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Perceptions of Learning and Stages of Concern Among Graduates of a Native Teacher Education Program

The purpose of this study was to examine the learning outcomes of students who had recently completed a two-year community-based Native Teacher Education Program (NTEP). The participants were 22 graduates of an NTEP who responded to open-ended items in a questionnaire on what they had learned throughout the program. Four women also participated in a focus group. The learning of the graduates was grouped according to the categories found in a previously developed framework: curriculum planning and evaluation, discipline and classroom management, pupils and pupil-teacher interactions, and the profession of teaching (Duquette & Cook, 1999). It was found that the NTEP graduates learned the most in the first three areas of the framework. As well, those with more than five years of experience working in the schools learned more in the pupils and pupil-teacher interactions category than their less experienced peers. The learning as stated by all the graduates showed that they addressed self-survival and impact concerns as described by Fuller (1969). The major source of their learning was through observation of their supervising teachers.

L'objectif de cette recherche était d'étudier les résultats d'apprentissage d'étudiants qui venaient de compléter une formation communautaire de deux ans pour enseignants autochtones (Native Teacher Education Program ou NTEP). Vingt-deux diplômés du NTEP ont complété un questionnaire consistant en des questions ouvertes portant sur ce qu'ils avaient appris pendant la formation. Quatre femmes ont également participé à un groupe de discussion. L'apprentissage des participants a été classé selon des catégories tirées d'un cadre déjà établi: planification curriculaire et évaluation, discipline et gestion de classe, les élèves et l'interaction élève-enseignant et la profession de l'enseignement (Duquette & Cook, 1999). Les résultats indiquent que les diplômés du NTEP apprennent davantage des trois premières catégories et que ceux qui avaient plus de cinq années d'expérience dans les écoles en ont appris davantage sur l'interaction élève-enseignant que l'ont fait leurs collègues moins expérimentés. Tous les diplômés ont exprimé des préoccupations liées aux notions de répercussions et de survie personnelle telles que Fuller les décrit (1969). L'observation de leur enseignant surveillant a constitué la source la plus importante d'apprentissage chez les participants.

Aboriginal people recognize that education provides access to a better standard of life and is a means of ensuring cultural survival (Goulet, 2001). Native teacher education programs are seen as having an important role in realizing this goal (Bilash & Witse, 1997; Friesen & Orr, 1998; Kirkness, 1999). Aboriginal educators bring much to their community: an understanding of the values of the people, the skills to blend the traditional teachings with the provincial curriculum, and an ability to act as positive role models in the community (Kirkness, 1999; Smith-Mohamed, 1998). However, there are barriers that keep Native people living in isolated communities out of traditional teacher educa-

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tion programs (Bilash & Witse, 1997). These include the prospect of leaving their family, friends, community, and way of life, as well as traveling great distances to attend postsecondary institutions (Freisen & Orr, 1998). Once enrolled, they are often faced with unfamiliar surroundings and customs, resulting in feelings of isolation (Tait, 1999). Therefore, teacher education programs have been developed that enable the students to remain in their communities, work in the schools, and enjoy the support of family and friends (Duquette, 2001; Friesen & Orr, 1998). Some of these community-based programs include the Program for the Education of Native Teachers (PENT) offered at Brandon University, the Saskatchewan Urban Native Teacher Education Program (SUNTEP) given by the Gabriel Dumont Institute, the Aboriginal Teacher Education Program (ATEP) provided by Queen's University, and the NTEP delivered by the University of Ottawa.

One of the oldest community-based programs is the Northern Teacher Education Program (NORTEP) that was established in 1976 to prepare Aboriginal teachers for northern Saskatchewan. NORTEP is an off-campus program affiliated with the University of Regina that offers a four-year BEd in elementary, middle, and secondary education. Students combine course work offered in a northern location with work in their local schools. The focus of NORTEP is to train Aboriginal people to be teachers and to learn, understand, and appreciate their Native language and culture. The development of Aboriginal teacher role identities of NORTEP graduates has been a positive outcome of this program (Friesen & Orr, 1998). Moreover, Friesen and Orr have found that the graduates affirm Aboriginality in others and have extended their teacher identity to include involvement in local politics, thereby advancing the overarching goal of self-determination.

