful. They found that their various classes responded differently to a given lesson. One student teacher cautioned, "Always expect the unexpected." This taught several candidates the necessity of flexibility, which they could see resulted from having considered several strategies for the delivery of the same material. They also realized the requirement for clear instructions and explanations during lessons and the need to access and learn to use a wide range of resources. Teaching strategies and evaluative instruments were also identified as important learnings by many of the study participants.

Pupils and Pupil-Teacher Interactions

Several preservice candidates made note of their learning about the nature of adolescents in general and their own pupils in particular. Such factors as the

Table 1
What Preservice Candidates Believe They Learned

<i>Curriculum Planning and Evaluation</i>	<i>Pupils and Pupil-Teacher Interactions</i>
Be prepared	Treat all pupils as individuals
Be flexible	Pupils' personal lives affect their
Give clear instructions and explanations	classroom behaviors and performance
Ask other people for resources	Pupils are not always motivated to learn
Use a variety of teaching methods	A class has a wide range of abilities
Do frequent formative assessment	Don't take occasional negative attitudes of pupils personally
<i>Discipline and Classroom Management</i>	<i>The Profession of Teaching</i>
Be firm from the beginning	Exhausting, demanding, and rewarding
Have clear rules	Persevere with weak pupils
Be consistent and fair	Become involved in the life of the school
Be friendly	Collaborate with other teachers
Treat pupils with respect	Be aware of the micropolitics

need to recognize pupils' individuality in a classroom setting, problems with motivation for many pupils, the intricate interplay between pupils' personal lives and classroom performance, and the range of competences in a typical classroom ("it's OK to spend more time in class helping particular students") all impressed the student teachers with their obvious importance. The delicate balance between befriending and disciplining pupils struck several student teachers as a particularly thorny but critically important element in their teaching. One preservice candidate arrived at the following conclusions about pupils and pupil-teacher interactions:

- If you treat students with respect, they will generally return the favor;
- Students like structure, especially during nontraditional activities;
- Sometimes you will fail.

In sum, many of the student teachers perceived that they had furthered their understandings about adolescents and pupil-teacher relations.

Discipline and Classroom Management

Not surprisingly, this group of novice teachers evinced some anxiety about their ability to control groups of pupils, but were confident in the eventual mastery of classroom management and discipline skills. In defining their learning in this area student teachers pointed to the requirement of establishing clear rules ("be tough—someone has to be the boss!"); of regular accountability in classrooms; and of exercising fair, respectful, consistent, and friendly but firm enforcement. One student asserted, "if you say no late assignments, don't accept late assignments!" On that point, another concluded, "never make exceptions."

The Profession of Teaching

Preservice candidates commented on their understanding of the nature of teaching as experienced in their own classrooms and schools. They were particularly aware of the exhaustion that accompanies the teaching role and, at the same time, of its importance. One student teacher wrote, "teaching is very

rewarding, but it is also very stressful." Some student teachers demonstrated acceptance of the "messianic" teaching role: "Even the 'worst' kid is inherently 'good' and should not be given up on." A few pointed to the importance of out-of-class commitments. One stated, "to really be a good teacher one must be involved with the kids outside the classroom as well as inside." Several also noted their introduction to the politics of education; for some, this stood as a positive lesson: "collaboration is a must—amongst teachers and amongst students and between teachers and students," whereas others saw this as a negative development in the profession: "teaching is very political—everything you do or say can come back to haunt you." Occasionally, student teachers assessed the profession as "sleeping at the wheel": "Teaching thinking isn't happening out here and is [seen as] bucking the system." Not surprisingly, however, such negative judgments were rare among student teachers. On the whole, the socialization process blotted out much of their criticisms.

