MJE

The *McGill Journal of Education* promotes an international, multidisciplinary discussion of issues in the field of educational research, theory, and practice. We are committed to high quality scholarship in both English and French. As an open-access publication, freely available on the web (http://mje.mcgill.ca), the *Journal* reaches an international audience and encourages scholars and practitioners from around the world to submit manuscripts on relevant educational issues.

La *Revue des sciences de l'éducation de McGill* favorise les échanges internationaux et pluridisciplinaires sur les sujets relevant de la recherche, de la théorie et de la pratique de l'éducation. Nous demeurons engagés envers un savoir de haute qualité en français et en anglais. Publication libre, accessible sur le Web (à http://mje.mcgill.ca), la *Revue* joint un lectorat international et invite les chercheurs et les praticiens du monde entier à lui faire parvenir leurs manuscrits traitant d'un sujet relié à l'éducation.

International Standard Serial No./Numéro de série international: online ISSN 1916-0666

McGill Journal of Education / Revue des sciences de l'éducation de McGill
4700 rue McTavish Street • Montréal (QC) • Canada H3G 1C6
•T: 514 398 4246 • F: 514 398 4529 • http://mje.mcgill.ca

The *McGill Journal of Education* acknowledges the financial support of The Social Sciences and Humanities Research Council of Canada.

La *Revue des sciences de l'éducation de McGill* remercie le Conseil de recherches en Sciences humaines du Canada de son soutien financier.

McGILL JOURNAL OF EDUCATION
REVUE DES SCIENCES DE L'ÉDUCATION DE McGILL

McGill Journal of Education is a partner member of Érudit.
La revue des sciences de l'éducation de McGill est une revue partenaire de Érudit. www.erudit.org

228c100

TABLE OF CONTENTS / SOMMAIRE

WINTER 2011 VOL. 46 Nº 1 / HIVER 2011 VOL. 46 Nº 1

EDITORIAL

WHEN ADULT EDUCATION INVITES ITSELF TO THE DEBATE ABOUT TEACHER DEVELOPMENT

Since the 80s, teaching has become considerably more complex, notably because of heavier teaching workloads and the diversification of the student population (Barrère, 2002). Because of this, teachers are faced with tangled situations and sometimes unexpected conditions for which their preservice university education did not necessarily prepare them (Carbonneau, 1993). As illustrated by Brodeur, Deaudelin, and Bru (2005), several dimensions inherent in the process of professional development for teachers require unpacking, in particular those occurring during the period of professional integration (Martineau, 2007). The difficulties new teaching personnel face in classroom situations and the stakes of these confrontations are currently a hot topic, as reported in the special issue of the magazine published by the Quebec Ministry of Education, *Vie Pédagogique* (September and October, 2003) and at the symposium held on May 20 and 21, 2004, in Quebec (MEQ, CRIFPE, COFPE). These various discussions have explored the effects of unsuccessful professional integration on the retention of teachers in the medium and long run. As a result, we must begin to question the learning processes that prepare candidates for successful integration into the classroom *before* they begin to teach. Moreover, research into teacher education will nurture a focus on the teaching practices that create successful learning conditions for pupils. Up until now, very little research has asked whether teachers in training receive the professional knowledge necessary for building and developing their professional competencies. In the long run, this lack of knowledge compromises not only the process of professional integration, but also the quality of teaching, in particular when we recognize that it is usually the most difficult classes that are assigned to new teachers (*Comité d'orientation de la formation du personnel enseignant* [COPFE], 2002).

Research question

Many research reports in Canada (e.g., Tardif, Lessard, & Gauthier, 1998), studies in Europe (e.g., Eurydice, 2004), and many recommendations and preconceptions emanating from ministries of education (Bancel 1989; Ministère de l'Éducation du Québec [MEQ], 2001) have, over the last twenty years, provided decision-makers with relevant arguments for conceiving teacher

education methods differently, in particular by privileging the development of professionalization of the teaching profession (Altet, 1994; Altet & Bourdoncle, 2000). That is to say, in recent times the field has been strongly committed to the belief that teacher education should improve the professional competencies of teachers. Let us recall that education has as its first objective to prepare future citizens for the society of tomorrow. For this to happen, education must be able to rely on competent professionals, which makes improvement in teacher education methods indispensable. Behind this orientation lies a postulate shared today by researchers (Fullan & Stiegelbauer, 1991) and political decision-makers (American Council on Education, 1999), affirming the role of teacher as a meaningful participant in any attempt to improve the academic performances of pupils. In addition, the success of any attempt at educational reform relies heavily on the professional involvement—that is, the committed and knowledgeable participation—of teachers.

In light of this, various publications (Mendro, 1998; Powell & Anderson, 2002) have insisted on the essential role of teachers in the success of implementation of a new curriculum (Lenoir, 2005). Faced with these challenges, teacher education institutions have sought, for over twenty years, to improve teacher education, thus responding to this call for professionalization (*Ministère de l'Éducation Nationale de la Recherche et de la Technologie* [MENRT], 1999; MEQ 2001), basing themselves on the findings of research (Paquay, Charlier, Altet & Perrenoud, 1996; Gauthier et Mellouki, 2006). In the Anglophone world (Darling-Hammond, 2000), teacher education institutions have attempted to build and implement new teacher education curricula founded on three overarching principles: recognition of teaching professionalism, access to ongoing professional learning, and a choice of various sites, schedules, and experts for training. The development and implementation of these new curricula should encourage the development of a new perspective for teaching, that of reflective practitioner (Perrenoud, 2001).

Underlying the reform to teacher education curricula, we find questions concerning the relationship between research and teacher training. In fact, various publications (*Association des Enseignants et Chercheurs en Sciences de l'Éducation* [AECSE], 1993; Paquay, Charlier, Altet & Perrenoud, 1996; Lessard, Tardif, & Gauthier, 1998) have shown how many teacher education methods, early on, privileged a transmission model: a model that considers scientific knowledge over the building of professional knowledge. This conception of professional training is shared by other professions (Maubant, 2004). More often than not, these methods favour the transmission of a body of canonical knowledge that constitutes the supposed corner-stone of the profession. Although some teacher education programs take pains to highlight their belonging to this model (Maubant, 1997, 2004), the analysis of comments from graduating teachers raises doubts about the ability of these programs to prepare future teachers for the profession (Maubant & Lenoir, in press).

Another question underlies this issue of the relationship between research and education, this one more specific to professional education: what is the relationship between theory and practice? If we consider continuing education methods, the dominant didactical-pedagogical model that favours theoretical knowledge over knowledge of practice is called into question (Perrenoud, 2001). Moreover, it is not even certain that knowledge gained through the teacher education curricula (knowledge *for* practice) is based on research knowledge (knowledge *of* practice). Should teacher education programs continue to ignore the knowledge that teachers themselves develop in the very act of teaching (knowledge *through* practice)? Considering these numerous grey zones, it seems necessary to question not only the current teacher education curricula, but also to consider how research knowledge informs the professional preparation of teachers. Faced with this disjuncture between teacher education and actual knowledge gained in the act of teaching, it seems essential for us to consider research into professional learning processes.

In order to understand the professional learning process of teachers in training, various theoretical, conceptual and methodological frameworks have been mobilized. In the field of teacher education, up until now, the socio-organizational perspective, which seeks to question various socio-pedagogical models initiated and implemented by teacher-education institutions, like "sandwich courses pedagogy," for example a pedagogy built on alternating between classroom or theoretical learning and practical, hands-on learning in the field (Tardif, Lessard & Gauthier, 1998; Gauthier & Mellouki, 2006; Maubant, 1997 & 2004), or the role of inservice programs in teacher education, has been favoured by researchers. But, in the past decade, the field of Adult Education has been the leader in the emergence of research in education aiming at understanding conditions for the realization and success of professional learning (Mayen, 2004; Maubant, 2007).

A greater understanding of the nature of professional knowledge (Bru, 2002), the means by which that knowledge is constucted (Mehran, Ronveaux & Vanhulle, 2007; Vanhulle, 2008), the ways in which professional knowledge might be developed during preservice programs (Jorro, 2002; Maubant, 2007), and the most effective training practices for that preservice education (Faulx, 2008, Donahue, 2008) have been the focus of research teams in North America and Europe. This special issue addresses some of the results of that research and offers a unique perspective by combining a comparative education perspective with North American and European research in order to raise critical questions about the formative effects of teacher education.

Theoretical and conceptual frameworks

There is a considerable literature on adult education (Laot, 2002; Forquin 2002) and a similarly extensive teacher-education literature (Altet, 1994 & 2000; Altet & Bourdoncle, 2000). To date, however, there is no work that

seeks to bring these two fields of research together. This seems surprising, given the possible points of convergence between the two fields. Work dealing with the training of teachers barely explores the analysis of the professional learning process that has developed in adult education, and in particular, the framework offered through the ergonomics of work (Durand & Veyrunes, 2005), professional didactics[1] (Raisky, 1993; Pastré, 2002), or the didactics of professional knowledge (Vanhulle, 2008).

Some recent research (Gervais & Desrosiers, 2005; Mehrand, Ronveaux & Vanhulle, 2007) does seek to understand what is at stake in the formative process of teachers, but few studies identify and stabilize a methodology for gathering data and for analysis of the various dimensions contributing to professional learning, and not one of these seems interested in the study of interactions between teachers in training and the various "educators" who act as preservice supervisors, associate teachers, and educators in teacher training institutions (Bru, 2002; Bru & Lenoir, 2006; Widden, Mayer-Smith & Moon, 1998; Wilson & Berne, 1999). This is the goal and the novel stake of this special issue: to account for research analyzing interactions between the teacher in training and the various resources contributing to her/his professional learning.

The construct of professional learning

According to Pastré (2008), "Learning, for man [*sic*], is a fundamental anthropological process that accompanies all activities, and functions in such a way that a human cannot act without, at the same time, producing resources to manage and orient his [*sic*] action" (our translation, p. 28). For Pastré, human activity is inseparable from learning. We consider, following Pastré, that professional learning is a human "activity that develops" (Rabardel 2004), and one that qualifies as a constructive activity. This constructive activity aims ultimately for the transformation of individuals. It distinguishes itself from productive activity that, for its part, aims to transform reality. The analysis of professional learning also requires questioning the nature of the function of didactical and pedagogical knowledge—the objects of this learning. This professional knowledge constitutes the heart of teaching practice. Studies presented in this special issue aim to identify and name this knowledge and to show how it is built by the teacher in training. This work should also allow us to take into consideration methodological difficulties linked to the location of this knowledge and the identification of its process of elaboration.

The concept of mediation

Research presented here studies interactions between preservice teachers and the various formative resources implicated in their training. The analysis of these interactions requires us to draw on the concept of mediation. In fact, learning is never a direct and immediate appropriation of reality. It is always shaped by the its mediating circumstances (situation, tools, participants, actions) that come between the subject and the object of knowledge. We must

distinguish between two types of mediation: cognitive mediation, that of the pupil and her/his relationship with knowledge, and pedagogico-didactic mediation, that of the teacher intervening in the cognitive mediation. The term "pedagogico-didactic" refers both to the "didactic function of structuring and management of contents" and to the "pedagogical function of assistance in knowledge-building by the functional relation and organization of learning" (Altet, 1997, pp. 11-12). By privileging the study of this didactical-pedagogical mediation, the research presented here seeks to read and understand the meaning and nature of interactions among these various formative resources. These include the formative practices of different interveners or didactical-pedagogical facilitators represented in particular by the various tools or media mobilized to sustain and foster the professional learning process (the professional thesis and in particular the portfolio).

The construct of interaction is defined by Fougeyrollas (2001) as the "Reciprocal influence of the person and his life context inherent in the realization of any human activity" (our translation, p. 102). For Pomerleau & Malcuit (1983), the concept of interaction refers to a transactional dynamic constructed in a temporal dimension, between two or more individuals. The conditions for exercise of cognitive mediation by the learner and those for exercise of pedagogical and didactical mediation by the teacher are therefore important contributors to the nature, stability, and quality of the interaction between the teacher in training and educators.

The concept of "sandwich courses" pedagogy

In order to consider the place of "sandwich" pedagogy in a comprehensive review of the dimensions contributing to professional learning, we must question the meaning of the articulation between, on the one hand, the various spaces-times of training (Clénet, 2003) constituting the training path and process, and on the other, the various interveners (teachers, educators, associate teachers, practice-teaching supervisors) carrying out the implementation of the professional learning process. These past few years, those in charge of teacher education programmes were more inclined to privilege the question of pedagogical modalities (namely "sandwich" pedagogy) susceptible to support the training process and to attain, therefore, the objectives for building professional competencies (Maubant, 2007). We thus frequently spoke of articulations, linkings, integrative processes meant to favour the process of professionalization. Some courses were conceived and created to support activities of integration. Tools were mobilized, such as the portfolio (Lacourse, 2008). Thus, teacher education methods based on the principle of sandwiching deserve to be analyzed in order to understand the relevance in terms of their added value to learning by teachers in training (Mehrand, Ronveaux & Vanhulle, 2007).

The spin-off expected

To date, research dealing with the professional training of teachers has rarely explored the professional learning process. The view privileged in this research aims primarily to identify and understand the effects of good teaching practices on the success of pupils. It also seeks to identify conditions for the elaboration and functioning of professional knowledge that can sustain and favour the implementation of teaching-learning situations that will support school success. In other words, what is privileged in teacher education research is mainly the analysis of processes and methods able to create successful conditions for pupils. The analysis of this teacher effect on school success still constitutes today, in large part, the rationale for research on teacher education in North America and in Europe. Therefore, it seems important for us to privilege our understanding of teachers' situations and professional learning processes, in order to determine conditions for construction of professional knowledge of a didactical and pedagogical order that these teachers will mobilize in teaching-learning situations.

P.M.

NOTE

1. "Didactics," from the French "didactique," refers to a fairly young field emerging from two sources: the disciplines that serve as theoretical points of reference for school subject matter and the disciplines that analyze teaching and learning (e.g., pedagogy, psychology, sociology). The field's main goal is to study the relationships among subject matter, teaching, and learning (Reuter, Cohen-Azria, Daunay, Delcambre, & Lahanier-Reuter, 2010). Didactics thus might study the interactions in a teaching-learning situation among a particular knowledge set, a teacher, and a student, and consider how the teacher reflects on the nature of the knowledge he/she teaches and takes into account students' representations of this knowledge (Raynal and Rieunier 1997).

REFERENCES

Association des Enseignants et Chercheurs en Sciences de l'Éducation (AECSE). (1993). *Les sciences de l'éducation : enjeux et finalités d'une discipline*. Paris : INRP

Altet, M. (1994). *La formation professionnelle des enseignants*. Paris : Presses universitaires de France.

Altet, M. (1997). *Les pédagogies d'apprentissage*. Paris : PUF.

Altet, M. (2000). Les dispositifs d'analyse des pratiques pédagogiques en formation d'enseignants : une démarche d'articulation pratique-théorie-pratique. In C. Blanchard-Laville & D. Fablet (Eds.), *L'analyse des pratiques professionnelle* (pp.15-34). Paris : l'Harmattan.

Altet, M. & Bourdoncle, R. (Eds.). (2000). Formes et dispositifs de la professionnalisation . *Recherches et formation, 3*,117-131.

American Council on Education (1999). *Transforming the way teachers are taught. An action agenda for college and university presidents*. Washington, DC: ACE.

Barrère, A. (2002). *Les enseignants au travail. Routines incertaines*. Paris : L'Harmattan.

Bancel, D. (1989). *Créer une nouvelle dynamique de la formation des maîtres*, Paris : MEN.

Brodeur, M., Deaudelin, C. & Bru, M. (2005). *Le développement professionnel des enseignants. Revue des sciences de l'éducation, XXXI*(1), 5-236.

Bru, M. (2002). Pratiques enseignantes : des recherches à conforter et à développer. *Revue française de pédagogie, 138*. 63-73.

Bru, M. & Lenoir, Y. (2006). *Analyse de publications nord-américaines relatives à l'enseignement : une collaboration scientifique*. France-Québec CRIE-Sherbrooke, CREFI-Toulouse-Le-Mirail.

Carbonneau, M. (1993). Modèles de formation et professionnalisation de l'enseignement : analyse critique de tendances nord-américaines. *Revue des sciences de l'éducation, XX*(1), 133-57.

Clenet, J. (2003). L'ingénierie des formations en alternance. Paris : L'Harmattan.

Comité d'orientation de la formation du personnel enseignant (COPFE). (2002). *Offrir la profession en héritage, Avis du COFPE sur l'insertion dans l'enseignement*. Québec, QC : Gouvernement du Québec.

Darling-Hammond, L. (Ed.). (2000). *Studies of excellence in teacher education. Preparation at the graduate level*. New York: National commission on teaching and America's future.

Donahue, C. (2008). *Écrire à l'université. Analyse comparée en France et aux Etats-Unis*. Villeneuve d'Ascq: Éditions du septentrion.

Durand, M. & Veyrunes, P. (2005). L'analyse de l'activité des enseignants dans le cadre d'un programme d'ergonomie-formation. *Les Dossiers des Sciences de l'Éducation, 14*, 47-60.

Eurydice (2004). Chiffres clés des technologies de l'information et de la communication à l'école en Europe. Bruxelles : Eurydice.

Faulx, D. (2008). L'animatique des groupes : esquisse d'un nouveau champ de recherche en formation des adultes. *Éducation permanente, 174*, 147-156.

Feiman-Nemser, S. (2001). From preparation to practice : designing a continuum to strengthen teaching. *Teachers College Record, 73*(6), 1013-1055.

Forquin, J.-C. (2002). *Les composantes doctrinales de l'idée d'éducation permanente. Analyse thématique d'un corpus international*. (UNESCO). Paris : L'Harmattan.

Fougeyrollas, P. (2001). Le processus de production du handicap : l'expérience québécoise. In R. DeRiedmatten, *Une nouvelle approche de la différence*. Genève : Médecine et Hygiène.

Fullan, M., & Stiegelbauer, S. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.

Gauthier, C. & Mellouki, M. (2006). *La formation des enseignants au Québec à la croisée des chemins*. Quebec : Les presses de l'Université Laval.

Gervais, C. & Desrosiers, P. (2005). *L'école, lieu de formation des enseignants. Questions et repères pour l'accompagnement des stagiaires*. Quebec : Presses de l'université Laval.

Jorro, A. (2002). *Professionnaliser le métier d'enseignant*. Paris : ESF.

Laot, F. (2002). *Quarante ans de recherche en formation d'adultes (1960-2000)*. Paris : L'Harmattan.
Lenoir, Y. (2005). Comment caractériser la fonction enseignante? *Puzzle, 19*, 5-18.

Martineau, S. (2007). Recension: L'obligation de résultats en éducation. Recherches sociographiques, *48*(1), 189-191.

Maubant, P. (1997). Pour une didactique et des pédagogies de l'alternance. *Revue POUR, 154*, 109-134.

Maubant, P. (2004). *Pédagogues et pédagogies en formation d'adultes*. Paris : Presses universitaires de France.

Maubant, P. (2007). Penser l'alternance comme logique de professionnalisation des enseignants. In S. Vanhulle, F. Merhan & C. Ronveaux. *Alternances en formation. Raisons éducatives, 11*, 67-82.

Maubant, P. & Lenoir, Y. (in press). Curriculum et professionnalité chez des enseignants québécois du primaire: résultats d'une recherche. In A. Hasni & G. Baillat. *La profession enseignante face aux disciplines scolaires: le cas de l'école primaire*. Sherbrooke : Éditions du CRP.

Mayen, P. (2004). Le couple situation-activité. Sa mise en œuvre dans l'analyse du travail en didactique professionnelle. . In J.-M. Marcel & P. Rayou (Eds.), *Recherches contextualisées en education* (pp. 29-39). Paris: INRP

Merhan, F., Ronveaux, C. & Vanhulle, S. (Ed.) (2007). *Alternances en formation. Raisons éducatives (11).* Bruxelles : De Boeck. Collection.

Mendro, R. L. (1998). Student achievement and school and teacher accountability. *Journal of personnel évaluation in éducation, 12*(3), 257-267.

Ministère de l'Éducation nationale de la Recherche et de la Technologie (MENRT) (1999). *Rapport sur les études doctorales, 1999*. Paris: Ministère de l'Éducation nationale de la Recherche et de la Technologie.