Although the previous study explored the sociocultural outcomes of a Native teacher education program, there is nothing in the extant literature about the learning outcomes of students enrolled in these programs. Moreover, as funding agents require accountability, there is a need for such information. Therefore, the purpose of this research was to examine the learning outcomes of the graduates of the NTEP delivered by the University of Ottawa. The program at this university was selected for study, as the researcher is also the administrator of it. In this study, learning outcomes were explored using a framework developed by Duquette and Cook (1999) in which student teachers' learnings were classified under four categories: curriculum planning and evaluation, discipline and classroom management, pupils and pupil-teacher interactions, and the profession of teaching. The second framework that underpinned this research was Fuller's (1969) concerns-based model in which to examine student teachers' development. Her three sequential phases of student teacher concerns are non-concerns, concern with self, and concern with pupils. Hence in this research what the NTEP graduates learned was described and classified according to the four categories. Then the learnings by more and less experienced participants were compared, and the methods of learning how to teach used by the graduates were also examined. From these findings the nature of the participants' concerns were determined.

The Native Teacher Education Program at the University of Ottawa The community-based NTEP has been offered by the University of Ottawa since 1997. This is a self-funded program that is currently being delivered in partnership with two Native groups: Matawa First Nations and the Sioux Lookout District. The candidates must be of Native ancestry and hold the requirements for a high school diploma or standing considered equivalent. The candidates must also have a knowledge of their Native language and have at least one year experience working or volunteering in classrooms.

The focus of this two-year program is to provide information on teaching and learning, as well as to develop classroom skills and professional attitudes. It is not one where the primary focus is cultural exploration or transmission. The NTEP at the University of Ottawa consists of courses, practice teaching, and work in the classroom. The course work consists of those courses offered in the traditional program at the university campus, which are modified to include Native perspectives. As well, many of the professors teach in both the traditional BEd program and the NTEP. The courses are delivered in person during the summers and in the North by distance education for the fall and winter sessions. The student teachers also have nine weeks of practice teaching supervised by a licensed teacher. Some of the NTEP students are employed as paraprofessionals during the two-year program and are mentored by the classroom teacher. These mentor teachers model professional behavior and support the student's development of classroom skills. Throughout the program the NTEP students are gradually given more teaching and administrative responsibilities so that by the end of the second year they are co-teaching the class with the mentor teacher. However, during the final year most of students are employed as unqualified teachers in their community schools. In these cases, the principal acts as a mentor who observes them teach, provides feedback, supervises their work, and supports their development. Graduates of the NTEP are qualified to teach from kindergarten to grade 6 in the band-operated schools. When they earn their undergraduate degree, they receive a BEd from the University of Ottawa and may apply to the Ontario College of Teachers to be certificated to teach in provincial schools. Hence the NTEP at the University of Ottawa provides the teacher training component of a BA/BEd degree, and graduates pursue undergraduate studies after the NTEP and not concurrently as is the case with other community-based programs.

Student Teachers' Perceptions of Their Learning

Several studies describe the competences that teacher education graduates should master (Kagan, 1992; Reynolds, 1992). However, there is a need to study what student teachers actually do learn during their preservice education in order to understand the reality of becoming a teacher (Tardiff, 1985). One study on what student teachers learned involved two groups of students in the secondary panel who were doing their practica in professional development schools and in traditional practice teaching placements. This research was conducted during the final weeks of the teacher education program, during which time the 23 students were completing their last practicum in an urban region. The student teachers responded to open-ended items in a questionnaire and participated in focus group discussions. It was found that the student teachers' learning may be classified into four categories: curriculum planning

and evaluation, discipline and classroom management, pupils and pupil-teacher interactions, and the profession of teaching (Duquette & Cook, 1999). As well, the participants of this research stated that they learned through individual reflection, meetings with the supervising teachers, and discussions with their peers.