Discussion and Conclusions

From this limited sample it was found that during the practica preservice candidates believed they learned about curriculum, pupils, discipline, and the teaching profession. Similar findings have been reported by other researchers (Johnston, 1994; Kagan, 1992). Therefore, the setting, PDS or non-PDS, did not seem to influence the substance of their learning. This was not surprising as the PDS sites were urban and suburban schools, much like those selected for the conventional practicum. As well, student teachers in both settings reported learning primarily through thoughtful reflection and with the assistance of their mentor teachers. Reflection took two forms: thinking while teaching and making adjustments on the spot, and thinking after the lesson or interaction had occurred. Mentor teachers played an important role in supporting the development of the students by modeling appropriate practice and providing feedback on performance. This finding is consistent with other research (Chamberlin & Vallance, 1991; Jacknicke & Samiroden, 1991; Kagan, 1992). Many of the preservice candidates also reported that they sought the assistance of other teachers in the school, an activity that is also linked with success in novice teaching (Everett-Turner, 1985; Goodman, 1987; Snow, 1988). Therefore, during the practicum the student teachers in the PDSs and non-PDSs believed they learned similar lessons about teaching. Moreover, three important sources of knowledge for all candidates were personal reflection, the mentor teacher, and other teachers.

However, it was found that the setting did influence other variables that facilitated their learning. Preservice candidates in PDSs for one or both placements relied more on peers and on the weekly seminar to support their learning than those in conventional placements who consulted friends, family, and the pupils. These weekly meetings provided a forum for participants to question and understand their experiences from different perspectives. As noted by Kilgore, Ross, and Yikowski (1990), the presence of a few peers who have similar values may be a critical characteristic of a context that supports the professional development of beginning teachers. The seminars also provided opportunities for the professors to assist the student teachers in linking their classroom experiences to theory.

The PDS setting also afforded student teachers opportunities to engage in cross-disciplinary conversations with their peers assigned to different departments. Hargreaves (1994) describes high schools as balkanized organizations in which teachers identify more with their own department than with the school as a whole. Student teachers located in PDSs commented that a strength of the weekly discussions was the opportunity for cross-departmental perspectives on classroom problems. The students recognized that their disciplinary base had shaped them profoundly during their undergraduate training, and the seminar helped them to understand the powerful socializing effect that departmental structures, curricula, and personnel were wielding in their development. The reflective seminar was viewed as a means of providing peer and faculty support and as a structure that fosters cross-departmental discussions. It may thus offer, more than other frameworks, opportunities for student teachers to deepen and broaden their experiential learning.

A number of implications for faculties of education arise from this study. First, the findings show that personal reflection is an important means of learning for student teachers. Therefore, faculties of education should teach preservice candidates the skills of reflection and provide opportunities for them to use reflection as a means of problem-solving, to delineate specific learnings, and to develop a deeper understanding of their personal professional practice. Second, mentor teachers also made an important contribution to the experiential learning of the student teachers. Hence faculties of education should provide inservice that goes beyond the nuts and bolts of filling out forms. It should address the role of the mentor teacher as it relates to initiating discussions with the candidate about perceived strengths and weakness of specific lessons and overall classroom practice. Mentor teachers should also be encouraged to draw out from their student teachers statements of specific learnings about children, the teaching and learning process, and the profession. Third, the students in PDS placements appeared to benefit from the weekly meetings at the school during the practica. Faculties of education should structure their practica so that groups of students are congregated in schools. This would facilitate the organization of weekly meetings so that candidates might have the opportunity to discuss critical incidents, their successes and failures, and to ask questions. These faculty-led meetings would actively support the students' articulation and discussion of their learnings. In sum, faculties need to acknowledge that the practicum is an occasion for experiential learning and to create a framework that supports the development of exemplary professional practice among their candidates. Therefore, there is a need to stress the importance of reflection as a means of improving practice; to teach preservice candidates how to reflect; and to provide opportunities for reflective discussions with peers, teachers, and professors about their experiential learning. The ability to learn from experience is critical for practicing teachers as their professional life centers around the engagement of the teaching and learning process. Our preservice candidates need to learn how to benefit from experience so that they may continually renew their own practice. Therefore, further research should be directed toward exploring methods of enhancing the learning of student teachers while the candidates are working in the schools.

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