Ministère de l'Éducation du Quebec (MEQ). (2001). *La formation à l'enseignement : les orientations, les compétences professionnelles*. Québec: Ministère de l'Éducation.

Paquay, L. Charlier, É., Altet, M. & Perrenoud, P. (1996). *Former des enseignants professionnels. Quelles stratégies ? Quelles compétences ?* Bruxelles : De Boeck Université.

Pastré, P. (2002). L'analyse du travail en didactique professionnelle. *Revue française de pédagogie, 138*, 9-17.

Pastré, P. (2008). Apprentissage et activité. In Y. Lenoir & P. Pastré, *Didactique professionnelle et didactiques disciplinaires en débat* (pp. 53-79). Toulouse, France : Octarès.

Perrenoud, P. (2001). Articulation théorie-pratique et formation de praticiens réflexifs en alternance. In P. Lhez & B. Séguier (Eds.). *Alternance et complexité en formation. Éducation, Santé, travail social* (pp. 10-27). Paris : Éditions Seli Arslan.

Pomerleau, A & Malcuit, G. (1983). *L'enfant et son environnement. Une etude fonctionnelle de la première enfance*. Québec: Presses de l'université du Québec.

Powell, J. C. & Anderson, R. D. (2002). Changing teacher's practice: Curriculum material and science education reform in the USA. *Studies in Science Education, 37*, 107-136.

Rabardel, P. (1994). *Les hommes et les technologies. Approche cognitive des instruments contemporains*. Paris : Armand Colin.

Raisky, C. (1993). *Problème du sens des savoirs professionnels, préalable à une didactique*. In P. Jonnaert & Y. Lenoir (Eds.), *Sens des didactiques et didactique du sens* (pp. 101-121). Sherbrooke : Éditions du CRP.

Raynal, F. & Rieunier, A. (1997) *Dictionnaire des concepts cles : apprentissages, formation, psychologie cognitive.* Paris : ESF.

Reuter, Y., Cohen-Azria, C., Daunay, B., Delcambre, I. & Lahanier-Reuter, D. (2010). *Dictionnaire des concepts fondamentaux des didactiques.* Bruxelles : De Boeck.

Tardif, M., Lessard, C. & Gauthier, C. (1998). *Formation des maîtres et contextes sociaux, perspectives internationales*. Paris : Presses universitaires de France.

Vanhulle, S. (2008). Au cœur de la didactique professionnelle, la subjectivation des savoirs. In Y. Lenoir & P. Pastré (Eds.), *Didactique professionnelle et didactiques disciplinaires en débat* (pp. 227-254). Toulouse, France : Octarès.

Widden, M., Mayer-Smith, J. & Moon, B. (1998). A critical analysis of the research on learning to teach: Making a case for an ecological perspective on inquiry. *Review of Educational Research, 68*(2), 130-178.

Wilson, S. M. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary development. *Review of Research in Education, 24*, 173-210.

ÉDITORIAL

QUAND LA FORMATION DES ADULTES S'INVITE AU DÉBAT SUR LA FORMATION DES MAÎTRES

Depuis les années 80, l'enseignement s'est considérablement complexifié, notamment en raison de l'alourdissement des tâches des enseignants et de la diversification de la population étudiante (Barrère, 2002). Cette situation place l'enseignant devant des contextes souvent enchevêtrés et des conditions parfois inédites auxquels sa formation universitaire initiale ne l'a pas nécessairement préparé (Carbonneau, 1993). Comme le mettent en évidence Brodeur, Deaudelin, et Bru (2005), plusieurs dimensions inhérentes au processus de développement professionnel sont à élucider, notamment au cours de la période d'insertion professionnelle (Martineau, 2007). Les enjeux et les difficultés auxquels est confronté le nouveau personnel enseignant, en situation de classe, constituent un sujet d'une brûlante actualité comme en ont témoigné récemment le dossier spécial de la revue du ministère de l'Éducation du Québec *Vie Pédagogique* (septembre et octobre 2003) et le colloque tenu les 20 et 21 mai 2004 au Québec (Ministère de l'Éducation du Quebec [MEQ], Centre de recherche interuniversitaire sur la formation et la profession enseignante [CRIFPE], Comité d'orientation de la formation du personnel enseignant [COFPE]). Ces différentes rencontres ont mis en évidence les effets d'une insertion professionnelle non réussie sur le maintien à moyen et long terme des enseignants dans la profession. Ce qui rend dès lors indispensable de questionner, en amont de la mise en emploi, les processus d'apprentissage professionnel censés préparer la réussite de cette insertion dans la classe. De plus, les recherches portant sur la formation à l'enseignement nourrissent le projet scientifique de mieux cerner les bonnes pratiques enseignantes supposées créer chez les élèves les conditions d'un apprentissage réussi. Mais ces travaux n'ont toutefois pas permis, à ce jour, de questionner les processus d'apprentissage, par les enseignants en formation, des savoirs professionnels nécessaires à la construction et au développement de leurs compétences professionnelles. Or, ce manque de connaissance risque de compromettre, à terme, non seulement le processus d'insertion professionnelle, mais aussi, la qualité de l'enseignement dispensé aux élèves, sachant que ce sont fréquemment les classes les plus difficiles, qui accueillent plusieurs élèves à risque ou en difficulté, qui sont laissées aux enseignants en début de carrière (Comité d'orientation de la formation du personnel enseignant [COPFE], 2002).

Problématique des 10es Journées internationales d'étude

Plusieurs rapports de recherche au Canada (voir Tardif, Lessard et Gauthier, 1998), des études en Europe (voir Eurydice, 2004), plusieurs recommandations voire préconisations émanant d'institutions officielles de ministères de l'éducation (Bancel, 1989; Ministère de l'Éducation du Quebec [MEQ], 2001) ont ces vingt dernières années fourni aux décideurs des arguments pertinents pour concevoir autrement les dispositifs de formation à l'enseignement, en particulier en favorisant le développement d'une professionnalisation (Altet, 1994; Altet et Bourdoncle, 2000) du métier d'enseignant. Autrement dit, un objectif et un pari sont affirmés avec force depuis cette époque, celui de penser la formation à l'enseignement au service de l'amélioration des compétences professionnelles des enseignants. Rappelons que les projets éducatifs ont pour objectif premier de préparer les futurs citoyens à la société de demain. Dans cette perspective, ils doivent pouvoir s'appuyer sur des professionnels compétents, ce qui rend indispensable l'amélioration de la qualité des dispositifs de formation à l'enseignement. Derrière cette orientation se trouve rappelé un postulat partagé aujourd'hui tant par les chercheurs (Fullan et Stiegelbauer, 1991) que par les responsables politiques (American Council on Education, 1999), celui de l'affirmation du rôle de l'enseignant comme vecteur significatif d'amélioration des performances académiques des élèves. *In fine*, la réussite d'une réforme éducative semble donc dépendre fortement de l'implication et de la conviction des acteurs concernés, en particulier les enseignants. Dans cette perspective, différentes publications (Mendro, 1998; Powell et Anderson, 2002;) ont insisté sur le rôle essentiel des enseignants dans la réussite de l'implantation d'un nouveau curriculum (Lenoir, 2005).

Face à ces enjeux et à ces défis, les institutions de formation d'enseignants (hautes écoles, Institut universitaire de formation des maîtres, départements universitaires, faculté d'éducation, etc.) ont cherché, depuis plus de vingt ans, à améliorer la formation des enseignants, répondant ainsi à cet objectif de professionnalisation. Dans cette perspective, les politiques éducatives, dans le monde francophone notamment (Ministère de l'Éducation nationale de la Recherche et de la Technologie [MENRT], 1999; MEQ 2001), s'appuyant sur des préconisations de chercheurs (Paquay, Charlier, Altet, et Perrenoud, 1996; Gauthier et Mellouki 2006), comme dans le monde anglophone (Feiman-Nemser, 2001; Darling-Hammond, 2000) ont tenté de construire et de mettre en œuvre de nouveaux curriculums de formation des maîtres reposant sur trois grands principes : la reconnaissance d'une professionnalité enseignante, le recours à un processus de professionnalisation et donc d'apprentissage professionnel, la convocation de différents espace-temps de formation incarnés par différents porteurs de savoirs. *In fine*, le développement et la mise en place de ces nouveaux curricula encouragerait le développement d'une nouvelle posture enseignante, celle de praticien réflexif (Perrenoud, 2001).

Derrière cet objectif réformateur des *curricula* de formation à l'enseignement se pose *de facto* la question spécifique du rapport entre recherche et formation. En effet, différentes publications (Association des Enseignants et Chercheurs en Sciences de l'Éducation [AECSE], 1993; Paquay, Charlier, Altet et Perrenoud, 1996; Tardif, Lessard et Gauthier, 1998) ont montré combien les dispositifs de formation à l'enseignement ont très tôt privilégié un modèle applicationniste, c'est-à-dire un modèle qui considère que les connaissances scientifiques président à la construction des connaissances professionnelles. Cette conception de la formation professionnelle des enseignants ne diffère guère de celles qui président à la construction d'autres dispositifs de formation professionnelle préparant à d'autres métiers (Maubant, 2004). En effet, ces dispositifs accordent le plus souvent une place primordiale aux savoirs scientifiques constitutifs des sciences de l'éducation en faisant d'eux la pierre angulaire de la construction des savoirs professionnels. Si de nombreux dispositifs de formation à l'enseignement peinent à reconnaître leur appartenance à ce modèle (Maubant, 1997 et 2004), il semble néanmoins que l'analyse des propos des enseignants « sortants » (Maubant et Lenoir, sous presse) laisse planer le doute sur la capacité de ces dispositifs à fournir aux futurs enseignants les savoirs nécessaires à l'exercice du métier. Derrière cette problématique du rapport entre recherche et formation apparait un autre questionnement, celui-ci plus spécifique de la formation professionnelle, celui du rapport entre théorie et pratique. Si nous interrogeons notamment les dispositifs de formation continue, le modèle didactico-pédagogique dominant, celui qui réserve une place prépondérante aux savoirs théoriques au détriment des savoirs de la pratique, est mis en cause (Perrenoud, 2001). En outre, il n'est même pas certain que les savoirs constitutifs des *curricula* de formation à l'enseignement (les savoirs « pour » la pratique) soient la traduction fidèle des savoirs issus de la recherche (les savoirs « sur » la pratique). Que dire enfin de la non prise en compte réelle dans les dispositifs de formation professionnelle des savoirs issus de l'analyse par les enseignants de leurs savoir-agir (les savoirs « de » la pratique). Face à ces nombreuses zones d'ombre, il apparait donc nécessaire d'interroger non seulement le modèle de formation privilégié dans les *curricula* de formation à l'enseignement mais aussi de dégager les conditions du transfert des savoirs scientifiques issus de la recherche en éducation dans les pratiques effectives des enseignants.

Face à ce constat d'une possible inadéquation entre la formation à l'enseignement et les savoirs mobilisés dans l'acte enseignant, il nous semble essentiel de convoquer les recherches visant à étudier les processus d'apprentissage professionnel. Pour questionner les processus d'apprentissage professionnel des enseignants en formation, différents cadres théoriques, conceptuels et méthodologiques sont mobilisés. Dans le champ de la formation des enseignants, une perspective avait été jusqu'à présent, particulièrement travaillée par les chercheurs: la perspective socio-organisationnelle visant à questionner

les différents modèles socio-pédagogiques initiés et mis en œuvre par les institutions de formation des enseignants, comme la pédagogie par alternance, par exemple (Tardif, Lessard et Gauthier, 1998; Gauthier et Mellouki, 2006; Maubant, 1997 et 2004) ou encore le rôle des stages dans la formation.

Mais il faut aller chercher dans le champ des recherches en formation d'adultes pour observer, à partir des années 2000, l'émergence de recherches en éducation visant à comprendre les conditions de réalisation et de réussite de l'apprentissage professionnel (Mayen, 2004; Maubant, 2007). Ainsi l'analyse des modalités d'élaboration et de maîtrise des savoirs professionnels constitutifs de la pratique enseignante (Bru, 2002), la compréhension des modalités de construction des savoirs professionnels (Mehrand, Ronveaux et Vanhulle, 2007; Vanhulle, 2008), l'identification des savoirs professionnels construits en formation initiale et mobilisés dans la mise en œuvre des compétences professionnelles (Jorro, 2002; Maubant, 2007), l'usage de pratiques de formation censées travailler le processus d'apprentissage des enseignants en formation (Faulx, 2008, Donahue, 2008) sont autant d'axes de recherches privilégiés et travaillés par différentes équipes de recherche en Europe et en Amérique du Nord et dont ce numéro spécial cherchera à rendre compte. L'originalité et le caractère novateur de l'objet travaillé dans le cadre de ce numéro réside dans la perspective proposée d'éducation comparée, par la confrontation de recherches nord-américaines et européennes et dans le choix de retenir des travaux visant à questionner les interactions entre l'enseignant en formation et les différentes ressources formatives impliquées dans la formation à l'enseignement

Cadres théoriques et conceptuels travaillés dans les journées d'études

Si les écrits sur la formation des adultes sont considérables (Laot, 2002; Forquin 2002), ceux sur la formation des enseignants (Altet, 1994 et 2000; Altet et Bourdoncle, 2000) constituent depuis plus de vingt ans une impressionnante somme de savoirs visant tour à tour la compréhension de l'acte d'enseignement et l'identification des conditions de réussite d'une formation à l'enseignement. Or il semble qu'aucune recherche ne vise à rapprocher ces deux champs de recherche. Cela peut surprendre tant il semble possible, voire souhaitable, dans la perspective d'explorer plus avant les conditions de réussite de la formation des enseignants, d'identifier des points de convergence entre ces deux champs scientifiques, la formation des adultes d'une part et la formation des enseignants d'autre part. Dans cette perspective, les travaux portant sur la formation des maîtres explorent peu l'analyse du processus d'apprentissage professionnel à partir de cadres théoriques provenant de la formation des adultes et en particulier celui de l'ergonomie du travail (Durand et Veyrunes, 2005), celui de la didactique professionnelle (Raisky, 1993; Pastré, 2002) ou encore celui de la didactique des savoirs professionnels (Vanhulle, 2008). Si quelques recherches récentes (Gervais et Desrosiers, 2005; Mehrand, Ronveaux et Vanhulle, 2007) cherchent à comprendre ce qui se joue dans le processus formatif des enseignants,

peu de recherches parviennent à identifier et à stabiliser une méthodologie de recueil et d'analyse des différentes dimensions contributives de l'apprentissage professionnel et aucune ne semble s'intéresser à l'étude des interactions (Bru, 2002; Bru et Lenoir, 2006; Widden, Mayer-Smith et Moon, 1998; Wilson et Berne, 1999) entre les enseignants en formation d'une part et les différents « formateurs » que sont les superviseurs de stage, les maîtres associés et les enseignants ou formateurs des institutions de formation des maîtres. C'est la finalité et l'enjeu novateur de ce numéro que de rendre compte des recherches analysant les interactions entre l'enseignant en formation et les différentes ressources formatives et contributives de son apprentissage professionnel.

Le construit d'apprentissage professionnel

Pastré (2008) définit ainsi l'apprentissage : « l'apprentissage est, chez l'homme, un processus anthropologique fondamental qui accompagne toute activité et qui fonctionne de telle sorte qu'un humain ne peut pas agir sans qu'en même temps il ne produise des ressources pour gérer et orienter son action. » Pour Pastré, l'activité humaine est indissociable de l'apprentissage. Nous considérons à l'instar de Pastré que l'apprentissage professionnel se définit comme l'une des deux dimensions de l'activité humaine que développe Rabardel (2004); celle qu'il qualifie d'activité constructive. Cette activité constructive vise *in fine* la transformation de l'homme. Elle se distingue de l'activité productive qui vise, quant à elle, la transformation du réel. L'analyse de l'apprentissage professionnel nécessite aussi de questionner la nature et la fonction des savoirs didactiques et pédagogiques, objets de cet apprentissage. Ces savoirs professionnels constituent le cœur de la pratique enseignante. Les recherches présentées dans ce numéro visent à identifier et à nommer ces savoirs et à montrer de quelles manières ils sont construits par l'enseignant en formation. La présentation de ces travaux devrait permettre aussi de prendre en compte les difficultés méthodologiques liées au repérage de ces savoirs et à l'identification de leurs processus d'élaboration.

Le concept de médiation

Les recherches présentées lors de ces journées internationales d'étude étudient les interactions entre l'enseignant stagiaire et les différentes ressources formatives impliquées dans sa formation. L'analyse de ces interactions nécessite le recours à un concept, celui de médiation. En effet, l'apprentissage n'est jamais un rapport direct et immédiat d'appropriation de la réalité. Il passe par l'intermédiaire d'un système médiateur entre le sujet et l'objet de savoir. Il faut distinguer deux types de médiation : la médiation cognitive, celle de l'élève dans son rapport au savoir, et la médiation pédagogicodidactique, celle de l'enseignant intervenant sur la médiation cognitive (Lenoir, 1993, 1996). Le terme "pédagogicodidactique" renvoie à la fois à «la fonction didactique de structuration et de gestion des contenus» et à la «fonction pédagogique d'aide

à la construction du savoir par la relation fonctionnelle et l'organisation des apprentissages» (Altet, 1997, p. 11-12). En privilégiant l'étude de cette médiation didactico-pédagogique, ces recherches ont pour projet de lire et de comprendre le sens et la nature des interactions entre les différentes ressources formatives, qu'il s'agisse des pratiques formatives des différents intervenants que des facilitateurs didactico-pédagogiques représentés notamment par les différents outils ou supports mobilisés pour soutenir et favoriser le processus d'apprentissage professionnel (le mémoire professionnel et le portfolio notamment).

Le construit d'interaction est défini ainsi par Fougeyrollas (2001) « Influence réciproque de la personne et de son contexte de vie inhérente à la réalisation de toute activité humaine » (pp. 102). Pour Pomerleau et Malcuit (1983) le concept d'interaction réfère à une dynamique transactionnelle, construite dans une dimension temporelle, entre deux ou plusieurs individus. Les conditions d'exercice de la médiation cognitive par l'apprenant et celles d'exercice de la médiation pédagogique et didactique de la part de l'enseignant sont donc fortement tributaires de la nature, de la stabilité et de la qualité des interactions entre l'enseignant en formation et les formateurs.

Le concept d'alternance

Considérer la place de l'alternance dans une démarche de lecture compréhensive des dimensions contributives de l'apprentissage professionnel conduit à questionner le sens d'une articulation entre d'une part les différents espace-temps de formation (Clénet, 2003) constitutifs du parcours et du processus de formation et d'autre part les différents intervenants (enseignants, formateurs, maîtres associés, superviseurs de stage) soutenant la mise en œuvre du processus d'apprentissage professionnel. Ces dernières années, les responsables de programmes de la formation des enseignants ont privilégié le plus souvent la question des modalités pédagogiques (dont la pédagogie par alternance) susceptibles de porter le procès de formation et d'atteindre ainsi les objectifs de construction des compétences professionnelles (Maubant, 2007). On a ainsi souvent parlé d'articulations, d'enchaînements, de processus intégrateurs sensés favoriser le processus de professionnalisation. Certains cours ont été pensés et crées dans ce sens : les activités d'intégration. Des outils ont été mobilisés : le portfolio (Lacourse, 2008). Or si des dispositifs de formation à l'enseignement s'appuyant sur le principe d'alternance méritent d'être analysés, c'est pour en saisir la pertinence en termes de plus values d'apprentissage pour les enseignants en formation. (Mehran, Ronveaux et Vanhulle, 2007).

Les retombées attendues des journées d'études

Les recherches portant sur la formation professionnelle des enseignants explorent, encore peu pour le moment, le processus d'apprentissage professionnel. Les regards privilégiés dans ces recherches visent surtout à identifier et à

comprendre les effets des bonnes pratiques d'enseignement sur la réussite des élèves. Ils cherchent aussi à identifier les conditions d'élaboration et de fonctionnement des savoirs professionnels soutenant et favorisant la mise en œuvre de situations d'enseignement-apprentissage au service de la réussite scolaire. Autrement dit, ce qui est privilégié dans les recherches sur la formation à l'enseignement, c'est principalement l'analyse des démarches et méthodes pouvant créer les conditions de réussite des élèves dans leurs apprentissages. L'analyse de cet effet-maître sur la réussite scolaire constitue encore aujourd'hui en grande partie la raison d'être des recherches sur la formation à l'enseignement en Amérique du Nord comme en Europe. Or, il nous semble important de privilégier la compréhension des situations et des processus d'apprentissage professionnel des enseignants afin de déterminer les conditions de construction des savoirs professionnels d'ordre didactique et pédagogique que ces enseignants mobiliseront dans les situations d'enseignement-apprentissage. C'est ici que les recherches en formation d'adultes peuvent proposer un éclairage pertinent.