Concerns and Stages of Development Among Student Teachers

The research has suggested that there are sequential steps in the teaching concerns and development of student teachers (Berliner, 1987; Goddard & Foster, 2001; Guillaume & Rudney, 1993). However, the concerns-based model developed by Fuller (1969) has provided a basic point of reference for others. This model consists of three distinct and sequential phases of student teacher concerns: non-concerns, concern with self, and concern with pupils. The first stage is the pre-teaching phase and occurs before practice teaching begins. At this time the students express a lack of concern about the specifics of teaching. The second phase occurs during the early teaching period, in which students are concerned about themselves. At this point the students are preoccupied with the adequacy of their teaching and their ability to discipline the pupils (self-survival concerns). They are also concerned about building working relationships with school personnel. In the final stage of development the student teachers are concerned about their ability to understand and meet the pupils' individual needs, to assess their progress, and to evaluate their own progress in terms of pupils' gains (impact concerns). As students develop more knowledge about practical classroom tasks and gain more experience, they learn how to cope with the concerns related to adequacy and move to concerns about their effect on the pupils.

Whereas the research supports that student teachers have a variety of concerns related to themselves and their pupils, other studies have found that novice teachers do not necessarily progress through the stages of concerns in a lockstep manner, that is, that self-related concerns must be addressed before pupil-related concerns are raised. Other research has reported that both types of student teachers' concerns are addressed simultaneously (Burn, Haggar, Mutton, & Everton, 2000; Guillaume & Rudney, 1993; Pigge & Marso, 1987, 1997; Reeves & Kazelskis, 1985). It has also been found that the context in which the student teaching is done, the personal characteristics of the student (sex, GPA, and past experience), and the nature of the teacher education program also have a bearing on the degree to which the concerns are felt and the time over which they are addressed (Guillaume & Rudney, 1993; Pigge & Marso, 1987, 1997).

In summary, the research has shown that student teachers in an urban-based program learned specific things about curriculum planning and evaluation, discipline and classroom management, pupils and pupil-teacher interactions, and the profession of teaching (Duquette & Cook, 1999). However, the learning of students enrolled in a community-based NTEP has not been examined. It was felt that an investigation of this type was required in order to remain accountable to the groups that funded the NTEP graduates. It is also known that student teachers have a number of concerns during their preservice training, and it has been suggested that as student teachers gain knowledge and experience, they are able to address their concerns. However,

in no studies are learning outcomes and concerns linked to show a relationship between concerns and what has been learned. A relationship would seem to be present, as what one seeks to learn and ultimately masters is a reflection in some measure of a concern, tension, or perceived inadequacy in terms of knowledge, skills, or attitudes. Therefore, it is the purpose of this study to examine the learning outcomes of students who had recently completed a two-year community-based NTEP with a view to assessing the nature of their concerns. The research questions were as follows:

- What did the NTEP students perceive that they had learned during their teacher education program?
- Were there differences in the learnings of student teachers with less and more experience?
- What do their learnings reveal about the nature of their concerns?
- How did the NTEP students learn these things?

Method

The methodological approach that was used in this qualitative study was adapted from the grounded theory approach, which is described by Strauss and Corbin (1998) as a process of reflecting on and examining "social reality" (p. 4). From this method, understanding is created by virtue of being founded on data derived from individuals' meanings of their life experiences. Hence the researcher sought to understand the perspectives of the participants and to interpret them. As such, the findings are not intended to be generalized to other Native teacher programs. However, certain findings may be relevant to specific people involved in community-based Native teacher education programs offered in other universities. The participants of this research were 22 recent graduates of the NTEP offered by the University of Ottawa. They had completed the requirements of the program in April and were in Ottawa attending their graduation in June. Twelve were from the Matawa First Nations, and 10 were from the Sioux Lookout District. The five men and 22 women ranged in age from 21 to 45 years. During the two-year program nine had been employed as teachers, four had worked as classroom assistants, seven had spent one year as a classroom assistant and one year as a teacher, and two others had been classroom assistants as well as a social counsellor or Native language teacher.