P.M.

RÉFÉRENCES

Association des Enseignants et Chercheurs en Sciences de l'Éducation (AECSE). (1993). *Les sciences de l'éducation : enjeux et finalités d'une discipline*. Paris : INRP.

Altet, M. (1994). *La formation professionnelle des enseignants*. Paris : Presses universitaires de France.

Altet, M. (1997). *Les pédagogies d'apprentissage*. Paris : PUF.

Altet, M. (2000). Les dispositifs d'analyse des pratiques pédagogiques en formation d'enseignants : une démarche d'articulation pratique-théorie-pratique. Dans C. Blanchard-Laville & D. Fablet (Eds.), *L'analyse des pratiques professionnelle* (pp.15-34). Paris : l'Hamarttan.

Altet, M. & Bourdoncle, R. (Eds.). (2000). Formes et dispositifs de la professionnalisation . *Recherches et formation*, *3*,117-131.

American Council on Education (1999). *Transforming the way teachers are taught. An action agenda for college and university presidents*. Washington, DC: ACE.

Bancel, D. (1989). *Créer une nouvelle dynamique de la formation des maîtres*. Paris : MEN.

Barrère, A. (2002). *Les enseignants au travail*. Routines incertaines. Paris : L'Harmattan.

Brodeur, M., Deaudelin, C. & Bru, M. (2005). *Le développement professionnel des enseignants. Revue des sciences de l'éducation, XXXI*(1), 5-236.

Bru, M. (2002). Pratiques enseignantes : des recherches à conforter et à développer. *Revue française de pédagogie, 138*. 63-73.

Bru, M. & Lenoir, Y. (2006). *Analyse de publications nord-américaines relatives à l'enseignement : une collaboration scientifique*. France-Québec CRIE-Sherbrooke, CREFI-Toulouse-Le-Mirail.

Carbonneau, M. (1993). Modèles de formation et professionnalisation de l'enseignement : analyse critique de tendances nord-américaines. *Revue des sciences de l'éducation, XX*(1), 133-57.

Clenet, J. (2003). L'ingénierie des formations en alternance. Paris : L'Harmattan.

Comité d'orientation de la formation du personnel enseignant (COPFE). (2002). *Offrir la profession en héritage, Avis du COFPE sur l'insertion dans l'enseignement*. Québec, QC : Gouvernement du Québec.

Darling-Hammond, L. (Ed.). (2000). *Studies of excellence in teacher education. Preparation at the graduate level*. New York: National commission on teaching and America's future.

Donahue, C. (2008). *Écrire à l'université. Analyse comparée en France et aux Etats-Unis*. Villeneuve d'Aseq: Éditions du septentrion.

Durand, M. & Veyrunes, P. (2005). L'analyse de l'activité des enseignants dans le cadre d'un programme d'ergonomie-formation. *Les Dossiers des Sciences de l'Éducation, 14*, 47-60.

Eurydice (2004). Chiffres clés des technologies de l'information et de la communication à l'école en Europe. Bruxelles : Eurydice.

Faulx, D. (2008). L'animatique des groupes : esquisse d'un nouveau champ de recherche en formation des adultes. *Éducation permanente, 174*, 147-156.

Feiman-Nemser, S. (2001). From preparation to practice : designing a continuum to strengthen teaching. *Teachers College Record, 73*(6), 1013-1055.

Forquin, J.-C. (2002). *Les composantes doctrinales de l'idée d'éducation permanente. Analyse thématique d'un corpus international*. (UNESCO). Paris : L'Harmattan.

Fougeyrollas, P. (2001). Le processus de production du handicap : l'expérience québécoise. Dans R. DeRiedmatten, *Une nouvelle approche de la différence*. Genève : Médecine et Hygiène.

Fullan, M. & Stiegelbauer, S. (1991). *The New Meaning of Educational Change*. New York: Teachers College Press.

Gauthier, C. & Mellouki, M. (2006). *La formation des enseignants au Québec à la croisée des chemins*. Quebec : Les presses de l'Université Laval.

Gervais, C. & Desrosiers, P. (2005). *L'école, lieu de formation des enseignants. Questions et repères pour l'accompagnement des stagiaires*. Quebec : Presses de l'université Laval.

Jorro, A. (2002). *Professionnaliser le métier d'enseignant*. Paris : ESF.

Laot, F. (2002). *Quarante ans de recherche en formation d'adultes (1960-2000)*. Paris : L'Harmattan.

Lenoir, Y. (1993). Entre Hegel et Descartes: de quels sens peut-il être question en didactique? Dans P. Jonnaert et Y. Lenoir (Eds.), Sens des didactiques et didactique du sens, (pp. 29-99). Sherbrooke: Éditions du CRP.

Lenoir, Y. (1996). Médiation cognitive et médiation didactique. Dans C. Raisky et M. Caillot (Eds.), Le didactique au-delà des didactiques. Débats autour de concepts fédérateurs, (pp. 223-251). Bruxelles: De Boeck Université.

Lenoir, Y. (2005). Comment caractériser la fonction enseignante? *Puzzle*, *19*, 5-18.

Martineau, S. (2007). Recension: L'obligation de résultats en éducation. Recherches sociographiques, 48(1), 189-191.

Maubant, P. (1997). Pour une didactique et des pédagogies de l'alternance. *Revue POUR*, 154, 109-134.

Maubant, P. (2004). *Pédagogues et pédagogies en formation d'adultes*. Paris : Presses universitaires de France.

Maubant, P. (2007). Penser l'alternance comme logique de professionnalisation des enseignants. Dans S. Vanhulle, F. Merhan & C. Ronveaux. *Alternances en formation. Raisons éducatives, 11*, 67-82.

Maubant, P. & Lenoir, Y. (in press). Curriculum et professionnalité chez des enseignants québécois du primaire: résultats d'une recherche. Dans A. Hasni & G. Baillat. *La profession enseignante face aux disciplines scolaires: le cas de l'école primaire*. Sherbrooke : Éditions du CRP.

Mayen, P. (2004). Le couple situation-activité. Sa mise en œuvre dans l'analyse du travail en didactique professionnelle. . Dans J.-M. Marcel & P. Rayou (Eds.), *Recherches contextualisées en education* (pp. 29-39). Paris: INRP.

Merhan, F., Ronveaux, C. & Vanhulle, S. (Ed.) (2007). *Alternances en formation. Raisons éducatives, 11*. Bruxelles : De Boeck. Collection.

Mendro, R. L. (1998). Student achievement and school and teacher accountability. *Journal of personnel évaluation in éducation, 12*(3), 257-267.

Ministère de l'Éducation nationale de la Recherche et de la Technologie (MENRT) (1999). *Rapport sur les études doctorales, 1999*. Paris: Ministère de l'Éducation nationale de la Recherche et de la Technologie.

Ministère de l'Éducation du Quebec (MEQ). (2001). *La formation à l'enseignement : les orientations, les compétences professionnelles*. Québec, QC: Ministère de l'Éducation.

Paquay, L. Charlier, É., Altet, M. & Perrenoud, P. (1996). *Former des enseignants professionnels. Quelles stratégies ? Quelles compétences ?* Bruxelles : De Boeck Université.

Pastré, P. (2002). L'analyse du travail en didactique professionnelle. Revue française de pédagogie, *138*, 9-17.

Pastré, P. (2008). Apprentissage et activité. Dans Y. Lenoir & P. Pastré, *Didactique professionnelle et didactiques disciplinaires en débat*, (pp. 53-79). Toulouse, France : Octarès.

Perrenoud, P. (2001). Articulation théorie-pratique et formation de praticiens réflexifs en alternance. In P. Lhez & B. Séguier (Eds.). *Alternance et complexité en formation. Éducation, Santé, travail social* (pp. 10-27). Paris : Éditions Seli Arslan.

Pomerleau, A & Malcuit, G. (1983). *L'enfant et son environnement. Une etude fonctionnelle de la première enfance*. Québec, QC: Presses de l'université du Québec.

Powell, J. C. & Anderson, R. D. (2002). Changing teacher's practice: Curriculum material and science education reform in the USA. *Studies in Science Education, 37*, 107-136.

Rabardel, P. (1994). *Les hommes et les technologies. Approche cognitive des instruments contemporains*. Paris: Armand Colin.

Raisky, C. (1993). *Problème du sens des savoirs professionnels, préalable à une didactique*. Dans P. Jonnaert & Y. Lenoir (Eds.), *Sens des didactiques et didactique du sens* (pp. 101-121). Sherbrooke : Éditions du CRP.

Tardif, M., Lessard, C. & Gauthier, C. (1998). *Formation des maîtres et contextes sociaux, perspectives internationales*. Paris : Presses universitaires de France.

Vanhulle, S. (2008). Au cœur de la didactique professionnelle, la subjectivation des savoirs. Dans Y. Lenoir & P. Pastré (Eds.), *Didactique professionnelle et didactiques disciplinaires en débat* (pp. 227-254). Toulouse, France : Octarès.

Widden, M., Mayer-Smith, J. & Moon, B. (1998). A critical analysis of the research on learning to teach: Making a case for an ecological perspective on inquiry. *Review of Educational Research, 68*(2), 130-178.

Wilson, S. M. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary development. *Review of Research in Education, 24*, 173-210.

A DISCURSIVE APPROACH TO RECOGNITION IN THE PRACTICUM

KRISTINE BALSLEV, SABINE VANHULLE & EDYTA TOMINSKA
Université de Genève

ABSTRACT. This article is part of a larger research project on professional development, and more specifically the emergence of "professional knowledge" among pre-service teachers. The intent here is to analyze recognition phenomena in supervisory discussions. We consider recognition of pre-service teachers' discourse as a condition for the emergence of professional knowledge. What "recognition markers" do evaluators seize from this discourse to decode its content and meaning, to adjust and influence it? How do these markers contribute (or fail to contribute) to establishing "shared communicative spaces"? Our analyses show that the emergence of these shared communicative spaces involves tensions that reveal (or fail to reveal) forms of recognition. These forms of recognition affect the shaping of pre-service teachers' professional knowledge, as well as components of pre-service teachers' identity that also influence the elaboration of professional knowledge.

UNE APPROCHE DISCURSIVE DE LA RECONNAISSANCE DANS LES ENTRETIENS DE STAGE

RÉSUMÉ. Cette contribution s'insère dans une recherche plus large portant sur les processus de développement professionnel, plus spécifiquement l'émergence de savoirs professionnels, chez des enseignants en formation. Cet article est centré sur les phénomènes de reconnaissance à l'oeuvre dans les entretiens de stage. Nous considérons en effet la reconnaissance du discours de l'enseignant en formation comme une condition d'émergence des savoirs professionnels. Quels « repères de reconnaissance » les évaluateurs prennent-ils dans ce discours pour en décoder le contenu et le sens, pour s'y ajuster et l'influencer ? En quoi ces repères contribuent-ils ou non à l'établissement de « zones de compréhension mutuelle » ? D'après nos analyses, l'émergence de ces zones de compréhension est soumise à des tensions qui révèlent ou non des formes de reconnaissance. Celles-ci influencent la configuration des savoirs professionnels que l'étudiant élabore, et partant, les composantes identitaires qui entrent dans cette élaboration.

INTRODUCTION

Supervisory discussions are an important part of teacher education. They provide opportunities for pre-service teachers to link theory and practice, and they represent the partnership between the university and the profession. But what professional learning takes place when a cooperating teacher (CT), a university supervisor (US), and a pre-service teacher (PT) meet to evaluate the PT's practicum? What elements help the PT's professional development? Considering that recognition plays an important role in helping the PT to build professional knowledge, we analyzed recognition phenomena in two evaluative interviews. Our aims are twofold: to point out the roles interactive discourses play in the elaboration of professional knowledge and to reveal recognition phenomena in supervisory discussions.

THEORETICAL FRAMEWORKS AND KEY CONCEPTS

Professional knowledge

In the field of professional didactics, and according to Raisky (1993, p. 118-119), professional knowledge is neither the juxtaposition of practical, technical and scientific knowledge, nor their sum, but a rereading of these three types of knowledge reinterpreted according to a logic of action. In the field of teacher education, Bromme and Tillemma (1995) assert that

> From a cognitive point of view, professional knowledge is developed as a product of professional action, and it establishes itself through work and performance in the profession, not merely through accumulation of theoretical knowledge, but through the integration, tuning and restructuring of theoretical knowledge to the demands of practical situations and constraints. From a socio-historical point of view, professional knowledge evolves gradually in a process of enculturation of the professional within a working context which is in itself part of a certain culture. (p. 262)

We subscribe to these definitions and add that the elaboration of professional knowledge results from a linking of different types of knowledge coming from different sources: academic, prescriptive, and practical (Vanhulle, 2008, 2009).

In this paper, we study the emergence of professional knowledge in supervisory discussions because we consider that such discussions represent opportunities for pre-service teachers to comment their actions in the classroom by referring to different sources of knowledge.

Supervisory discussions

These last years have seen a growing interest in the way that professional conversations support and stimulate professional development (Tillema & Orland-Barak, 2006). Supervisory discussions are at the center of a large number of research projects (Caroll, 2005; Cartaut & Bertone, 2009; Chal-

ièes, Ria, Bertone, Trohel & Durand, 2004; Crasborn, Hennissen, Brouwer, Korthagen, & Bergen, 2008; Hennissen, Crasborn, Brouwer, Korthagen, & Bergen, 2008; Orland-Barak, 2006; Orland-Barak & Klein, 2005). These studies have various objects: beliefs or the transformation of beliefs among pre-service teachers; the different roles teacher educators take on in practicum settings; power relations in the interactions between pre-service teacher (PT), university supervisor (US), and cooperating teacher (CT); mentors' representations of mentoring conversations; and types of conversations and their effects on professional learning.

These studies shed light on important features of supervisory discussions in line with professional development, but do not tell us much about linguistic processes and aspects of recognition in supervisory discussions. We consider that studying these processes contributes to a better understanding of the emergence of professional knowledge.

Features of professionality in discourse

We consider four features of personal discourse related to professional knowledge.

1. This discourse is a combination of two discursive types (Bronckart, 1996): *narration* and *statement*. Within these discursive types, the subject talks about him- or herself in a situation or states generalities, expresses statements based on single and concrete examples, or expresses theoretical ideas. Thus, *narration* oscillates between an *interactive account* and an *independent narration*; and a *statement* oscillates between an *interactive discourse* and a *theoretical discourse*.

Evaluators recognize the PT's professionality in this heterogeneous discourse, and they judge the strength of the PT's account and elaboration on his/her professional preparation. This account is more than a mere statement of theoretical contents expected by the evaluators. The evaluators' challenges are as follows: to grasp the way in which the PT makes meaning of his/her actions, to rate his/her ability to establish a distance from these actions, to move off center through interpretations and call some actions into question, to make sense of the situations and knowledge components that the PT uses to analyze his/her own actions, and to measure the PT's involvement in the situation.

2. Recognition markers are based on the way the subject treats contents, elaborates various knowledge components, and mobilizes experience. These contents include contextual (spatial and temporal aspects, presence of other people) and situational markers (circumstances in which the subject encountered actions, problems, obstacles, etc.). The preciseness of these aspects provides indications on the way the subject is rooted in the situations he/she reveals. The contents incorporate the elements of knowledge linked to the situations that the subject analyzes. They include *referential markers* (theories, concepts, and knowledge acquired in previous experiences or during the professional

preparation period) that indicate that the subject can mobilize elements of analysis and can critically distance him- or herself from existing situations.

3. The subject elaborates on content by attributing *motives* (Schütz, 1953) to his/her own actions. These motives are either "in-order-to" motives or "because" motives. According to Schütz (1953), an "in-order-to" motive has to do with "... the state of affairs, the end, in view of which the action has been undertaken. From the point of view of the actor this class of motives refers to the future" (p. 16) (for example, "To check that the pupils understood, I suggested a new exercise..."). A "because" motive "refers from the point of view of the actor to his past experiences which have determined him to act as he did" (Schütz, 1953, p. 16-17). The subject also expresses *intentions*, and thus emphasizes a general understanding of professional action: "Based on this situation and my subsequent actions, I can say that, for me, teaching and motivating pupils mainly consists of .... Therefore, in my profession, I will be vigilant about...."

4. The subject talks about his/her actions using various linguistic means of enunciation. His/her discourse takes form in different *modalities*. Modalities represent important linguistic operations through which speakers interject their personal comment – through specific sentence structures, adjectives, adverbs, and so on. Inspired by Bronckart (1996), Vanhulle (2005, p. 300, our translations) identified four types of modalities: *logical* (which elaborates general laws, ideal rules – in other words, the "what's true?" order); *deontic* (oriented toward values and norms; in other words, "what's good to do and to think"); *pragmatic* (meaning, "what must be done"); and *appreciative* (meaning, "what seems good, valuable, true, fearful..." or not, for me).

In their communicational action, subjects attempt to make their sayings valid and legitimate by situating these sayings within existing laws, social ways of functioning, values, or appreciations of their singular action. By doing so, PT's anticipate recognition. Their discourse is a kind of argumentation aiming to obtain the evaluators' support. In the discourse, professional knowledge is the result of schematization (Grize, 1996).

The schematization process

According to Grize (1996), *schematization* is a discursive organization in which the addressees *recognize* a meaningful point of view. The issue is not merely to *convince*, but also to *persuade* by using emotional and interpersonal aspects. Let us point out some characteristics of schematization:

A. Schematization is mainly linked to what it should represent and to situations encountered in actions mentioned above: "recognition is only effective, only takes place, when it links speech to action" (Lenoir, 2009, p. 11, our translation). Furthermore, others recognize the dimensions of an action that the subject represents in his/her discourse (Honneth, 2003). In other words,

when the subject talks about his/her actions he/she selects some specific elements of these actions, which are (or are not) taken into account by the subject's interlocutor.

B. *Notions* achieve schematization and are endowed with properties, relations, and predicates (Grize, 1996). By using, in a singular way, notions related to actions, the PT makes a schematization of his/her personal relation to action. For the evaluators, *recognition markers* concern the ways in which the PT talks about his/her actions, and the notions that he/she selects and imbues with specific meanings.

C. The subject uses *coherence effects* in her/his discourse. Among these effects, repetition establishes balance between presumed information and information previously acquired (Charaudeau & Maingueneau, 2002, p. 99). However, according to what the subject tries to hide or, on the contrary, intentionally show, other more opaque processes occur: his/her utterances contain *filtering* or *emphasizing* effects (Grize, 1996, p. 68).

Keeping this in mind, evaluators must, within the dynamics of the dialogue, make inferences regarding the meanings that the subject tries to put into his/her words. The evaluators must also bring out significations despite the subject's filtering or emphasizing effects. Their recognition work consists of cooperating with the subject to bring out professional knowledge based on what his/her utterances suggest, including what the subject does not say.

The creation of a shared communicative space

Another, more revealing way to explain these interviews is to say that the US, CT, and PT must use the discussion to create a *shared communicative space*, or an *inter-mental development zone* (Mercer, 2000, p. 141), but trainers and trainees obviously do not use knowledge the same way or maintain the same relationship with knowledge. Therefore, discrepancies occur in the form of misunderstandings and semi-understandings during the dialogues between the trainer and trainee (Balslev & Saada-Robert, 2007).

In conclusion, recognition processes in triadic interviews do not only depend on the markers that the evaluators select in the PT's talk; they also depend on their ability to adjust their interventions within the dialogue in order to elucidate or modify the PT's representations.

The issues of formative interviews and recognition

The last year of the pre-service teacher education program at the Université de Genève involves three practicum periods. Each practicum lasts from three to seven (part-time) weeks and is evaluated through two triadic interviews. The first is formative and held in the middle of the practicum, and the second is summative and held at the end of the practicum. These interviews take place

in the school where the PT is being trained, before or after class, and without the presence of any pupils. The cooperating teacher (CT) follows the PT's everyday actions in the classroom. Because the university supervisor (US) is only present for the two triadic interviews, he/she does not know much about the PT's interactions with the pupils in the classroom. Therefore, the CT, US, and PT relate differently to the PT's practical experience. The CT, US, and PT each participate in the interviews with their own references, representations, expectations, images of the profession, and images of themselves as a teacher, a future teacher, or a teacher trainer.

The first assumption of this exploratory study is that these triadic interviews help to understand the emergence of the PT's professional knowledge. Our second assumption is that the university supervisor and the cooperating teacher participate in the emergence of this knowledge by recognizing or not recognizing elements that the PT brings to the interviews. We also analyze how speakers create a shared communicative space and how recognition phenomena play a role in the creation of such spaces.

We focus on the elements of the PT's discourse that the CT and US point out in order to help the PT explain or clarify his/her knowledge and skills, the way he/she understands principles of the profession and develops his/her own professional identity. We call these elements "recognition markers."

The CT and US point out the way in which the PT draws on the knowledge required for the profession. We distinguish four different types of knowledge: *academic knowledge* (resulting from educational research); *institutional knowledge* (linked to formal recommendations and to school organizations); *practical knowledge* (resulting from practical experiences legitimized by the profession or the CT); and *experiential knowledge* (resulting from personal experience).

Moreover, the PT has to meet other expectations, that is, prove his/her abilities to theorize knowledge and skills that he/she has built from everyday experiences, particularly during the professional preparation period; take into account the aims of the professional preparation; and have a reflective point of view of his/her actions.

METHODOLOGICAL FRAMEWORK

We based our analyses on the transcripts of filmed interviews. Our analyses combine two complementary approaches. The first concerns the interactional dynamics and refers to microgenetic studies (Balslev & Saada-Robert, 2007), while the second concerns microanalysis of the enunciations.

1. Microgenetic studies involve identifying sequences containing frames of reference in which the trainee builds his or her professional knowledge, postures endorsed by the speakers through the conversation (dissymmetry, symmetry,

initiators, followers, etc.), the communication methods linked to these postures, and the more or less successful creation of a shared communicative space.

2. Professional knowledge is elaborated through utterances. Our analyses take into account different types of discourse (narrative/statement; autonomous/involved) and different discourse modalities, as well as the various aspects of schematization.

CASE STUDY

The two interviews take place at the beginning and the end of a practicum, in a double-grade class (first and second year of the elementary division, ages 4 to 6). In this period, the trainee should prove his/her organizational and management skills (mastering "how to teach"), and didactic competencies (mastering "what to teach"). The first interview is formative and takes place two weeks after the beginning of the practicum. The second is summative and takes place at the end of the practicum. In these two interviews, we hope to describe the evolution in the ways the PT shapes his/her professional knowledge.

We divided the first interview into 15 sequences (753 turns and 67 minutes), and the second into 16 sequences (513 turns and 58 minutes) (Tables 1 and 2). Tables 1 and 2 (see Appendix B) indicate the sequences, the timing of the turns (column 1); the reference frames and types of knowledge that the speakers treat (academic knowledge – AK, institutional knowledge – IK, experiential knowledge - EK, and practical knowledge - PK); moments of recognition (R) or non-recognition (NR) of the PT's discourse or action (columns 2, 3, 4); the shared communicative spaces; and the relations in the discourse between the speakers. We tried to identify whose (US's, CT's or PT's) significations are dominant in the sequence and identify whether the significations (of one or two speakers) are imposed on the others; whether two or three significations are juxtaposed; whether a speaker tries to gain access to the significations of the other speaker; whether there is a construction of shared significations; or whether the significations of the three speakers are convergent (column 5).

Interactional dynamics

Evolutions between the first and the second interview deal with the slow and laborious construction of a shared communicative space. In this space, the two evaluators cooperate with the PT to clarify his/her knowledge and his/her own position in relation to this knowledge.

During the interviews, the two evaluators both recognize some of the PT's discourses and actions, but they do not each seize the same elements in the PT's discourse.

In the first interview, the CT finds opportunities in the PT's discourse to recognize her adaptational attitudes, the relevance of her actions, and the

emergence of her professional skills. The CT's attitude is caring and protective. She gives value to the PT's actions that are compatible with her own pedagogy. The US's job is to seek indicators of strong academic knowledge in the PT's discourse. She constantly confronts the PT by asking, "What are your objectives?"

In the second interview, the CT is less protective and more discreet. The US leads the interview and focuses her questions on didactic issues and on how the PT plans to handle heterogeneity in her group of pupils. At the end of the interview, that is, during the time when the two evaluators must agree on a grade to assign to the professional preparation period, the tension between their two positions subsides as their new goal is to combine their findings about the PT.

DETAILED ANALYSIS OF THE TWO INTERVIEWS

The formative interview

Conflict between two perspectives. In the following sequence, and throughout the interview, the US frequently refers to official documents that frame the evaluation (see Table 1). The US prompts the PT to make her objectives known. The PT's discourse is mainly narrative, interactive, and addressed to the US, even if she sends some nonverbal signs to the CT in order to get support from her. This narrative discourse relates to elements of the practicum and experiences in the classroom (tasks for the children and their reactions). The PT schematizes her actions by describing them in their chronological order and by relating them to adaptations she has carried out. She does not mention educational aims. Instead, she bases her discourse on various documents coming from her activities with the pupils. Many gestures complete her description of tasks, in particular when she is not able to formalize the objectives related to these tasks. Repetition, screening, and emphasizing effects show the tensions between US's demands (for example, asking the PT to clarify her objectives) and the PT's answers. The two discourses clearly differ in the way they treat the objects of actions.

TRANSCRIPT 1. Sequence 2, turns 36 to 42

(see Appendix A for transcription conventions)

36. PT: regarding the continuity of didactics [▯] well I firstly chose mathematics and the playroom (looks at CT) I had some days of observation and then I discussed with CT since she knows the class better than me (PT laughs), about activities I could do [CO, PK] and as the weeks went by we planned them and I went ahead / so I began with the numerical band (points at a paper posted on the wall) [AK didactics : object taught : counting] that is on the blackboard then I had to divide this activity into smaller daily activities so I chose the "smarties" activity [the task and its unfolding ▯] where I ask the pupils to fetch a specific token [unfolding of the task] / here we are ending the caterpillar [▯] (*She points out the cards she has in front of her*) / an activity we did in the playroom and that we continued in the classroom

37 US: you are describing all sort of activities / numerical band / smarties / caterpillar / but I would like to hear more about your purposes / your objectives

38 PT: that's all / there is a part that is counting and a part that is spatial / and we also worked on that with the caterpillar / actually sometimes one learns math in the playroom and that's why we chose spatiality [Justification of the "playroom" place regarding the "space" objective] [e/ s]

39 US: could you please be more accurate when you talk about your aims? / what do you expect the pupils / um / for example / what do you expect them to build while doing these activities ? / how will you acknowledge that what they build is actually what you expect them to build? [>< emphasizing / screening : divergent reasoning : double configuration : US = objectives; PT = existing activities]

40 PT: um// it concerns the numerical order / being able to count to ten / um // being able / for example to search for example / when I ask for a number / being able to fetch an object to reproduce um something like the caterpillar *(she draws circles in the air)* or in the playroom/ memorize [N in relation to the objective "memorize"] / in fact we follow the program and we leave some moments

41 US: yes yes / but what are your objectives? When you talk about fetching the right number [I] could you in theoretical terms

42 PT: its when he has / or he memorizes cardinal numbers and he looks for / no / he counts by himself the object that he brings back and at that moment there is a regulation and then he notices himself if there are too many or too few *(makes a gesture with her hand)* // and as he has to walk some steps he immediately sees if he has a different number or not / and for the theoretical aspect / to know for example in the smarties activity know when he has a token *(she shows a token with her thumb)* / in the smarties activity it's the symmetrical axis *(shows axiality on a paper in front of her with her forefinger)*

The PT clarifies her preoccupations and thus partly answers the US's question about objectives. Her preoccupations are the two activities' spatio-temporal characteristics: the "smarties" activity deals with chronological continuity, and the "caterpillar" activity takes place at two separate times and in two different places (the classroom and the playroom). She clarifies that the tasks promote memorization of numbers (turn 42, particularly). The explanation remains unclear regarding the idea she defends: by "doing," the pupils have to memorize and therefore they "regulate" (somehow naturally) their activity. The US does not announce or question the fact that the pupils are confronted with a problem solving activity. Therefore, the pupil's ability to regulate is not natural but provoked by the task. This could be considered a missed opportunity to elaborate professional knowledge based on didactic concepts. At that point in the interview, the US does not acknowledge this latent knowledge. However, she will come back to it later.

The CT intervenes after receiving various verbal and non-verbal signals from the PT. She intervenes in order to validate the PT's actions (not according to didactic objectives) that she estimates are well adapted to the teaching teams' practices. The CT also points out some of the PT's qualities: her openness and her ability to integrate a program established by others (turns 48 to 51).

Beginning of construction of a shared communicative space. The US encourages the PT to analyze her own actions, as well as to differentiate her interventions in

relation to each pupil. Together, they create a shared communicative space based on the childrens' drawings.

TRANSCRIPT 2. Sequence 4, excerpts

135 CT: the discussion about all the drawings was interesting

136 PT: *(picks a poster)*

137 CT: yeah because even if they all have the same caterpillar, we note that they do not draw the same thing / there are a lot of differences between drawings, and that is really interesting (...)

142 PT: *(opens a poster)* and that's how we made the observations *(written on the paper)*

143 US: OK, so the children made the observations [i]

144 PT: yes exactly and I wrote them down

(...)

147 US: OK

148 PT: so here they are *(all three look at the notes on the paper)*

149 US: *(reads the paper)* caterpillars have a body / caterpillars have paws / OK so how did you proceed ? / you made a list

150 PT: so I wrote a list and reminded them that they were going to the playroom and that's where they made their second drawing

151 US: and your objective regarding the first drawing was to see what remained in their memory? [i]

152 PT: it was mainly to see if they all drew the same thing / and / not at all / they had all made different caterpillars

153 US: OK

(...)

155 CT: but the second time there was *(points to the drawings and picks one)* / they had their first drawing in the playroom

156 US: yes

157 CT: so each child had his drawing in front of him and had to correct it / agree to do the same caterpillar again and then there was the soup moment *(laughs)*

158 PT: *(laughs)* and then

159 CT: it's really interesting because some don't look at all / don't work according to what they have in their hands /they just observe what is different between what they imagined and what they have to do / that exercise was really interesting

In this activity of co-pointing around the drawings, the three utterers adopt the position that any teacher would if he or she were confronted with learning phenomena. By doing so, they set aside dissymmetry. A new feature appears: the US seizes elements of answers to the question about the objectives (151) in the PT's discourse. We consider it a sign of the US's recognition of the way the PT treats the objects of her actions.

The summative interview

New communicative space and configuration of professional knowledge. The PT begins by presenting the main issue of her professional preparation period (that is, how she handled heterogeneity in the double-grade class). Her discourse is again narrative and interactive, but it now includes theoretical segments: her utterances deal with the context of the fight against academic failure as well as with teaching reforms. Her discourse refers to institutional knowledge (IK) and she relates her IK to the school's educational policies and curricula. She refers to a situated experience, and clarifies the terms she uses by means of *examples*. She does not fully respond to the academic requirements: she does not seem to have mastered the knowledge that comes from her research on differentiated learning. She gives priority to ideological issues (fight against academic failure); her discourse belongs to the world of values and of practices that correspond to these values. Compared with the first interview, the PT's utterances are more strongly marked, and include her personal appreciations (appreciative modality), as well as her pragmatic and deontic considerations. She refers to knowledge based on experience (EK) in order to justify her choices, and relates to experiences from other professional preparation periods (for example, "I noticed that..."). Furthermore, "in-order-to" motives (Schütz, 1953), which explain her activities with her pupils, now appear in her speech with greater clarity. Finally, the PT projects herself into the future as a teacher.

TRANSCRIPT 3. Second interview, sequence 12, excerpts

310. PT: I think that if I were in the daily life / I think I would have reacted in a completely different way / I admit that the fact that it's in the context of professional preparation influenced me a lot / because in daily life / *I think* I would have taken the time *I would have thought more about it* / and/ it's true that I wasn't in that process / and *I was fully aware of that* when I came to the end of the professional preparation period

311. US: mm hmm

312. PT: when I began to analyze / to do things I realized that / I said to myself "*the day that I will have my own class, I definitely won't do things that way*"

313. US: what will change, then?

314. PT: first of all, we follow them // XX/ we discussed that with CT (*points at CT*) / She's here since the beginning of the school year / therefore she can see progression / she knows the pupils much better than me / I just arrive for the professional preparation period and / I think one organizes things differently / I just come / I have to do my disciplines / I must have my planning, etc./ I observe two pupils / In other words, I wasn't in that process / I think that when I will have my own class / I will have a pupil like Sara and take note of elements and say to myself "I have to do some things with her again" / I thought that / I always noted "I must do this and this thing again, etc."

What explains the evolution of the PT's utterances towards an affirmation of a "capable subject"? Perhaps it is the fact that the three partners react as teachers concerned by the same crucial question: how to avoid "giving up" on some pupils (turns 272 and sequence 12). A new schematization about the representation of teachers' tasks appears in the PT's discourse. For the

PT, this task consists of going beyond the double-grade issue. Regarding equal opportunities for succeeding, there will always be differences between pupils, whatever their age. Therefore, teachers should adopt specific professional gestures in order to, for example, follow children's individual progress in tasks and accomplishments.

CONCLUSIONS: "THE EXERCISE WAS INTERESTING," OR WHEN MUTUAL RECOGNITION PROVOKES SHARED MEANINGS AND ACTIVITIES

We observed a conflict between the PT's and the US's perspectives (juxtaposition of meanings). The US seeks conceptualization and scrupulously respects the items of the academic contract for evaluating the professional preparation period, whereas the PT bases her discourse on her direct experience. The CT particularly recognizes the PT's actions that are legitimate according to the professional context.

The phenomena observed here are typical of supervisory discussions:

- The trainee (or PT) refers more often to pragmatic notions than to theoretical and academic concepts;
- Professional knowledge is built on field practices and on the identification of the PT's practices; and
- There is personal positioning based on values, to the detriment of research-based knowledge about education.

How is it possible for evaluators to overcome these limits? They can probably do so by recognizing elements in the PT's discourse in order to create openings. In the two interviews that we analyzed above, we observe that the PT's action-related interventions involve references to the fundamental objectives that she should pursue. After some time, the US seizes these references. Her role seems to consist of confronting the PT. On the other hand, the CT offers caring support. The two roles are indeed complementary, but could cause difficulties if each evaluator restricts him- or herself to one single defined role.

The distinctions between the three partners fade as they try to respond together to educational dilemmas based on practical problems. The CT's intervention in Sequence 4 in the first interview shows that she participates in this work of understanding. Her simple statement, "The exercise was interesting," does not just point to superficial recognition of the PT's actions, but to recognition of what this action allows the evaluators to develop in terms of their knowledge of the teacher's work. The interdependence between research and the reality of the job can finally be consolidated, with the new data that pragmatic experiences bring to the research. Within this interdependence, the "trainee" becomes the "future teacher": "in my class, I will pay attention to...."

When two types of reasoning meet, keen professional knowledge can emerge. This knowledge can be rational, and it considers the responsibility of the subject to be able to place him- or herself in a collective professional activity that is pre-organized by academic and institutional knowledge. However, the trainee should also demonstrate the knowledge of a critical and creative subject.

REFERENCES

Balslev, K. & Saada-Robert, M. (2007). Les microgenèses situées. Unités et procédés d'analyse. *Recherche qualitative, 26, n°2,* 85-109.

Bromme, R., & Tillemma, H. (1995). Fusing Experience and Theory: The Structure of Professional Knowledge. *Learning and Instruction, Vol. 55,* 261-267.

Bronckart, J.-P. (1996). *Activité langagière, textes et discours. Pour un interactionisme socio-discursif.* Neuchâtel : Delachaux et Niestlé.

Carroll, D. (2005). Learning through interactive talk: A school-based mentor teacher study group as a context for professional learning. *Teaching and Teacher Education, 21*(5), 457-473.

Cartaut, S. & Bertone, S. (2009). Co-analysis of work in the triadic supervision of preservice teachers based on neo-Vygotskian activity theory: case study from a French university institute of teacher training. *Teaching and Teacher Education, 25* (8), 1086-1094.

Chaliès, S., Ria, L., Bertone, S., Trohel, J., & Durand, M. (2004). Interactions between preservice and cooperating teachers and knowledge construction during post-lesson interviews. *Teaching and Teacher Education, 20* (8), 765-781.

Charaudeau, P. Maingueneau, D. (Dir.) (2002). *Dictionnaire d'analyse des discours.* Paris : Seuil.

Crasborn, F., Hennissen, P., Brouwer, N., Korthagen, F., & Bergen, T. (2008). Promoting versatility in mentor teachers' use of supervisory skills. *Teaching and Teacher Education, 24*(3), 499-514.

Grize, J.-B. (1996). *Logique naturelle et communications.* Paris : Presses Universitaires de France.

Hennissen P., Crasborn, F., Brouwer N., Korthagen, F. & Bergen, T.(2008). Mapping mentor teachers' roles in metoring dialogues. *Educational Research Review, 3* (2), 168-186.

Honneth, A. (2003). La reconnaissance : une piste pour la théorie sociale contemporaine. Dans R. Le Coadic (dir.), *Identités et démocratie. Diversité et mondialisation : repenser la démocratie.* Rennes : Presses universitaires de Rennes.

Lenoir, Y. (2009). Les pratiques d'enseignement : l'enjeu de la reconnaissance. Papier présenté au Symposium international de Carcassonne, *Education, recherche et société*, Université d'été de l'Aude, juillet 2009.

Mercer, N. (2000). *Words & Minds. How we use language to think together.* London and New York: Routledge.

Orland-Barak, L. (2006). Convergent, divergent and parallel dialogues: knowledge construction in professional conversations. *Teachers and Teaching: Theory and Practice, 12*(1), 13-31.

Orland-Barak, L., & Klein, S. (2005). The expressed and the realized: Mentors' representations of a mentoring conversation and its realization in practice. *Teaching and Teacher Education, 21*(4), 379-402.

Raisky, C. (1993). Problème du sens des savoirs professionnels agricoles, préalable à une didactique. In P. Jonnaert et Y. Lenoir (Eds.), *Didactique du sens et sens des didactiques* (p. 101-121). Sherbrooke: Éditions du CRP.

Schütz, A. (1953). Common-sense and scientific interpretation of human action. *Philosophy and Phenomenological Research, 14*, 1,(1) 1-37.

Tillema, H., & Orland-Barak, L. (2006). Constructing knowledge in professional conversations: The role of beliefs on knowledge and knowing. *Learning and Instruction 16* (6), 592-608.

Vanhulle, S. (2005). How future teachers develop professional knowledge through reflective writing in a dialogical frame. *L1-Educational Studies in Language and Literature 5* (3) 287-314.

Vanhulle, S. (2008). Au coeur de la didactique professionnelle, la subjectivation des savoirs. In P. Pastré & Y. Lenoir (Eds.), *Didactique professionnelle, didactique des savoirs professionnels* (pp. 227-254). Toulouse : Octarès.

Vanhulle, S. (2009). Dire les savoirs professionnels : savoirs de références et logiques d'action. In R. Hofstetter & B. Schneuwly (Eds.), *Savoirs en (trans)formation. Au cœur des professions de l'enseignement et de la formation (pp. 245-264).* Bruxelles : De Boeck.

APPENDIX A. TRANSCRIPTION CONVENTIONS

(italics): pointings, gestures, laughs, etc.