This descriptive research was conducted in two phases. In the first phase 36 graduates (16 from the Matawa First Nations and 20 from the Sioux Lookout District) were asked to complete a nine-item questionnaire, of which 22 were returned. It consisted of three forced-choice demographic questions relating to age range, employment during the two-year program, and the number of years experience they had working with children in a classroom. These were followed by four open-ended items based on the categories of learning, which were curriculum planning and evaluation, discipline and classroom management, pupils and pupil-teacher interactions, and the profession of teaching. A sample question is as follows:

Through your course work, practice teaching and classroom experiences during the past two years, list below what you learned about curriculum planning and evaluation (e.g., write lesson plans, prepare long-range plans, use the Ontario curriculum documents, have all materials prepared, use rubrics, give clear instructions and explanations, use a variety of teaching methods, etc.).

The questionnaire also included one item on what they learned about themselves and another on how they learned what they did. The NTEP participants completed the questionnaire in June 2001 while at the university to attend the convocation ceremony. In the second phase four female graduates agreed to participate in a discussion group that was conducted following the procedures for focus group interviews outlined by Morgan (1988). During the discussion the four areas of student learning and how learning occurred were explored further. Specifically, the items followed this pattern: a question on what was learned (based on one of the four categories of learning), which was immediately followed by one where participants were asked how they learned it. Essentially, the questions were designed to have students expand on what they learned and how they learned it. A partial transcript of key statements by the participants was produced.

The qualitative data from the first three demographic items were analyzed to produce ranges and frequencies. Data from the open-ended items (items 4-9) and the discussion group were categorized according to the questions that were asked. Then for each question, responses were coded, similar responses were grouped, and frequencies were noted. Differences within the set of responses from each question were also noted. The findings from all four categories of learning for the entire group of NTEP participants were compared with those of the previous research on the secondary student teachers. Then the questionnaires were divided into two subgroups according to experience (five years or less and more than five years). The data from each group were analyzed a second time in the same manner as described above. Then the results from the two NTEP subgroups based on years of experience (five years or less and more than five years) were also compared in terms of the four categories of learning. As well, the findings of categories of learning among the entire NTEP group and the subgroups were compared with those of the secondary group from the previous study. Themes emerged from the data when they were grouped according to classification of learning and when the comparisons were made between the NTEP group and the secondary group and in the NTEP subgroups based on years of experience. Trustworthiness was established by triangulation (questionnaires from two groups, one discussion group) and member checks involving participants (LeCompte & Preissle, 1993).

Findings and Discussion

When the data were analyzed according to the four categories of student teacher learning to show what all the participants learned, it was found that the highest frequencies of responses among all the recent graduates were in the areas of curriculum planning and evaluation and discipline and classroom management (see Table 1). Specifically, under the category of curriculum, the NTEP graduates learned about lesson planning, the provincial curriculum, and how to make long-range plans. In the area of discipline, they learned to have classroom rules, to treat everyone equally and with respect, and to be firm and consistent with the pupils. These results suggest that as NTEP student teachers, they were focusing on resolving their concerns about developing skills in lesson planning and classroom management. The results also show that they were concerned about developing and maintaining positive relations with