[bold]: elements of professional knowledge, such as: 1) markers related to objects : contextual CO ; situationnal SIT ; referential; 2) stamps/markers related to references: academic knowledge (AK); institutional knowledge (IK); practical knowledge (PK); experiential knowledge (EK); 3) modalities: appreciative (AM); deontic (DM); logical (LM); pragmatic (PM); 4) motives: "because" motives (BM), and "in-order-to" motives (IOM); 4) intentions: Int; 5) Notions:N; 6) concepts: C

[⇦]: retroactions; [⇨]: proactions

[s,e,r,c]: screening, emphasizing, repetition, and other coherence effects

/: short pause ; ///: long pause

XX: inaudible

APPENDIX B. TABLES

TABLE 1. Formative interview

Sequences and minutes	PT	CT	US	Shared communicative space (patterns)
1 (1-32) *Min. 0-5*	*Acceptation*	*Acceptation*	Interview and professional preparation contract- IK	US>CT and PT Imposed significations
2 (33-55) *Min. 5-10*	Interview and professional preparation contract Teaching management – IK, AK	Teaching management – IK, PK *R of PTs attitude*	Interview and professional preparation contract *NR of PTs discourse* Teaching concept° – AK	PT<US PT=CT Juxtaposition of significations Building of shared significations
4 (100-185) *Min. 14-20*	Teaching concept° and management – EK, AK Observat° and evaluat° of pupils	Teaching concept° *R PTs discourse* Observat° and evaluat° of pupils – EK, PK	*R PTs discourse* Teaching concept°-EK, PK, AK Observat° and evaluat° of pupils	PT=CT=US Juxtaposition of significations and access to significations
5 (186-240) *Min. 20-24*	Observat° and evaluat° of pupils – EK Teaching management	Observat° and evaluat° of pupils -EK, AK, PK	Observat° and evaluat° of pupils *R of PTs discourse*	PT=FT=US Access to significations Building of shared significations
6 (241-273a) *Min. 24-27*	Teaching management - IK	Interview and professional preparation contract - IK	Teaching management Interview and professional preparation contract - IK	PT<US PT=US Building of shared significations
7 (273b-336a) *Min. 28-35*	Teaching management – EK, AK Observat° and evaluat° of pupils Professional preparation contract Teaching concept°	Observat° and evaluat° of pupils – EK, PK, AK *R of PTs attitude in the classroom*	Observat° and evaluat° of pupils – IK, PK, EK *NR of PTs discourse* *R of CTs discourse*	S=CT=US Building of shared significations
8 (336b-416a) *Min. 35-41*	Teaching concept° – EK, PK, AK Teaching management – IK, AK	Professional preparation contract Teaching management – S (?) *R of PTs attitude*	Teaching management – AK Teaching concept° – AK *R of PTs act°s* *R of PTs and CTs discourses* Knowledge to teach	PT=CT=US Building of shared significations
9 (416b-460) *Min. 42-44*	Teaching management - EK	Personal commitments and attitudes – PK Teaching management *R of PTs attitudes* *R of PTs actions*	*R of PTs discourse* Personal commitments and attitudes	CT=US>PT
10 (461-549) *Min. 45-51*	Teaching management Personal commitments and attitudes – PK, IK, EK	Personal commitments and attitudes – EK *R of PTs attitudes*	Personal commitments and attitudes *R of PTs and CTs discourse*	CT=US>PT Convergent significations
11 (550-593) *Min. 51-55*	Teaching concept° Teaching management – AK, EK Professional preparation contract	Teaching management *R of PTs actions*	Teaching concept° Professional preparation contract	CT=US>PT Convergent significations
12 (594-635a) *Min. 56-60*	Teaching management – EK Observat° and evaluat° of pupils	Teaching management – PK *R of PTs actions*	Teaching management Observat° and evaluat° of pupils	CT=US>PT
13 (635b-677a) *Min. 60-62*	Observat° and evaluat° of pupils – EK, AK Teaching concept° Teaching management - EK	*R of PTs discourse*	Teaching concept° *R of PTs discourse* *Questions CT* Observat° and evaluat° of pupils – AK, PK	PT=US Access to significations Convergent significations
14 (677b-699) *Min. 62-63*	Professional preparation contract	Professional preparation contract – EK *R of PTs skills*	Professional preparation contract	Convergent significations
15 (700-753) *Min. 63-67*	Professional preparation contract Teaching concept° and management	Professional preparation contract	Professional preparation contract -EK Teaching concept and management *R of PTs issues*	US>CT, PT Convergent significations

TABLE 2. Summative interview

Sequences and minutes	PT	CT	US	Shared communicative space (patterns)
1 (1-11a) *Min.0-2*	*Acceptation*	*Acceptation*	Professional preparation contract IK	US>CT and PT Divergent significations Imposed significations
2 (11b-13) *Min. 2-7*	*Presents her issue: differenciation* Teaching conception	*Acceptation*	*Acceptation*	US>PT Convergent significations Access to significations
3 (14-30) *Min. 8-9*	Professional preparation contract	*Acceptation*	Professional preparation contract *R PTs issue* *NR of PTs discourse*	US>PT Divergent significations Imposed significations
4 (30b-45) *Min. 10-12*	Professional preparation contract EK-AK-IK	*Acceptation*	Professional preparation contract *NR of PTs discourse*	US>PT Juxtaposition of significations Access to significations
5 (46-58) *Min. 13-14*	Teaching management EK-IK	*Acceptation*	Interview and professional preparation contract	US>PT Building of shared significations
6 (59-93) *Min. 15-19*	Teaching conception – EK Teaching management – PK, EK	*Acceptation*	Teaching conception – AK, IK *Tries to lead PTs discourse towards teaching conception* *R of PTs discourse*	US=PT Building of shared significations
7 (94-143) *Min. 20-24*	Teaching conception – AK Teaching management – PK, EK	Teaching conception – EK Observation and evaluation of pupil Professional preparation contract R CTs actions in the classroom	Teaching conception – AK Professional preparation contract *Prompts PT to interpret the situation* Teaching management *R PTs discourse*	PT=CT=US Building of shared significations
8 (144-185a) *Min. 25-28*	Teaching conception – EK, AK Teaching management	*Acceptation*	Teaching conception- AK *NR of PTs discourse*	PT<SU Juxtaposition of significations
9 (185b-225) *Min. 29-31*	Observation and evaluation of pupil – S (?), EK Teaching management – EK Teaching conception	*Acceptation*	Observation and evaluation of pupils *R of PTs discourse* Professional preparation contract *NR of PTs discourse (questions PTs assertions)* Teaching management - IK	S=US Access to significations
10 (226-248) *Min. 32-34*	Observation and evaluation of pupils	*Acceptation*	Observation and evaluation of pupils *NR of PTs discourse* Professional preparation contract	PT<US Juxtaposition of significations Access to significations
11 (249-262a) *Min. 34-36*	Observation and evaluation of pupils	Acc.	Observation and evaluation of pupils *NR of PTs discourse*	PT<US Juxtaposition of significations Access to significations
12 (262b-340a) *Min, 37-43*	Professional preparation contract Teaching management Teaching conception Observation and evaluation of pupils	Teaching management and conception- EK Professional preparation contract R of PTs actions and choices (regarding her issues)	Observation and evaluation of pupils - PK *R of PTs discourse* *NR of PTs actions* Teaching conception *Questions CT on teaching conception* Professional preparation contract *R CTs discourse* Teaching management	PT=US=CT Building of shared significations Access to significations
13 (340b-357a) *Min. 44-45*	Teaching management and conception	*Acceptation*	*R of PTs discourse* *Invites CT to evaluate the complete professional preparation period*	PT=US=CT
14 (357b-409) *Min. 46-50*	Professional preparation contract – IK Teaching conception – PK, S (?), EK	Professional preparation and interview contract *Evaluates in a summative way the whole professional preparation period: R of PTs actions + R PTs issues* Teaching conception - EK	Teaching conception – *R of PTs discourse*	PT=US=CT Building of shared significations
15 (410-444) *Min. 51-53*	Teaching management – S (?) *Acceptation*	Professional preparation contract	Teaching conception – PK, AK *Questions CT in order to continue the evaluation of the whole professional preparation period*	PT>US and CT Building of shared significations
16 (445-513) *Min. 54-58*	Observation and evaluation of pupils	*Acceptation*	Observation and evaluation of pupils *R of PTs actions (430, 432)*	Shared significations

KRISTIN BALSLEV (Ph.D. Sciences de l'éducation, Université de Genève, 2006). Maître-assistante. Membre du groupe de recherche TALES. Specialisations: la construction du savoir chez les enseignants à partir de l'intéraction stagiaire-formateur (notamment au regard de l'analyse micro-génétique de l'intéraction).

SABINE VANHULLE est professeure titulaire (Université de Genève, faculté de pyschologie et des sciences de l'éducation) dans le domaine des relations entre théorie et pratique en formation des enseignants. Ses travaux portent sur la question des savoirs professionnels : outils de construction du savoir, analyse du discours (écrits réflexifs, portfolios, interactions orales entre stagiaires et formateurs). Directrice du groupe de recherche TALES (Theories, actions, languages, knowledge) et membre du IRPE-ROIP (Réseau-observatoire international de la recherche sur la professionnalisation).

EDYTA TOMINSKA est assistante de recherche dans le groupe TALES. À partir de sa thèse (septembre 2011) sur l'alphabétisme des enfants sourds, Edyta Tominska developpe des projets de recherche portant sur la formation d'enseignants spécialisés. Elle est également membre du groupe TALES et participe aux projets de recherche en lien avec le savoir professionnel et sa construction à travers l'écriture réflexive et l'interaction sociale avec le formateur.

KRISTINE BALSLEV (Ph.D. Education Science, Université de Genève, 2006), is an assistant professor (maitre-assistante) at the University of Geneva. Member of the TALK/TALES research group, she specializes in: the building of teachers' professional knowledge through interaction between trainees and trainers (especially with a focus on the micro-genetic analysis of interaction).

SABINE VANHULLE is a full professor at the University of Geneva (Faculté de psychologie et de sciences de l'éducation) in the area "Relations between Theory and Practice in Teacher Education." Ms. Vanhulle carries out research projects on professional knowledge, particularly tools of knowledge construction and analysis of discourse (reflective texts, portfolios, oral interactions between trainees and trainers). She is director of the TALK research group (Theories, actions, languages, and knowledge) and a member of the IRPE-ROIP (Réseau-observatoire international de la recherche sur la professionnalisation).

EDYTA TOMINSKA is a research assistant in the TALK/TALES research group. On the basis of her thesis (September, 2011) on the literacy of deaf children (microgenetic analysis), Ms. Tominska is developing research projects for the training of specialized teachers. She also participates in TALK/TALES research projects relating to professional knowledge and its construction through reflective writing and social interaction with trainers.

BRAIDED STORIES AND BRICOLAGED SYMBOLS: CRITICAL REFLECTION AND TRANSFORMATIVE LEARNING THEORY FOR TEACHERS[1]

SUSAN M. BRIGHAM *Mount Saint Vincent University*

ABSTRACT: In this paper I make the case that transformative learning theory, a specific adult learning theory, and an arts-informed research method have important value for teacher professional practice and teacher education. I refer to two phases of a study involving women who have immigrated to Maritime Canada and were teachers in their countries of origin. I illustrate a process through which participants can weave multiple perspectives, unpack constructed realities, and become more reflective about their teacher identity and teaching practice.

HISTOIRES MÉTISSÉES ET SYMBOLES FABRIQUÉS: RÉFLEXION CRITIQUE ET THÉORIE DE L'APPRENTISSAGE PAR TRANSFORMATION POUR LES ENSEIGNANTS

RÉSUMÉ. Par le biais de cet article, je démontre que la théorie de l'apprentissage par transformation, une théorie de l'apprentissage associée aux clientèles adultes et une méthodologie de recherche axée sur les arts, se révèle d'une valeur cruciale pour la pratique professionnelle des enseignants ainsi que la formation des maîtres. Pour ce faire, je fais référence aux deux phases d'une étude impliquant des femmes enseignantes dans leur pays d'origine et ayant immigré dans la région canadienne des Maritimes. J'illustre le processus au cours duquel les participantes peuvent développer de multiples perspectives, déconstruire leur perception de la réalité et devenir davantage réfléchies quant à leur identité et leur pratique enseignantes.

INTRODUCTION

Adult education, far more than any other field of education, has, from its inception, perceived its mission as that of creating conditions in which adults dialogue across difference *sine qua non*. It has defined itself as a form of education designed to overcome just the kinds of intrusions in learning of power influence and inequality which has led some postmodernists or antimodernists to condemn reflective dialogue and education as illusionary goals (Mezirow, 1995, p. 60).

Adult educators have traditionally centred on the disenfranchised and the socially, economically and culturally disadvantaged and have reached out to men and women through such universally recognized programs as the Highlander Folk Schools, Mechanic Institutes, Workers' Theatre, Women's Institutes, the Frontier College, and the Antigonish Movement; the latter two programs arose in Nova Scotia. These programs have involved their learners in community work to address a range of social needs (i.e., lack of access to resources, services, a united voice) and to alleviate immediate difficulties faced by community members while at the same time developing critical thinking and reflection, fostering conditions for dialogue, critiquing larger social, economic and political structures, and challenging power hierarchies through informed social action. While each of these adult programs was/is influenced by various philosophies and learning theories, the notion of change (e.g., personal, professional and/or social) as well as "the power and potential of risk and challenge in learning" (Clover, 2006, p. 56) are strong common undercurrents. Many teachers and teacher educators understand the value of reflection, contemplative practices, critical inquiry, and engaged dialogue to heightened states of consciousness or awareness for creating new ways of thinking, expanding knowledge systems to promote a shift in worldviews, and taking action to build and sustain a socially just society. Brown, Morehead and Smith (2008, p. 180) pointed out that:

> reflections and critical discussions that scaffold new understandings about the knowledge teachers must possess in today's classroom will ultimately help future teachers develop the foundation for a personally meaningful professional identity that will continue to grow throughout a teacher's career.

Yet while teachers are called upon and assumed to be reflective, I believe their reflective practices are more often done outwardly rather than inwardly, despite the strong emphasis in teacher education programs on what I have heard referred to by preservice teachers as the dreaded "R word" (reflection), as in "Not another R [reflective] assignment!" Van Woerkom (2010, p. 351) suggested that:

> critical reflection is a mysterious concept to students not because they have never thought critically reflectively during their academic careers before (Spalding & Wilson, 2002) but because they do not recognize the abstract and neat theories on critical reflection in their own everyday ways of learning and thinking.

Van Woerkom added, "critical reflection is not the solution to all problems and we need to develop theories about creating balances between critical reflection and other ways of learning" (p. 351). In this paper I highlight the value of theoretical, methodological and conceptual frames used in research in adult education that can respond to questions about teachers' professional learning processes, questions related to critical reflection and also transformative learning and teacher identity. I make the case that transformative learning theory (TL), a specific adult learning theory which has gained greater purchase in recent

years (cf. Mezirow, 2000), and an arts-informed research method have important value for teacher professional practice and teacher education. To make this case, I refer to two phases of a study involving women who have immigrated to Maritime Canada and were teachers in their home countries. Arts-informed methods have been used in both adult education research (see for example, Brigham, in press; Brigham & Walsh, 2011; Butterwick & Selman, 2002; Clover, 2000; Clover, Stalker & McGauley, 2004; Grace & Wells, 2005;) and teacher education (see for example, Diamond & Mullen, 1999; Fels, 1999; Leitch, 2006; Telles, 2006; Walsh, 2003; Walsh & Brigham, 2007). I propose that both the theory (TL) and the research method (arts-informed) combined and integrated in teacher education programs can enrich veteran and preservice teachers' reflective practices and support a shift in the rational/cognitive and the extrarational/affective domains of their meaning schemes specifically with regard to teacher identity. In the following sections I discuss the theory and then provide an overview of the research process.

TRANSFORMATIVE LEARNING

The main purposes of the many theories of adult learning that have developed over time are "to provide us with a vocabulary and a conceptual framework for interpreting the examples of learning that we observe ... [and to help us] look for solutions to practical problems. The theories do not give us solutions but they do direct our attention to those variables that are crucial in finding solutions" (Hill, 2002, p. 190). Adult learning theories that are located within a humanist orientation are, according to Elias and Merriam (2005), most prevalent in North America because of their "compatibility with a democratic political system and ... adult education's voluntary nature" (cited in Merriam, Caffarella & Baumgartner, 2007, p. 284). A humanist orientation holds that humans are inherently good and will strive for highest good, have unlimited potential for growth and development, are free to act and are able to determine their own futures (Maslow, 1970; Rogers, 1983). A humanist learning process centres on learners' needs, experiences, knowledge, values and emotions. A particular learning theory that has its roots in humanism is transformative learning (TL), a theory attributed to Jack Mezirow who published his seminal work in 1978. Since then TL theory has been debated, further developed, and refined by adult practitioners and researchers who have evaluated TL processes, methods and effects in numerous social, political, and cultural contexts.

Transformative learning is learning which troubles one's taken-for-granted assumptions, meaning perspectives ("set of schemas, worldview or personal paradigm," Mezirow, 1995, p. 42) and meaning schemes ("specific set of beliefs, knowledge, judgment, attitude, and feeling which shape a particular interpretation," p. 43). It moves one to test new integrated-meaning perspectives, and take actions to challenge and transform both oneself and the societal status quo. Lange (2004) clarified TL is not just an epistemological process; "it is also

an ontological process where participants experience a change in their being in the world including their forms of relatedness" (p. 137).

Such a transformation can occur through various learning processes, which Mezirow (1995) suggested involves a triggering event that is either personal and life altering, such as a marriage or divorce, a birth or death of a loved one, being diagnosed with a terminal illness or surviving a near death experience, or is social and life-altering such as a war or a natural disaster. Mezirow acknowledged that a series of events over time can have the same transformative potential as a singular disorienting dilemma. TL requires critical reflection and reflective discourse with others in a safe setting with a dialogic or transformative educator who uses conscious raising strategies such as critical questioning, journaling and role-plays (Cranton, 2002).

Some researchers have critiqued Mezirow as being too concerned with rationality in the process of transformation and insufficiently attentive to the affective dimension of learning (feelings and emotions) (Dirkx, 2001; Scott, 2006; Taylor, 2000). Scott (2006) for example suggested TL requires that we be engaged in imaginal dialogical relationships with our unconscious psychic energy through, for instance, meditation, poetry, art, and paying special attention to our dreams. In this paper I stress the importance of both the rational and extrarational as well as cognitive and affective dimensions in TL. I will discuss this further below.

RESEARCH METHOD

The research method for this study is arts-informed. As a method it is "designed to enhance meaning, to broaden and deepen on-going conversations about educational policy and practice" (Barone & Eisner, 1997, p. 102). The research process follows a previous study involving teachers (Walsh, 2003). The participants in the study are 24 women who immigrated to the Maritimes as international students, temporary workers, or permanent residents; a few are now Canadian citizens. All were teachers in their home countries, which are: Australia, Bangladesh, China, El Salvador, Egypt, France, Hong Kong, India, Iran, Jordan, South Korea, Kuwait, Mexico, Nigeria, Poland, Singapore, and Sri Lanka. Some of the women are now teaching or are in the process of getting certified to teach in Canada. With regard to their family status, some are in long-term relationships, some are single, and some have children. Their age range is between late twenties and mid sixties.

The study involved two phases that took place in the Maritime provinces over the span of 5 years (between 2005 and 2010).[2] Phase one involved 11 women and phase two, 13 women. Each woman was a part of a small group (consisting of 5 to 7 women) which met on a regular basis over many months. At each meeting the women participated in several processes, which included dialogue around issues of teaching, learning and migrating to Canada; flow writing; story-

telling; and art making with materials such as water colours, coloured pencils, pastels, fabric, and clay. Most of the meetings proceeded in the following way: we reviewed the main points from previous meetings and often times picked up some of these strands for further discussion. This was followed by about 10 minutes of flow writing; each woman chose what to write about related to teaching, learning and migration (i.e., an idea we just discussed, a recent incident, or a personal experience) in a language she preferred. The women were instructed to write in silence, to keep their pens moving at all times and not be concerned with spelling, grammar, or neatness. Subsequent to this, one woman shared what she had written either by reading it aloud or speaking about it. After a few brief questions for the story-teller, the women, including the story-teller, selected art materials with which they responded to the story that was just shared. Art making took approximately 30 minutes, after which each woman, including the story-teller, showed what they had made in response to the story, saying a little about the meaning or process. The storyteller often responded to each of the group member's art pieces, perhaps with questions, clarification of her story, or comments. Group dialogue ensued in which, at times, voices were raised in frustration, anger or relief; laughter rang out; tears were shed; and more questions were posed. In their art and talk the women drew on symbols, metaphors, images, and occasionally parables, proverbs, and idioms. Through art, the women were released from the restrictions of language which does not necessarily incorporate embodied knowledge (what is known in and by a person) and which can conceal non-verbal meanings including that of the unconscious (Leitch, 2006).

The research processes (i.e., the combination of writing, art and dialogue), engaged the research participants in the imaginative, experiential, cognitive and affective dimensions of learning. Through the processes the women explored multiple modes of knowledge construction and dimensions of identity. By meeting regularly in small groups over a sustained period of time the participants came to know one another very well and felt safe within the community we developed, such that in the research sessions, they shared their inner most thoughts and memories and challenged one another with opposing views. Before the research began and on a few other occasions during the study the research participants were reminded of the importance of respecting one another's privacy and confidentiality by not identifying other participants outside of the group and not discussing what transpired in the sessions outside of the group.

From a large amount of data generated in the study, which cannot be condensed for this journal article, I focus mainly on data from one research session involving five group members. Resisting the temptation to reduce the data to isolated short snippets I attempt to keep the actual flow of data intact and the narratives as whole as possible. I describe the relevant art work.

BRAIDING TEACHER NARRATIVES

In this section I begin with one woman's narrative, Catherine's (all participants' names are referred to with pseudonyms), and a few of the participants' responses, particularly Katka's response, to illustrate how the artistic processes and the ensuing dialogue lend themselves to creative tensions. These tensions provide additional narrative resources from which a sort of critical reflective "narrative braid" (Collins, 2003) and a bricolage of symbols emerged under the theme "a 'good' teacher."

A "good" teacher.

Catherine's story. After a period of flow writing, Catherine shared the following,

> I think it is a big challenge for me to stay here to be a teacher.... I've got my education in China....that is sixteen years of education.... So you can imagine, like, how I have been shaped and cut in a certain way....to fit a certain society. And it is like a small part of big machine. It is useful there in a particular machine but it may not work in other machine. And, uh, China and Canada, uh, in my eyes are two different machines....here it seems that students do not like teachers who give them much homework. Teachers without humor seem not able to survive. Like, uh, one of my teachers I see here, in one of my classes, I think in China she would be a perfect teacher; she's so diligent and she care about her students,....but she is not....humorous. And, uh, she is not always, like, praise the students. And the two of the native students say they do not like her because when they give answers the teacher is kind of, "Oh." But, you know, they do not give the perfect answer, so the teacher turn to others, like, "Oh, what do you think?" But that is totally unacceptable to them....[hits desk] "You should value what I say and then you can turn to another."
>
> Susan Brigham (SB): Okay. I see.
>
> But that in China is very reasonable. Like no one can give a perfect answer. I think teaching is a more difficult job here than in China. And maybe, maybe different...that is, difficult in another sense.... But, uh, maybe some people would think, like, uh....teach[ing] here [is] easier.... Like one....teacher, I do not like her because....I don't think she has enough knowledge. When we talk about theories or something she doesn't really understand. But....she respects the students, and she, like....admitted to us, "I don't know totally those theories, but....by, uh, discussion you can....we can understand the theories." But for me, that's not good teacher. The good teacher should know more than the student. And the teacher should do their job, not to get the students to lead a discussion or something.... And she's always, you know, like you say something; she's always like, "hmm, yeah." ....I do not feel good about that. I just think, "Oh what I've learned from you?" Nothing.... We can have this classroom outside of this building and....without you we can carry on our learning. Why would....we need you here? We need your expertise. That is what I paid money for, right? .... The other teacher, who really knows....and she's.... so experienced in the field, she knows a lot....and

> she cares about students, and if....people who cannot talk well, like,....they can, uh, write a journal; "Then I can still know what is going on in your mind." You know, she cares about different learning styles.... So, in my eyes, she is a very good teacher but she is seen by the students as weird. She's naïve and weird. So, it really makes me confused. So different. How can I be a teacher? ....In my eyes one is better; the other is not better. But in their eyes it's different, you know? They....value the other things more.
>
> Katka: I agree with you, 'cause it was the same in Poland. You go to the class; you don't open your mouth...at the University level. You just sit there and just hope that [the Professor] doesn't catch you. 'Cause they just talking, and they have the biggest knowledge, and they ....I mean, ...all the way to elementary high school, um, like we talk about the parents' participation. Parents won't go and participate in the school because the teacher is like a god. She knows everything, and I don't know any, so I'm not going to help and participate.... That's their kingdom, and I'm not going to invade it.

After this brief dialogue the participants made artistic responses to Catherine's story. Using bristle blocks, 3 plastic figurines and 5 wheels that can rotate, Katka constructed a "machine," picking up on the analogy that Catherine had used at the beginning of her story. The machine has a base upon which are 3 walls. The 3-sided structure has just enough interior room for the figure that stands in this space. The back wall, which is taller than the 2 side walls, extends above and beyond the ceiling. The ceiling has 2 wheels attached with one of the wheels up on a block. On the exterior of one of the side walls, near the top is a block that juts out upon which a person stands. Below the person, at the base of the machine, is another wheel. Outside the other side wall is a wheel that faces outward. Katka explains:

> So anyway, here's my contraption....it's a great comparison to a machine, and completely different how you are trying to get into the machine, and sometimes you can get hurt if the machine is going too fast....So some people were able to jump right in, and they're okay [indicating a plastic figure of a woman inside the machine]. Some people are still at the side of the machine spinning around [indicating a figure of a man who is attached half way up the outside of the machine]; they don't really know where they're going. Some people ....just gave up and they can't get in, so they'll be always on the side [indicating a figure of a boy who is not attached to the machine but is on a block close by]....but for some people this machine has like a big wall and they're trying to climb over it....'cause the ideal place would be here that you do belong, 'cause you're supposed to both turn. If I had a few hands this would be all turning, turning, [demonstrating how each of the 5 wheels rotate] because it's....not that easy to get into the machine.... 'cause you're not stopping that machine once you come, you're jumping right in it....while it's moving....If you're not jumping in the right spot, you can get hurt.

Two others in the group share their artwork which also depicts different types of machines. One artistic response is a water coloured painting of cogs that are parts of two larger machines. On each cog is a picture of a teacher conducting her classroom in different ways. For example, upon one cog is a drawing of

a teacher standing and directing learning as the students sit quietly at desks. This cog is well oiled and turning smoothly while the same teaching style depicted on another cog in a different machine is rusty, squeaky and barely moving. The artist explains:

> You'll notice that....the cog within the machine that's moving smoothly ....is a teacher who's very open and accepting, and all the students are around her, and they are all engaged in a dialogue process and theory building. That one seems to be quite effective in this particular machine, whereas the teacher who is spouting knowledge all the time and not involving the students in some way, um, there's a problem because students are resisting, you know, maybe they don't like the fact that the teacher thinks she knows everything. And so, she doesn't go over quite so well. So her machine needs to be more oiled in order for it to function properly in there.

Another response shows two distinctly different machines, one from duplo® blocks and another from clay, a feather, a piece of pipe cleaner and one piece of duplo®. The art maker explains:

> Somebody who comes from this machine over to here....doesn't know how to fit into that. So then what? Do they change their shape? And become, you know, something else? Or do they stay like this and then change the shape of the machine?
>
> Catherine: Or does the machine have to change a bit to accommodate?
>
> ....It's hard to tell which will help them.

Catherine then explains her art piece which she made using a lego® house with open windows. Hesitantly she explains:

> I think it goes with a house....and people. There are people in a house and maybe that [house] is in Earth, I don't know, and they want to find the truth but from different windows. [And they are looking] and they see differently. I don't know. I just see [from one window]. No one knows maybe.... You want to have a better life on the Earth, but....we do things differently; so many things.

In her story and art work Catherine considers epistemological questions of knowledge and truth as well as identity. She begins her story by explaining that over time and through experience within a specific context or "machine" she has "been shaped and cut in a certain way....to fit a certain society" and now in a new context (Maritime Canada) she has to refit herself which requires a re-thinking of the values and assumptions around, for example, what constitutes "a 'good' teacher." Catherine defines a teacher as one who should "know more than the student" and a student as one who is not being capable of providing a perfect answer. Katka picks up the idea of the knowledgeable teacher and warns that the teacher or professor who assumes to know everything silences both students and parents and creates a deep moat between families and the teacher's "kingdom." When Catherine shows her art work she struggles

to explain that "through different windows" people can see different truths, perhaps acknowledging that the assessment of the quality of teachers can vary depending on the context as well as individual perspectives.

Catherine's analogy of transforming as a painful process is reiterated by Katka who suggests there are different ways to approach a new context; you have to know where you are going, be prepared to maneuver around obstacles (i.e., climb over walls), and jump into the ideal place where "you do belong" or you will get hurt. Katka's representation of a society that is in motion, has its own momentum, and is in a state of flux does not stop to let the newcomer enter in at his/her usual pace; the newcomer must make his/her way in the best way s/he can, or risk remaining on the margins and/or getting injured.

Through a process of plaiting, unplaiting and replaiting stories, the group members developed a braided dialogue where some strands were taken up and woven in, some tightly and some loosely, and some strands were left out, which were taken up at another time. The braid above is composed of complex overlapping questions related to teaching, learning, identity, culture, and power within micro, meso and macro contexts. For example, as others in the group picked up Catherine's strand of thought related to identity and change, they queried the role of the individual and society; who/what changes – the society, the individual or both? How does society change the individual and how does the individual change society? How does a teacher position her identity and what instigates re/positioning? Which begs the question, what is the role of teachers in facilitating and/or stymieing individual and societal change?

In sessions involving other participants, the same theme "a 'good' teacher" arose. For example, a group explored different perspectives about the power invested in teachers, which stemmed from Rita's quest to become a good teacher despite a lack of role models in her own schooling. She explains:

> I was one of the good teachers in my country. But now I think....I was not good teacher and the way I taught was not good. Oh! What did I teach there? Nothing....Repeating and repeating is not good teaching. ...I said [to my students],...."What I give you now, you follow. You have to write 10 times, you have to read 10 hours, it does not matter you sleep or not. Just read and remember it". Now I think what I did with them. I took them like machines. I feel very sad. Many times I wake up with bad dreams.

After a period of art making and dialogue others in the group return to Rita's theme, such as Sara who states, "Guru means teacher. Guru is before God. Gurus are more important because they are showing the way to God." Sandi agrees with this assessment, adding: "Teaching is....very powerful. Students can know what is good or bad and can choose because of the teacher," while Ocean cautions, "In our country....teacher said it is right but even she is not right, we have to respect the teacher." Rita rejoins that the power imbalances between the teacher and the student are "not good for the learning process."

The braided stories and bricolaged symbols contain opposing themes, such as the qualities of "good" and "bad" teachers, powerfulness and powerlessness, as well as differing characteristics of Canadian-born teachers and teachers from other countries. Yet, through the group processes, the contrasts become less distinct. For example, while the research participants praise the provincial education systems in Canada and the quality of teachers educated in Canada, they are also critical of the discrimination they have experienced in schools and in teacher education programs, as well as the discrimination their children consistently encounter in their schools, highlighting the pervasive silence around discrimination, which they assert must be addressed in provincial education systems and teacher education programs.

DISCUSSION

The braided stories that emerged remind us that: (1) we must pay attention to the little stories for they are worked through with culture and they tell us who and what we are (Abu-Lughod, 1993); (2) storying can help us to see ourselves reflexively and expose distortions in our interpretations of our experiences; and (3) there is not one grand narrative of "female internationally educated teachers," but strands of individual stories, each situated in particular contexts, which contribute to the larger social analysis of female internationally educated teachers and more generally, what it is to be a teacher. The bricolaged symbols remind us that symbols can (1) evoke a relationship with our emotions and our unconsciousness (Scott, 2006), (2) engage us in interpersonal dialogical relationships, and (3) help to bring our habits of mind and meaning schemes into consciousness.

The dynamic interplay of flow writing, art making, storying and dialogue in a safe setting, helped to unblock blind spots necessary for creative thinking, critical reflection, and revisioning micro and macro power structures. Catherine underscores the value of comparing interpretations of common experiences as a way of recognizing taken-for-granted frames of reference (Mezirow, 2003):

> Especially after the presentations; they had me really thinking....I mean....I haven't been thinking clearly, but just disease is really doing in my mind. I'm very encouraged to listen to your stories.

For many of the participants, the arts-informed group processes also provoked collective social action.

Collective social tranformation

Drawing on Freire and Gramsci, Weiler (1988) reminded us that interrogation which leads to critical reflection and consciousness are not enough because "real power must be changed" (p. 71). Weiler went on to assert, "social transformation must go hand in hand with a critical understanding of people's relations of power and to production" (p. 71). Indeed several

research participants' transformative learning involved social action. One participant, for instance declared, "we need to put this group into action... like invite educational authorities and share our stories and let them know what's going on!" She and some of the other research participants did find ways of sharing their stories as a way of educating communities about issues related to teaching and learning in diverse contexts, which has the potential for social transformation. With the author and her colleague, the women assisted in the development and public performances of readers' theatre scripts, conference papers and poster presentations using the research data. They also produced a play through a method called Theatre Collective Creation based on a synthesis of their experiences.[3] Some participants have also been involved in facilitating workshops for new students in the teacher education program at Mount Saint Vincent University.

Some of the art work was incorporated into these presentations which contributed to the dissemination of knowledge generated in the study, yet from the outset the final art pieces produced were not, in and of themselves, the main purpose, rather it was the artistic processes (i.e., of working with art materials which involved contemplation, re/symbolization, experiential learning, etc.) that were more critical than the end product. For this reason the research participants were at the beginning reassured that they did not require any formal training in the arts in order to participate in the study and that the art produced would not necessarily be the main focus.

CONCLUSION

In an increasingly globalized world, it is critical that teacher education candidates be actively involved and challenged to think about historical and socio/geopolitical global issues, and be open to and receptive of other perspectives, stories, and questions, and to query their own values and norms (Mwebi & Brigham, 2009). The history of adult education, particularly the humanist oriented programs which centre lifelong learning on learners' experiences, embrace pedagogical methods such as dialogue and critical reflection, and nurture collective social action for a more socially just society offer valuable insights for teacher education. Additionally adult learning theory, specifically transformative learning, yields a valuable theoretical framework for teachers and teacher educators.

In this paper I have demonstrated how critical reflection is operationalized (Van Woerkom, 2010) through an arts-informed process. I have highlighted how both the rational/cognitive and the extrarational/affective dimensions are of equal importance in transformative learning. The example of the narrative braid and the bricolage of symbols derived from the research data illustrate a process through which participants can weave multiple perspectives, unpack constructed realities, become more reflective about their teacher identity and

teaching practice, and develop new ideas and possibilities. I recommend teacher educators become familiar with the rich history of adult education and transformative learning theory as inspiration for engaging preservice teachers in critical reflection and transformation. In particular, I urge teachers and teacher educators to embrace the risk and challenge an arts-informed approach, such as is set out in this paper, can offer.

NOTES

1. This paper is based, in part, on a conference paper called "Transformative learning in teacher education programs: The experiences of immigrant female teachers in multicultural Canada," which I presented at the *Transformative Learning Conference* in Bermuda, November 18-20, 2009.

2. My colleague, Susan Walsh, and I worked together on this 5 year study.

3. Aren Morris, student in the Master of Arts in Education program at Mount Saint Vincent University and school drama teacher, facilitated this process.

ACKNOWLEDGEMENTS

I acknowledge with appreciation the women who participated in this study. I also acknowledge the funding for this research: the Social Sciences and Humanities Research Council (SSHRC) and the Gender, Migration, Diversity/Immigrant Women Research Domain/ Atlantic Metropolis Centre of Excellence/SSHRC.

REFERENCES

Abu-Lughod, L. (1993). *Writing women's worlds: Bedouin stories.* Berkeley: University of California Press.

Barone, T., & Eisner, E. W. (1997). Arts-based educational research. In M. Jaeger (Ed.), *Complementary methods for research in education* (2nd ed., pp. 73-116). Washington, DC: American Educational Research Association.

Brigham, S. (in press). Internationally educated female teachers' transformative lifelong learning experiences: Rethinking the immigrant experience through an arts-informed group process. *Journal of Adult and Continuing Education, 17* (2).

Brigham, S. & Walsh, S. (2011). Having voice, being heard, and being silent: Internationally educated teachers' representations of "immigrant women" in an arts-informed research study in Nova Scotia (pp. 209-234). In E. Tastsoglou & P. S. Jaya (Eds.) *Immigrant Women in Atlantic Canada: Challenges, negotiations and re-constructions.* Canadian Scholars/ Women's Press.

Brown, N., Morehead, P. & Smith, J. (2008). But I love children: Changing elementary teacher candidates' conceptions of the qualities of effective teachers. *Teacher Education Quarterly,* Winter, 169-183.

Butterwick, S., *&* Selman, J. (2002). Deep listening in a feminist popular theatre project: Unsettling the position of audience in participatory education. *Adult Education Quarterly, 54*(1), 7-22.

Clover, D. E. (2000). Community arts as environmental adult education and activism. *Convergence, 33*(3), 19-31.

Clover, D. E. (2006). Cultural and anti-racism adult education: An exploration of the contributions of arts-based learning. *Adult Education Quarterly, 51*(1), 46-61.

Clover, D. E., Stalker, J., & McGauley, L. (2004). Feminist popular education and community arts/ crafts: The case of new directions. In D. E. Clover (Ed), *Adult education for democracy, social justice and a culture of peace: Proceedings of the Joint Adult Education Research Conference and the conference of the Canadian Association for the Study of Adult Education* (pp. 131-135). Victoria, Canada: University of Victoria.

Collins, P. (2003). Storying self and others: The construction of narrative identity. *Journal of Language and Politics, 2*(2), 243-264.

Cranton, P. (2002). Teaching for transformation. In J. Ross-Gordon (Ed.), Contemporary viewpoints on teaching adults effectively. *New Directions for adult and continuing education,* (93), (pp. 63-71). San Francisco: Jossey-Bass.

Diamond, C. & Mullen, C. (1999). *The postmodern educator: Arts-based inquiries and teacher development*. New York: Peter Lang.

Dirkx, J. (2001). The power of feelings: Emotion, imagination, and the construction of meaning in adult learning. In S.B. Merriam (Ed.), *The new update on adult learning theory. New Directions for adult and continuing education,* (89), (pp. 63-72). San Francisco: Jossey-Bass.

Fels, L. (1999). *In the wind clothes dance on a line: Performative inquiry as a research methodology*. Unpublished doctoral thesis, University of British Columbia, Vancouver, British Columbia, Canada.

Grace, A., & Wells, K. (2005). Out is in: Arts-informed community-based approach to social and cultural learning by and for queer young adults. In S. Mojab (Ed.), *Conference proceedings of the Canadian Association for the Study of Adult Education* (pp.112-118). London: University of Western Ontario.

Hill, W. (2002). *Learning: A survey of psychological interpretations* (7th ed). Needham Heights, MA: Allyn & Bacon.

Lange, E. (2004). Transformative and restorative learning: A vital dialectic for sustainable societies. *Adult Education Quarterly, 54* (2), 121-139.

Leitch, R. (2006). Limitations of language: Developing arts-based creative narrative in stories of teacher identities. *Teachers and Teaching: Theory and practice, 12*(5), 549-569.

Maslow, A. (1970). *Motivations and personality* (2nd ed). New York: HarperCollins.

Merriam, S., Caffarella, R. & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide.* (3rd ed.). San Francisco: John Wiley & Son.

Mezirow, J. (1978). Perspective transformation. *Adult Education, 28* (2), 100 – 109.

Mezirow, J. (1995). Transformation theory of adult learning. In M.R. Welton (Ed.), *In defense of the lifeworld* (pp. 39-70). New York: State University of New York Press.

Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow (Ed.) and Associates, *Learning as transformation: Critical perspectives on a theory in progress* (pp. 3-33). San Francisco: Jossey-Bass.

Mezirow, J. (2003). Transformative learning as discourse. *Journal of Transformative Education. 1*, 16-37.

Mwebi, B. & Brigham, S. (2009). Preparing North American pre-service teachers for global perspectives: An international teaching practicum experience in Africa. *Alberta Journal of Education 55* (3), 415-428.

Rogers, C. (1983). *Freedom to learn from the 80s*. Columbus, OH: Merrill.

Scott, S. (2006). A way of seeing: Transformation for a new century. In T. Fenwick, T. Nesbit, & B. Spencer (Eds.). *Contexts of Adult Education: Canadian Perspectives* (pp. 153-163). Toronto: Thompson.