Table 1 The Learning of All the NTEP Graduates

Curriculum planning and evaluation

lesson planning 17/22 Ontario curriculum 11/22 long-range plans 11/22

rubrics 9/22

Pupils and pupil-teacher interactions treat everyone equally 8/22

Discipline and classroom management

have rules 12/22

respect the students 11/22

be firm 11/22 be consistent 8/22

The profession of teaching cooperate with staff 9/22 teaching is rewarding 8/22 teaching is exhausting 7/22 teaching is demanding 6/22

other staff members and that they realized just how demanding teaching can be. Essentially, the findings suggest that their concerns were clustered heavily in the area of self-survival in accordance with the Fuller (1969) model. However, nine of the participants stated that they had learned about rubrics, which indicates that they were also concerned about the effect of their teaching on their pupils. Therefore, the results of what the entire group of NTEP graduates learned demonstrated that their primary focus was addressing their needs for technical adequacy. A secondary concern was pupil progress, which was shown by their mastery of writing rubrics. Hence this finding supports the notion that student teachers simultaneously address concerns about themselves and their impact is also found by Burn et al. (2000), Guillaume and Rudney (1993), Pigge and Marso (1987, 1997), and Reeves and Kazelskis (1985).

The data were also analyzed to show what less experienced and more experienced NTEP graduates learned (see Table 2). The two subgroups consisted of 11 participants with five or fewer years of experience and 11 with more than five years experience working in classrooms. When the learning of less experienced teachers was compared with that of their more experienced peers, it was found that the learnings of both groups were much the same in all but one category. In the area of pupils and pupil-teacher interactions, the less experienced group reported learning only to treat everyone equally, which means that the rules apply to all students regardless of their familial relationship with the band council. Members of the more experienced group stated that they learned not only to treat everyone equally, but also the following: that every child is unique, the importance of using hands-on activities, that children's personal lives affect performance, and that the pupils in a classroom have a wide range of abilities. Therefore, these results show that those NTEP graduates with more classroom experience may be further ahead in their learning about the pupils and how to teach them than their less experienced peers.

The data also revealed that the more experienced group learned more items in three of the four categories than those participants with five or fewer years experience working in classrooms. One woman with 12 years experience said, "I was a special education assistant. I observed how the teacher worked with the children. From this course I learned it more, and from practice teaching I learned even more." This result would suggest that these participants may

Table 2
The Learning of Less Experienced and More Experienced NTEP Graduates

Less experienced	More experienced
Curriculum planning and evaluation	Curriculum planning and evaluation
lesson planning 8/11 curriculum documents 5/11 rubrics 4/11 long-range plans 3/11	lesson planning 9/11 long-range plans 8/11 assessment 6/11 different teaching methods 5/11 rubrics 5/11 give clear instructions 3/11
Discipline and classroom management	Discipline and classroom management
respect the students 5/11 be firm 4/11 use positive reinforcement 3/11 develop a friendly atmosphere 3/11 have rules 3/11	have rules 9/11 be firm 7/11 respect the students 6/11 be consistent 6/11 treat everyone fairly 4/11 repeat the rules 3/11
Pupils and pupil-teacher interactions	Pupils and pupil/teacher interactions
treat everyone equally 4/11	every child is unique 6/11 use manipulatives in teaching 4/11 treat everyone equally 4/11 children's personal lives affect their performance 3/11
Profession of teaching	Profession of teaching
cooperate with other teachers 6/11 teaching is hard work 5/11 teaching is exhausting 4/11 teaching is rewarding 4/11 teaching is demanding 3/11 being a role model 3/11	teaching is rewarding 4/11 cooperate with other teachers 3/11 teaching is exhausting 3/11

have derived more from the NTEP due to their ability to relate new ideas presented in the program to previous experience, thereby building on the foundation of that experience.