Taylor, E. (2000). Analyzing research on transformative learning theory. In J. Mezirow (Ed.) and Associates, *Learning as transformation: Critical perspectives on a theory in progress* (pp. 285-328). San Francisco: Jossey-Bass.

Telles, J. (2006). Arts-based educational research: thinking teacher education as an aesthetic experience. *Educação e Pesquisa, São Paulo, 32*(3), 509-530.

Van Woerkom, M. (2010). Critical reflection as a rationalistic idea. *Adult Education Quarterly,* 60(4), 339-356.

Walsh, S. (2003). Experiences of fear and pain in teaching: A collaborative arts-based inquiry. In A. Clarke & G. Erickson (Eds.), *Teacher inquiry: Living the research in everyday practice* (pp. 164-178). London: RoutledgeFalmer.

Walsh, S. & Brigham, S., with members of the Women, Diversity, and Teaching Group (2007). Internationally educated female teachers who have immigrated to Nova Scotia: A research/performance text. *International Journal of Qualitative Methods, 6* (3), 1-28.

Weiler, K. (1988). *Women teaching for change: Gender, class and power.* New York: Bergin & Garvey.

SUSAN M. BRIGHAM is an associate professor in the Faculty of Education at Mount Saint Vincent University. Before becoming a professor of adult education, Susan began her career as a schoolteacher in Ireland, Kuwait, and then Canada. Her research interests include adult education/lifelong learning, international migration of women, diversity issues and teacher education.

SUSAN M. BRIGHAM est professeur associée à la Faculté des sciences de l'éducation de l'Université Mount Saint Vincent. Susan a débuté sa carrière comme enseignante en Irlande, au Koweït puis au Canada, avant de devenir professeur spécialisée dans l'éducation des adultes. Ses intérêts de recherche englobent l'éducation des adultes/la formation continue, les flots migratoires internationaux des femmes, les questions liées à la diversité et l'éducation des maîtres.

PROFESSIONAL CONSTRUCTS OF FUTURE TEACHERS IN SPECIAL EDUCATION WITHIN THE CONTEXT OF REMEDIAL GUIDANCE FOR ADULTS WITH MINIMAL SCHOOLING

ENRIQUE CORREA MOLINA & CARINE VILLEMAGNE
Université de Sherbrooke

ABSTRACT. The role of teachers today in special education requires extensive background knowledge about various types of learners, their specific needs and the particularities of the stakeholders with whom the teacher is called to collaborate. The knowledge constructed by future teachers is acquired not only in the formal context of initial training, but also in the field, in contexts other than the purely academic milieu. In this frame, the implementation of practical activities involving the application of diverse knowledge has its place in a training curriculum. This is the case of the clinic activity referred to in this article.

QUELS CONSTRUITS PROFESSIONNELS CHEZ DES FUTURS ENSEIGNANTS EN ADAPTATION SCOLAIRE ET SOCIALE, DANS LE CONTEXTE DE L'ACCOMPAGNEMENT ORTHOPÉDAGOGIQUE D'ADULTES FAIBLEMENT SCOLARISÉS ?

RÉSUMÉ. De nos jours, le rôle de l'enseignant en adaptation scolaire et sociale (ASS) en est un qui exige des multiples connaissances. Mentionnons, par exemple : les divers types d'apprenants, leurs besoins spécifiques, les particularités des autres acteurs avec qui il devra collaborer. En plus du contexte formel de formation initiale, les connaissances à construire par les futurs enseignants sont aussi acquises en terrain, dans des contextes autres que le pur milieu académique. Dans ce sens, la mise en œuvre, à l'intérieur du curriculum de formation, d'activités de nature pratique et qui font appel à la mobilisation de différents savoirs, est de mise. C'est le cas de l'activité Clinique dont il est question dans cet article.

INTRODUCTION

Owing to a government requirement, the bachelor's program in special education (or BASS, for *Baccalauréat en adaptation scolaire et sociale*) at the Université de Sherbrooke has had to meet the challenge of offering its student teachers a chance to gain experience working with learners with learning difficulties. More specifically, these learners are adults who are returning to school for basic general education in an adult education centre. It should be noted that educators in the field of adult education must now address a number of challenges to deal with the growing complexity of their intervention context (Saint-Laurent, 2007). Significant challenges confronting these adult educators

include the following: (1) *A mixed adult population presenting a variety of educational needs and undergoing substantial change* – for example, students between 16-24 years of age constitute a rapidly growing group of learners requiring a specific educational response (Bourdon and Roy, 2004) – and (2) *the establishment of new training programs stemming from the education reform in common basic education* – programs that are based on a change in adult education practices, notably including the diversification of adult education approaches and the decompartmentalization of disciplines. These challenges raise a first question concerning teachers' ability to face these changes, especially in terms of their training and past experience. They also raise the question of initial and continuing training in adult education, especially for student teachers in the field of special education. The problem of adult education is therefore treated from the standpoint of the training of future teachers of adult learners, as well as that of adult learners said to have "low schooling" and whose characteristics lead to a reflection on the content and training devices offered to their current and future teachers.

THE REALITIES OF ADULTS WITH LOW SCHOOLING

As Bélanger, Carignan and Staiculescu (2007) point out, adult basic education is a major issue in Quebec society, where it contributes to the development of basic competencies among citizens and hence to the province's economic, cultural, and social vitality. The adult sector of the Quebec school system is divided into two levels: (1) common basic education (level: first cycle of secondary school) offered to adults with 9 years of schooling or less; and (2) diversified basic education (level: second cycle of secondary school). According to the 2001 census (Roy, 2005, p. 5), 26.3% of the adult population in Quebec (between 15 and 64 years of age) did not have a secondary school diploma and 9.5% had less than 9 years of schooling. The basic education needs of adults are therefore substantial, and encouraging adults to go back to school – as promoted by the *Politique d'éducation des adultes et de formation continue* (2002) – necessarily calls for a greater number of teachers in adult education centres associated with the various school boards in Quebec.

The adult learners with whom the future teachers in the Université de Sherbrooke BASS program will most often be expected to work have low schooling and are enrolled in basic education (level: first cycle of secondary school) in an adult education centre. Many of the adults who did not complete their initial secondary school education had a negative and trying experience in school, and dropped out because of persistent problems experienced as students. Some were judged to be "slow," "maladjusted," or "problem children" (Roy, 2005, p. 72) throughout their schooling. Many of these learners experienced a set of difficulties related to social and academic adjustment. These difficulties are a cause for concern insofar as they can present multiple obstacles for adults in terms of their roles and responsibilities, particularly when it comes to certain

facets of adult life (Scanlon & Mellard, 2002): educational opportunities are more limited, work possibilities are scarcer, social isolation is greater, and living independently can be problematic.

As a result, going back to school in the adult education sector can be riddled with pitfalls for adults with low schooling. These adults must overcome many disposition-related, situational, institutional, and sometimes information-related challenges. It should be noted that these adults, some of whom were labelled special needs or "EHDAA" in Quebec (*handicapé ou en difficulté d'adpatation ou d'apprentissage*, that is, handicapped or presenting adjustment or learning difficulties) over the course of their schooling, are no longer labelled in adult education.

However, when adults go back to school, these difficulties can persist and impede progress. These learners exhibit what Chamberland refers to as *the burden of learning*, as they continue to experience a set of difficulties related to social and academic adjustment. In their study on the educational progress of adults enrolled in basic education, Bélanger et al. (2007) observe that two thirds of adults who did not achieve their educational plans exhibited learning difficulties, but did not necessarily recognize that these difficulties were responsible for their "academic interruption." Is this a case of withdrawal, failure, or dropout? According to Bélanger et al. (2007), conceptions such as these are no longer acceptable if we seek to offer adult education with a view to lifelong education. We should note that the adults with whom the future teachers in the BASS program are called to work constitute a highly mixed population in terms of socio-cultural background, life path, previous school-related experiences, native language, sex, religious denomination, age, academic motivation, professional situations, and the like. This leads us to examine the training of teachers who will work with this group of learners.

THE QUESTION OF INITIAL TRAINING

Initial teacher training programs in Quebec are based on a framework of 12 professional competencies (ministère de l'Éducation du Québec [MEQ], 2001) and are geared toward primary and/or secondary education. There is no one specific program for initial training relative to adult education. The current training programs offered to future teachers, such as the bachelor's degrees in secondary school education or special education, devote very limited time to the question of adult education, that is, 2 or 3 credits out of 120.

Certain authors (Bouchard, 2004; Turgeon & Wagner, 1998) point out that such training cannot be sufficient to prepare teachers who wish to work with adults, even though their teaching certificates allow them to do so. According to Turgeon and Wagner (1998), the training currently offered to teachers therefore eliminates the specificities of adult education by relegating it to a mere "adjustment of normal secondary education" (p. 42, our translation).

Today's programs hardly take into account the educational specificities of adults, instead offering programs similar to those for the youth sector (Turgeon & Wagner, 1998; Bouchard, 2004).

How can the ministry requirement of introducing adult education in the BASS program be reconciled with the reality of offering a high-quality initial teacher training program that is already very heavy – now expected to train teachers for the primary, secondary, and adult sectors? This problem inevitably affects the BASS program at the Université de Sherbrooke, which originally prepared teachers for the primary and secondary levels. At the request of the *Comité d'agrément des programmes de formation à l'enseignement* (approval committee for teacher education programs, or CAPFE[1]), BASS coordinators have nevertheless been required to include the adult dimension in the training curriculum since 2005-2006.

To meet this requirement, the teaching team chose to develop the practical training of future teachers in the adult education sector, in complement with their introductory course *l'apprenant adulte* (the adult learner). This two-credit course (30 hours of training) allows student teachers to familiarize themselves with the professional area of adult education by exploring the characteristics of adult learners, examining educational approaches promoted in adult education, and analyzing training programs available to adults with low schooling. Professional practica are therefore offered to student teachers and training activities are developed in the context of a remedial guidance clinic for adults who are returning to school at an adult education centre. This clinic activity is a pedagogical innovation aiming to offer training for adult education that is more optimal within the current limits imposed by the bachelor's program. It is a training device underpinned by a socio-constructivist conception of learning. This is why we here refer to professional constructs, as it is in a real intervention context that the future professional must call on, adapt, and construct knowledge that is likely to provide a response to a given situation. Here, we touch on *savoir* (knowledge), *savoir-faire* (know-how), and *savoir-être* (literally "knowing how to be") applied according to the *savoir-agir* ("knowing how to act") that characterizes a professional's competency.

We present the foundations of this clinic activity, then its description in terms of adapting to the adult education context. These sections will be followed by the methodology used, and finally a discussion of results.

FOUNDATIONS OF THE CLINIC ACTIVITY

This academic offering is designated as a clinic (Université de Sherbrooke's Pierre-H.-Ruel clinic) because it is foremost practical in nature. It is important not to associate the term with a medical connotation. Although in French the term is an Anglicism, it is useful insofar as it highlights the dynamic of col-

laboration among peers who directly or indirectly work with people enrolled in a school establishment and experiencing learning difficulties. The activity is thus similar to a workshop in which student teachers must report to a supervisor about their respective responsibilities and the results of their actions. Supervision is carried out by a professional in the field. The supervision style recommended is the one proposed in the past by Acheson and Gall (1980), that is, clinical supervision. This style can be defined as a process whose main goal is to ensure the professional development of pre-service or in-service teachers. The clinical supervision process entails three steps: planning, observation, and feedback (Acheson & Gall, 1980). These three steps are applied and validated weekly, before and after each intervention, by team members involved in the activity. The clinic contributes to developing the professional competencies of future teachers in special education by calling for collaborative work to carry out real interventions with learners experiencing learning difficulties (at the primary, secondary, and adult levels), and by ensuring on-going follow-through provided by an experienced teacher.

The Pierre-H.-Ruel clinic has been active since 1997, but only since 2004 has it been a mandatory part of the program of studies, starting in the second year of training. This decision was based on the will to offer remedial services for learners who needed them, and on the will to provide an exceptional training space for future teachers of learners who are at risk or experiencing difficulties. Moreover, this will is quite directly connected to the aims of the Quebec school system reform, specifically the aim of proposing a *virage vers le succès* or turn toward success, that is, the success of the largest number of students (MEQ, 1999). Most services offered by the clinic target the largest group of learners in the area of special education, namely individuals with learning difficulties or socio-affective adjustment difficulties (Correa Molina, Sanchez and Fryer, 2008). To promote academic progress, these services must necessarily take into account the needs of the learners they address, so as to favour prevention – reducing early manifestations of difficulty – or intervention – providing support for ingrained difficulties.

As an innovative medium for training, the activities of the Pierre-H.-Ruel clinic contribute to developing future teachers' competencies because they are: (1) geared toward solving problems situated in an authentic learning context; and (2) accompanied by pluridisciplinary supervision *in vivo* (Correa Molina, Sanchez and Fryer, 2008). According to these last authors, this is what leads student teachers to go beyond compartmentalized categories of diagnosis and to arrive at a holistic vision of the learner and of intervention. The clinic activity aims to provide dynamic guidance based on experiences shared by university trainees and trainers, so as to favour a real construction of various types of knowledge. It also enables future teachers to develop a set of didactic and psychoeducational competencies required in the field of special education.

The activities of the Pierre-H.-Ruel clinic are guided by a social constructivist epistemology of learning and human development. The clinic therefore draws from two fundamental currents: the ethological approach (Campan & Scapinni, 2001) and the ecosystemic approach (Bronfenbrenner & Morris, 1998). The ethological approach favours a vision of learning and behaviour as occurring in the same settings where they arise and are expressed, since this is where adaptation processes and the difficulties of at-risk learners are created and developed. The ecosystemic approach postulates that child development results from multiple interactions between the person and the environment, or a series of closely-knit family, school, social, and cultural systems with inter-relations that determine the quality of the individual's adaptation. In this sense, our approach allows us to manage the complexity of educational situations in terms of the many sources of interference related to learning and social adaptation processes. The intent is to emphasize all that allows the struggling learner to truly learn and to develop in healthy ways from a cognitive and socio-affective standpoint. This involves, first, the identifying key factors, in various systems, for adapting academic content to learners' specific needs; and, second, ensuring successful social adaptation. Student teachers at the clinic learn to work with struggling or at-risk learners consistent with the principles underlying these last two approaches.

In the activities of this clinic, we attempt to identify the strengths and potentialities that can be called on. It is important to consider the particular situation of training and intervention as a dynamic process of development for people involved in these approaches. As Vygotsky (1927/1994) suggests, it is important to go beyond the disruptive element and to identify the positive forces supporting the development of learning among children and among those who work with these children.

DESCRIPTION OF THE CLINIC ACTIVITY

General characteristics

The work groups participating in the clinic's activities are made up of second-year student teachers acting as observers, third-year student teachers acting as *intervenants* (henceforth referred to as intervenors), fourth-year student teachers acting as evaluators, and a supervisor who oversees each group. Before and after each intervention, the work group gathers to make the most of the roles and interventions of the student teachers in view of helping the learner to progress. With the permission of the parents or the adults (when necessary), each intervention is filmed and preserved for research and training purposes.

Over the course of the academic (university) year, 17 meetings are planned, of which 15 are devoted to direct work with learners (the child, the adolescent, the adult). The work team begins to meet at the start of the university's academic

year, with a first meeting for student file examination. As the year progresses and the meetings with learners progress, the members of the team who are not involved in intervention gradually withdraw. Thus, fourth-year student teachers (evaluation) take part in only 8 meetings, in which they support the team in evaluating and elaborating the intervention plan. Second-year student teachers (observation) attend 13 meetings and are therefore involved throughout the fall term. Third-year student teachers (intervention) are entirely responsible for the activity. The diagram in Figure 1 illustrates the team dynamic as experienced by team members.

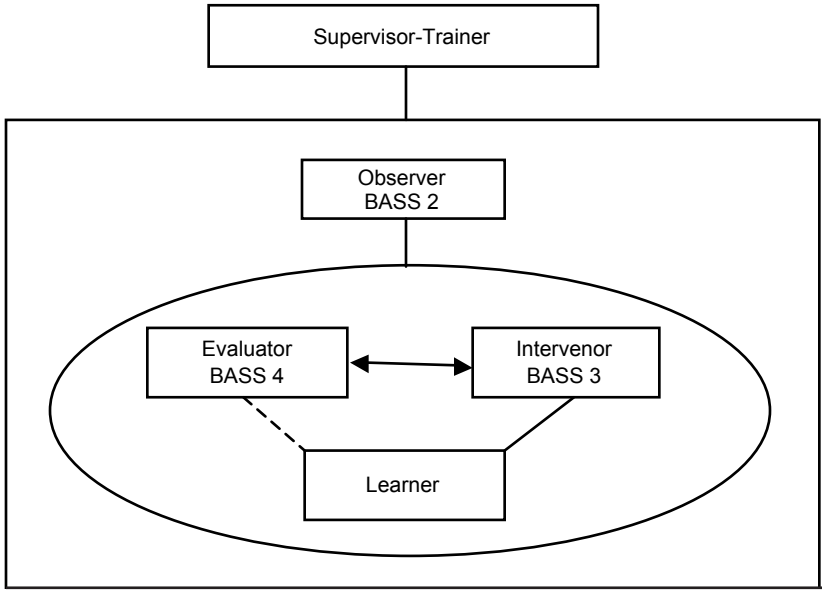

FIGURE 1. *Functioning of the clinic group*

As this figure shows, the supervisor oversees the functioning of the entire team working with a learner exhibiting learning difficulties. Second-year student teachers are never in direct contact with this learner and play an observation role only. They provide information regarding the progression of the activity managed by third-year student teachers, the learner, and the punctual interventions of fourth-year student teachers. This information is shared during the post-intervention meeting with the supervisor and all student teachers on the team. The fourth-year student teachers guide the execution of the intervention plan and principally collaborate in the evaluation phase. Depending on the realities of each learner, they may join a third-year student teacher to carry out activities related to the learner evaluation phase. Third-year student teachers are responsible for intervention with the learner, as well as weekly communication with the parent(s) of the learner (primary and secondary levels) and with the school if necessary.

The clinic activity, adapted to the adult dimension

Aware that the realities of adult learners are quite different from those of primary and secondary school learners, the Université de Sherbrooke – with the support of the *Fonds d'appui à la pédagogie universitaire* (support fund for university pedagogy, or FAPU) – established a collaborative project with an adult education centre, namely the Centre Saint-Michel of the Commission scolaire de la Région de Sherbrooke (Sherbrooke school board). The project aimed to document these realities and to establish a clinic activity as conceived by the bachelor's program in special education. Adjustments certainly had to be made to the activity in order to meet needs specific to adult education services. For example, adults with learning difficulties present characteristics which, in our view, hinder or preclude their presence in clinic rooms at the same time as primary school students. Hence, to preserve the dynamic established with children receiving services and to offer services for an age group with very different needs, the facilities of the Centre Saint-Michel were adapted to allow the teams to function the same way as at the Clinique Pierre-H.-Ruel.

This is why, starting in 2006, teams of student teachers working at the secondary level were put in charge of interventions with adults experiencing learning difficulties at the Centre Saint-Michel. These interventions are patterned after the model presented earlier, that is, teams formed by second-year student teachers (observation), third-year student teachers (intervention), and fourth-year student teachers (evaluation support) along with a supervisor. The interventions are filmed and pre- and post-intervention meetings are held weekly from September to January. The interventions with adults generally take place individually, but the small-group format has also been implemented. We first present our methodology, then a few of our results.

Methodology

The research process undertaken in order to establish a new training program closely links research and training. It integrates methodological approaches suggested in the context of developing an educational aim (Loiselle, 2001; Van der Maren, 2003). The adult clinic was therefore designed, tested, and evaluated in view of its operationalization. To design, test, and operationalize a method for guiding learners with learning difficulties, the teaching team involved in the clinic collected data to better understand the educational intervention modes developed at the clinic with adults exhibiting difficulties. They also sought to determine needs for educational tools or materials in view of enhancing intervention with these adults. The data we are currently analyzing will allow us to know whether we are upholding the mandate of training competent teachers in view of the realities of learners returning to school and in keeping with the twelve professional competencies prescribed by the Quebec Ministry of Education.