Another finding among the NTEP graduates with less classroom experience is that they learned how to be role models. One young woman said, "I learned how to be a role model.... I became more aware of how unique our job is.... We have an impact on [the children's] lives." The results of other research have shown that the lack of positive role models has been linked to high rates of dropouts among Native students (MacKay & Myles, 1989). This finding suggests that there is a need for Aboriginal teachers to be positive role models for their students and to understand their community situations, motivate them to learn, encourage them when they have difficulty, and help them solve their problems (Smith-Mohamed, 1998). Positive role models are seen as demonstrating the possibilities, as well as encouraging and supporting the participation of children and adults in educational pursuits and other endeavors that

lead to the advancement of the community. NTEP graduates recognize the importance of role models and are willing to begin engaging in that role when they enter the program (Duquette, 2001). Therefore, the need to resolve this concern of how to be a role model is not surprising. However, this item was not reported among the more experienced group, who may have addressed this issue during their previous years of work in classrooms.

When the NTEP graduates were asked what they learned about themselves, the most frequent response was that they had a supportive family (7/22). One participant wrote, "My family is supportive, encouraging, and cares about what I do and the choices I make. My family was with me all the way." Their families included spouses, parents, siblings, and others. The importance of family support among NTEP students has previously been found to be a key variable in the decision to persist in the program until graduation (Duquette, 2001). There were no discernible differences in what NTEP graduates with more or less experience learned about themselves.

The participants also reported learning most from observing the teachers in whose class they were working or in which they were doing a practicum. This result supports the work of Lortie (1975), who describes learning to teach as characterized by an "apprenticeship of observation" that involves a long period of watching teachers. Specifically, the participants reported learning most from observing the teachers in whose class they were working or in which they were doing a practice teaching session (7/22). One graduate stated, "I learned that observing older, experienced teachers helped me a lot." This finding is not surprising as traditional teaching practices among many Aboriginal groups involve learning by observation and doing (Erickson & Mohatt, 1982). As well, the participants indicated that they learned by discussing issues, problems, and their own performance feedback with the teachers. A woman stated, "I would ask them a lot of questions, and they would provide me with information and reading material. It helps a lot to talk with other teachers." Another graduate wrote the following about the supervising teachers' help during the practicum: "They told me where I needed to improve, and they gave me oral and written feedback." Hence the responses to this item indicate the importance of observation, discussion, and feedback among the NTEP students in learning how to teach.

An interesting finding was that the NTEP graduates with more years of classroom experience developed a richer repertoire of professional learning methods than their less experienced peers. As well as learning through observation and discussion, some members of this subgroup also learned about teaching through discussions with peers, course work, and reflection. These results demonstrate that the more experienced beginning teachers were less dependent on others for their learning and had become more self-reliant as they sought out peers, reread course notes and texts, and thought critically about their own practice. However, as most participants in this group were working as unqualified teachers during the two-year program, they may have developed these methods of learning as they had limited opportunities to observe others.

In summary, the NTEP graduates indicated that they learned classroom skills and developed practical knowledge during the two-year teacher educa-

tion program. Their statements of learning suggested that they were addressing self-survival and impact concerns simultaneously, as opposed to progressing through the stages of concern in a lockstep manner. The major differences in the learning between the two groups was that the more experienced group learned more about their pupils and their own interactions with them, and the less experienced group learned more about becoming role models. Both groups of participants stated that they learned through observation and discussions with their supervising teacher. However, the more experienced group also reported that they learned through more self-directed methods such as reading and reflecting.

Conclusions and Recommendations

The NTEP graduates reported learnings in the four categories that were more similar to than different from those indicated by the participants cited in the previous research who were enrolled in the traditional urban-based teacher education program (Duquette & Cook, 1999). The only exception was in the area of pupils and pupil-teacher interactions. The entire group of NTEP participants stated that they learned to treat students equally, whereas in the previous research the participants appeared to learn considerably more in this category. The urban group learned to treat all pupils as individuals, to understand that pupils' personal lives affect their classroom behaviors and performance, that pupils are not always motivated to learn, that a class has a wide range of abilities, and not to take occasional negative attitudes of pupils personally. It was also in this category that the more experienced NTEP participants indicated that they learned more than their less experienced peers. When the learning of the more experienced NTEP group was compared with the urban group, the two points of similarity that emerged were that each student is an individual and that the personal lives of the children affect their school performance. However, the urban group also learned that a classroom has a wide range of abilities and not to take students' behaviors personally, whereas the more experienced NTEP students learned to treat everyone equally and to use manipulatives during instruction. The differences may be due to the context of the teaching: the first group did their practice teaching in secondary schools situated in an urban region, whereas most of the NTEP students did a large portion or all their practice teaching in elementary schools located in remote communities. As well, the personal biographies of the student teachers and the types of programs may also have contributed to the differences.

The data on the learning of all the NTEP graduates indicated that they worked mainly on addressing concerns that were related to their own competences in the classroom, specifically in the areas of curriculum planning and evaluation as well as discipline and classroom management. However, their attention to rubrics revealed that they were also concerned about the effect of their teaching on the pupils. This result suggested that although impact concerns were present, they may not have taken on importance until certain self-concerns were addressed. In other words, there may be a set of concerns related to technical adequacy that must be resolved before the student teachers then also examine with much seriousness the effect of their teaching on the pupils.

Moreover, the data showed that the graduates with more experience reported learning more than their less experienced peers in all categories except one. The work involved in the program seemed to solidify their previous observations and extended their learning beyond that of their less experienced peers. This finding demonstrated that the more experienced group may also have made further progress in addressing concerns about personal competence and their effect on the pupils' learning. Therefore, in order to produce teachers who may be better prepared to teach on graduation, Native teacher education programs should require potential applicants to have as much classroom experience as possible as paraprofessionals or volunteers. Although this may appear obvious, it is an important finding as not all students begin the NTEP with much classroom experience. Moreover, given that bands pay to have well-trained teachers, this result suggests their money may be better spent on those candidates with more experience working with children in the classroom and an understanding of the role of a teacher in the school and community.

The group of NTEP participants reported learning mainly from observation and discussion with their teachers. The participants in the previous research in an urban center indicated that they learned mostly through reflection on the events of the day. However, this is not to suggest that the NTEP graduates did not mull over the day's activities and try to determine how to make improvements. For most of them, the more important methods of learning involved other teachers rather than their own reflections. However, as all the graduates who want positions in their communities are hired, they will not be able to observe other teachers once they have full-time positions. Therefore, they need to develop skills on how to learn through thinking critically about their own practice, as well as how to obtain further information to improve their teaching. These skills could be practiced and developed throughout the NTEP so that by the end of the program, graduates are in the habit of reflecting on their technical adequacy, their effect on the pupils, and their own professional development.

An implication that followed from this research is the importance of the teachers who supervise and support the development of the NTEP students. The participants stated that they learned chiefly through observation and discussions with the supervising teachers. Therefore, these teachers must be carefully selected to ensure that they are excellent teaching models who are also able to critique the students' performance and discuss suggestions for improvement. Training for supervising teachers may be necessary to develop skills in performance assessment.

In conclusion, the statements of learning outcomes may be an indicator of concerns and stages of learning how to teach. As well, it appears that contrary to the Fuller (1969) model, these graduates resolved certain technical issues (self-survival concerns) at the same time as they addressed those about pupils (impact concerns). However, a few areas related to teaching, classroom management, and discipline may have been at least partly resolved before they also began to have concerns about their effect on the pupils. From this point, the NTEP graduates appeared to have focused on self and impact concerns simultaneously. Therefore, future research should examine the set of technical skills

that student teachers feel they must develop before they also direct their attention toward their effects on pupils.

Teacher education programs for Aboriginal students have had a positive effect on the student teachers themselves and their communities (Friesen & Orr, 1998). However, they must also be able to demonstrate the learning outcomes of the participants. These programs must also seek to improve the quality and quantity of that learning through relevant course work, excellent supervising teachers, and the candidates themselves who are self-reliant, committed, and bring previous classroom experience to their studies.

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