Four types of participants were involved in collecting evaluation data pertaining to the adult clinic over two academic (university) years, namely 2007-2008 and 2008-2009:

1. second-, third-, and fourth-year BASS student teachers with their respective training goals in the frame of the adult clinic;
2. adults in training at the Centre Saint-Michel (involved in the activities of the adult clinic);
3. supervisors of clinic activities with second-, third-, and fourth-year BASS student teachers; and
4. the management of the Centre Saint-Michel and the teachers serving as tutors for adults participating in clinic activities.

These participants were asked to answer satisfaction questionnaires and to collaborate with discussion groups on experiences, learning, and satisfaction in line with participation in the activities of the adult clinic. Adults and BASS student teachers were also filmed during clinic observations.

To better identify the effects of establishing the adult clinic, we have used several specific objectives to guide our collection of evaluation data. This evaluation-research aimed to:

1. assess the quality and relevance of developing a clinic for adults with difficulties (to this end, participants questioned included: adult learners, management of the Centre, student teachers, supervisors);
2. assess the satisfaction of participants (again, participants questioned included: adult learners, student teachers, supervisors) concerning their involvement in the clinic for adults with difficulties; and
3. issue recommendations regarding the continuation (or termination), improvement, and long-term prospects of services offered at the adult clinic.

In addition to these evaluation-related objectives, we also had a knowledge-related objective of better understanding the intervention modes developed at the remedial guidance clinic for adults with difficulties.

In this paper, given the progress of our work, we present only the analytical results of verbatim transcripts from the discussion groups held with 19 student teachers. Nine of these student teachers took part in the adult clinic during the 2007-2008 academic (university) year and 10 took part in the adult clinic during the 2008-2009 academic (university) year.

TABLE 1. *Data collected by year*

2007-2008	2008-2009
Verbatim transcript and summary of data collected from 9 student teachers in their second, third, or fourth year (2 observers, 4 intervenors, 3 evaluators)	Verbatim transcript and summary of data collected from 10 student teachers in their second, third, or fourth year (4 observers, 3 intervenors, 3 evaluators)

The data collected from the group interviews were transcribed as verbatim reports, then coded and sorted using a categorization grid (predetermined and emerging categories). Analysis of qualitative content enabled the identification of "units of meaning" but also of "units of context" (Bardin, 1996) which improved understanding of units of meaning. Analytical units were classified using categories constructed based on a fluctuating reading of the corpus, but also based on pre-targeted dimensions associated with a) the development of the 12 professional competencies targeted by the BASS (MEQ, 2001), some of which were specifically targeted clinic activities; and b) the specific characteristics of remedial guidance in adult education (contextual elements, educational material, instructional approaches, particularities of adult learners, characteristics of training activities at the clinic and its links with the BASS, supervision of clinic training activities). This categorization remained open and flexible to changes and improvements throughout the analysis process. The data analysed were the verbatim transcripts of group interviews conducted with 19 student teachers. This material reveals a "perception" among student teachers of the adult clinic as well as a perception of their learning as "people undergoing training" placed in a professional situation within a "training program."

Results

As mentioned previously, the results here presented come from a specific group of participants involved in this study, namely student teachers belonging to teams that interacted with adult learners. The results are presented in two broad sections. The first concerns professional constructs—the professional competencies expected to be developed in this intervention context—while the second concerns the relevance of and satisfaction with the clinic activity addressing adult learners.

PROFESSIONAL CONSTRUCTS REFERRED TO BY BASS STUDENT TEACHERS

Second-year student teachers

We should recall that second-year student teachers in the BASS program have an observation mandate at the adult clinic. In this context, two competencies are specifically targeted, namely competency 10, "To cooperate with members of the teaching team in carrying out tasks involving the development and evaluation of the competencies targeted in the programs of study, taking into account the students concerned"; and competency 11, "To engage in professional development individually and with others."

With regard to competency 10, second-year student teachers for the 2007-2008 and 2008-2009 years had a mandate to observe clinic activities, which they judged relevant as long as the other members of the team, their fellow student teachers in their third and fourth years, recognized their value. In other words,

they wished for their observations to be useful to the mandates of the two other groups of student teachers. Their wish was to see the contribution of these observations to the clinic interventions beyond meeting the objectives of a training plan. Although collaboration between members of student teacher teams was globally appreciated, elements were nevertheless cited for improvement to favour the integration of observers into their groups with regard to their concrete contribution to remedial guidance. As for competency 11, the specific context of adult education allowed student teachers to observe the existence of a real career option in this field. Their experience in the remedial guidance clinic was considered "rewarding" and "informative," a "plus" and an "opportunity" in terms of discovering and learning about a professional setting previously unknown to them.

Second-year student teachers also explore three other competencies in the frame of the adult clinic.

First, competency 9: "To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school." This competency was considered in our analyses from the standpoint of cooperation with the staff of the Centre Saint-Michel. In particular, second-year student teachers viewed very favourably the opportunity to be welcomed and guided by the assistant director of the Centre, who coordinates the project of the adult clinic. Conversely, they saw the absence of communication with tutors of the Centre (who are in charge of adults accompanied at the adult clinic) as a negative point. The student teachers could not benefit from the experience and knowledge of these tutors involved in the adult clinic. Consequently, they had to rely on the adults when it came to perceptions of difficulties and remedial guidance needs, and this proved problematic in a number of cases. Putting student teachers in touch with the tutors of adults should therefore be an integral part of training at the clinic.

The next competency in question is competency 12: "To demonstrate ethical and responsible professional behaviour in the performance of his or her duties." Second-year student teachers observed ethically questionable relationship dynamics between an adult and an intervenor. The close relationships between student teachers and adult learners as well as the way of dressing when working with adults were judged problematic. These dimensions raised the student teachers' awareness of the need to establish a certain distance in adult-adult relationships in a training context.

Finally, the student teachers observed that the lack of materials provided to work with adults forced third- and fourth-year student teachers to be creative, thus relating to competency 3, "To develop teaching/learning situations (TLS) that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study."

Third-year student teachers

Third-year student teachers in the BASS have an intervention mandate at the remedial guidance clinic for adults. In this context, many competencies are called on, but three are more specifically targeted. These are: competency 3, "To develop teaching/learning situations (TLS) that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study"; competency 4, "To pilot teaching/learning situations that are appropriate to the students concerned and to the subject content with a view to developing the competencies targeted in the programs of study;" and competency 7, "To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps."

In regard to the competencies directly related to their mandate, namely competencies 3, 4, and 7, the student teachers of the 2007-2008 and 2008-2009 cohorts stated that this clinic approach did indeed require creativity in terms of designing and adjusting teaching/learning situations involving adults. They nevertheless disapproved of the lack of pedagogical materials for adult learners. In their view, piloting activities at the clinic required them to take into account factors that they did not usually consider in the context of their past interventions, for instance in practica and clinic interventions in a secondary school setting. Student teachers stated that they had to take into account the adult's age – sometimes very close to their own – as well as shared interests or leisure activities. As for adjusting interventions (competency 7), the student teachers indicated that two approaches are at odds in their interventions, as adults usually work in units and are generally not used to the social constructivist approach favoured in their training.

Third-year student teachers also touched on other competencies. First, they expressed dissatisfaction concerning collaboration with school staff (competency 9) because they struggled to establish contact with the tutor of their adult learner to acquire more specific information on this learner's difficulties. However, the student teachers did appreciate working with the teaching team (competency 10) including second- and fourth-year student teachers. On this subject, they suggested that each year one member who worked with adults in a clinic setting belong to the new team the following year, as greater knowledge of the context will help to guide interventions.

Fourth-year student teachers

Fourth-year student teachers, who take on a leadership role in evaluation, had the specific mandate of developing competency 5, "To evaluate progress in learning the subject content and mastering the related competencies." The student teachers agreed that this learner evaluation process should be carried out on an on-going basis, rather than as a test to be passed at the beginning

of the activity and on which to then base the whole intervention plan. This provides us with clues about their understanding of evaluation as a step inherent to the intervention itself. Indeed, evaluation is an information source permitting the adjustment, modification, or adaptation of the intervention over the course of progress (or lack thereof) in learning targeted for the adult in question.

Starting with this competency, the student teachers referred to other competencies such as those related to collaboration with school staff (competency 9), work with the teaching team (competency 10), and professional development (competency 11). Like the second- and third-year student teachers, they expressed dissatisfaction with the absence of communication with the tutors, but appreciated the initial meeting with the assistant director of the Centre. Fourth-year student teachers expressed strong appreciation of teamwork with student teachers who were in their second or third year. Having acquired experience over the first three years of training as observers and intervenors, they now saw themselves as "guides." One of the student teachers mentioned that her experience with the adult clinic has led her to pursue professional development in this field.

THE REMEDIAL GUIDANCE CLINIC IN THE CONTEXT OF ADULT EDUCATION

The adult clinic was globally evaluated quite positively by second-, third-, and fourth-year BASS student teachers in the first two years of its implementation (2007-2008 and 2008-2009).

The student teachers nevertheless highlighted that adjustments would be required to improve their own training and the instruction of adults involved in clinic activities, namely:

1. A clarification of the roles of BASS student teachers with regard to the adults taking part in the activities of the clinic. Some adults had substantial expectations about solutions to their learning difficulties and/or confused the activities offered by the clinic with homework assistance. The adults should therefore be better informed about the real possibilities offered by the clinic, as well as its educational mandate.

2. The importance of offering evaluation materials (diagnosis of difficulties) as well as learning materials adapted to adults with low schooling and/or exhibiting learning difficulties. The absence of specific material for adults presented an additional obstacle compared to traditional activities offered at the Clinique Pierre-H.-Ruel. Student teachers also felt they had more professional responsibilities because of the need to adapt and even create materials for evaluation and intervention.

3. The usefulness of organizing a tour of the facilities used for clinic activities together with supervisors and the assistant director of the Centre. To foster

the participation of adult learners, the activities of the adult clinic take place at the same location as adult education; however, student teachers are less familiar with these facilities than with those of the Clinique Pierre-H.-Ruel. This need was addressed in the second year of program testing.

Other irritants pointed out include the small size of classrooms at the adult clinic, as well as a lack of access to students' academic files and a lack of meetings with the tutors. The desire of BASS student teachers for closer collaboration with the Centre Saint-Michel team thus had not been satisfied.

A good deal of learning specific to the adult education sector was accomplished by student teachers in the frame of this clinic:

• It was observed that certain adults undergoing training at the Centre Saint-Michel struggle with persistent learning difficulties involving much more than their academic progression as students of basic education. These difficulties severely impact their lives as adults, notably when it comes to employability. Weak social skills among the adults were also observed.

• Student teachers also underscored the importance of taking into account adults' life experiences, their "baggage," age, and personal interests.

• Adults involved in the adult clinic demonstrated much greater motivation than the secondary school youths with which the second-, third-, and fourth-year student teachers had interacted; these adults have a desire to learn and to succeed. They have higher intrinsic motivation, and this in turn motivates the BASS students.

• The relationship between adult learners and BASS student teachers in the context of the adult clinic is also marked by the fact that the learners *are adults.* Interactions are based much more on respect for the adult, for example when communicating the results of diagnostic evaluation. Stress management for adults who understand the stakes involved in their success or failure was underlined as another dimension. Finally, BASS student teachers came to the realization that a professional attitude, appropriate clothing, and maintaining a certain distance with adult students in training were important aspects in their relationships.

• Second-, third-, and fourth-year BASS students established a clear link between the training activities of the adult clinic and the BASS program. This clinic has its place in the training program and opens the way for professional possibilities among students who have obtained their teaching certificates.

Second-, third-, and fourth-year student teachers nonetheless disapproved of the lack of time accorded to remedial guidance interventions with adult learners who have considerable expectations. Is it realistic to think that the clinic's activities have a significant impact on adults' academic success?

DISCUSSION

Our intent was to ascertain whether the BASS training program answered the needs of student teachers called to work with a population of adults returning to school and exhibiting learning difficulties. Hence, three specific objectives guided our approach to evaluating the activity itself. A fourth objective sought to take a closer look at competency building related to intervention with adults experiencing learning difficulties. As a result, our discussion will be elaborated in line with these two aspects, that is, competency building and the clinic activity adapted to the adult dimension.

Professional constructs in progress

It is not surprising to note that the competencies targeted for each year of training (second, third, and fourth years) were often mentioned by student teachers involved in this study. This is the case for competencies 10 and 11 for observers (second year), competencies 3, 4, and 7 for intervenors (third year), and competency 5 for evaluators (fourth year). Nevertheless, it is important to mention the progressive appropriation of these competencies as is the case, for example, for competency 10, which calls for working together with the teaching team. This competency, which is specifically targeted in the second year, is also strongly present in the discourse of members of the third-year team: "They (second-year student teachers) brought a great deal of highly relevant information to our attention, and in a professional way." Or in the words of members of the fourth-year team: "Our fellow student teachers in their third year were not afraid to approach us with questions, to ask us for information," and "we answered to the best of our abilities and they took our answers very well. The collaborative work is very valuable since we can benefit from each person's competencies and strengths" (our translations).

The above statements suggest to us that this activity plays a significant role in enabling student teachers to build professional competencies. As they take on specific responsibilities over the course of three consecutive years, these student teachers are constantly expected to share their professional resources and to apply competencies appropriate to intervention with adults.

The same is true of other competencies, for instance competency 7, which targets the adaptation of interventions to the level of the student, in this case the adult. Because of the absence of materials for intervention and evaluation specifically for adults, the teams had to work to create and adapt material appropriate to interventions with the adults with whom they were called to work. To do this, the teams based themselves on the material used in their courses or in the frame of the clinic activities addressing primary or secondary school students. This is what student teachers clearly brought to the fore when stating that, because of this reality, they had a greater responsibility and had to work harder than if they had been in the regular context with this clinic,

that is, if they had been working with primary or secondary school learners. In this sense, the statements made by the teams relate to those of Turgeon and Wagner (1998), for whom the training of future teachers does not take into account the specificity of adult education, in accordance with the belief that it is enough to adjust regular secondary education.

The clinic in the context of adult education

As for educational and evaluation-related materials for adults with learning difficulties, a review of the literature reveals, first, that adult remedial guidance (or *ortho-andragogie* in French, Solar and Tremblay, 2008) is a little-explored field of research. The few existing instruction and evaluation materials written for adults have been elaborated in particular by community organizations, associations of persons with learning difficulties, and literacy groups. A few documents—notably those produced by the Quebec Ministry of Education—provide more information on learning difficulties among adults than on coping strategies, particularly over the course of schooling.

Closely related to the above observations, members of the student teacher groups working with adults also pointed to aspects showing that the field of adult education remains to be developed. Indeed, while student teachers maintained that the activity is undoubtedly pertinent for the adults with whom they worked, they also questioned aspects such as the absence of materials specifically designed for adults, the time allotted to work with adults each week (55 minutes) that they deemed insufficient, and the break between meetings because of the practicum weeks in November. These observations are consistent with Turgeon and Wagner (1998) as well as Bouchard (2004), who point out that training programs do not take into account the educational specificities of adult education.

CONCLUSION

The research we have conducted in the context of creating a new remedial guidance service for adults with difficulties illustrates the relevance of this service for student teachers involved, but also reveals its limits. The "non-permanence" of the clinic activity brings into question the real impact of the student teachers and research team on adults participating in the clinic's activities. Moreover, despite the enthusiasm of BASS student teachers, the research team questions the global competency developed in connection with adult education. Despite the proactive and innovative choices made in adult education by the BASS teaching team, training elements remain very limited and hardly compare with those offered to primary and secondary school students. How can this impasse be broken? The BASS teaching team recognizes that training activities in adult education are popular with student teachers and encourage them to pursue careers in this field. It also observes that the

establishment of the adult clinic led to a reflection on the part of the Centre Saint-Michel management team. A pedagogical support service for adult learners was thus established, constituting a more permanent form of direct assistance to promote the academic perseverance and success of adults in basic education. The faculty team at the Université de Sherbrooke Département d'études sur l'adaptation scolaire et sociale (department of studies in special education) also decided to emphasize the development of master's level continuing education programs for teachers in the little-explored field of adult special education (see Solar & Tremblay, 2008).

It should be noted that the results presented in this text are yet to be completed, since only data gathered from BASS student teachers were analysed. These evaluations are drawn from the discourse of student teachers concerning the professional competencies they are developing. Video analysis of evaluation and instruction interventions carried out with adults exhibiting difficulties should enable us, in the future, to compare this discourse with student teachers' actual practices. Finally, we should note that, when it comes to the methodology described, the evaluations of the supervisors, the adult learners, the management of the Centre, and the tutors of the adults in question remain to be analysed. These evaluations should shed a different and complementary light on the learning of BASS student teachers and of adult learners at the Centre Saint-Michel.

We would like to conclude by pointing out that the Quebec Ministry of Education (ministère de l'Éducation du Québec, 2009) recently proposed a frame of reference for developing complementary services in adult education. This new framework integrates remedial guidance and other measures for adults' academic success. It is therefore our belief that this clinic activity, with the changes that must be made, holds a significant place and is highly relevant in the initial teacher training program in special education, specifically as concerns the adult education dimension.

NOTE

1. The Comité d'agrément des programmes de formation à l'enseignement (CAPFE) is an autonomous and independent committee associated with the ministre de l'Éducation, du Loisir et du Sport du Québec (MEQ).

REFERENCES

Acheson, K. et Gall, M. (1980). *Techniques in the Clinical Supervision of Teachers.* NY: Longman Inc.

Bardin, L. (1996). *L'analyse de contenu.* Paris : Presses Universitaires de France.

Bélanger, P., Carignan, P. et Staiculescu, R. (2007). *La diversité des trajectoires et réussite éducative des adultes en formation de base.* Rapport de recherche. Montréal : CIRDEP-UQAM.

Bouchard, P. (2004). Quelques enjeux éducatifs de l'élaboration du curriculum de la formation générale de base des adultes. Dans Mercier, A., Ettayebi, M. et Medzo, F. (dir). *Le curriculum de la formation générale des adultes* (p. 11-22). Montréal : Les cahiers scientifiques de l'Acfas (100).

Bourdon S. et Roy, S (2004). *Le plaisir d'apprendre. J'embarque quand ça me ressemble. Programme d'aide pour favoriser le retour en formation des 16-24 ans. Cahier de mise en œuvre.* Québec: Gouvernement du Québec.

Bronfenbrenner, U. et Morris, P.A. (1998). The ecology of developmental process. Dans W. Damon et R. M. Lerner, *Handbook of Child Psychology: Vol 1 Theoretical Models of Human Development* (5th ed., p. 993-1028). New York: Wiley.

Campan, R. et Scapini, F. (2001). *Manuel d'éthologie, approche systémique du comportement animal*. De Boeck Université.

Chamberland, E. (1997). Le mal d'apprendre et les images pour le dire. La conception de l'apprentissage et l'image de soi d'adultes en difficulté d'apprentissage. *Repères. Essais en éducation*, Vol. 18, p. 71-91.

Correa Molina, E., Sanchez, C. et Fryer, C. (2008). L'expérience à la Clinique Pierre-H Ruel : une formation à la pratique collaborative. Dans E. Correa Molina et C. Gervais (dir.) *Les stages en formation à l'enseignement : pratiques et perspectives théoriques* (pp. 177-194). Québec : Presses de l'Université du Québec.

Loiselle, J. (2001). La recherche développement en éducation : sa nature et ses caractéristiques. Dans Anadon, M. et l'Hostie, M. *Nouvelles dynamiques de recherche en éducation* (pp. 77-97). Sainte-Foy : Les presses de l'Université Laval.

Ministère de l'Éducation du Québec (1999). *Orientations fondamentales et voies d'action. Dans une école adaptée à tous ses élèves : Prendre le virage du succès. Projet de politique en adaptation scolaire*. Québec : Gouvernement du Québec.

Ministère de l'Éducation du Québec (2001). *La formation à l'enseignement : les orientations, les compétences professionnelles*. Québec : Gouvernement du Québec.

Roy, S. (2005). *État de la formation de base des adultes au Québec*. Québec : Gouvernement du Québec, ministère de l'Éducation, du Loisir et du Sport.

Saint-Laurent, H. (2007). Les 10 enjeux de l'enseignant à l'éducation des adultes. *Québec Français*, 144, p. 66-67.

Scanlon, D. et Mellard, D. F. (2002). Academic and participation profiles of school-age dropouts with and without disabilities. *Exceptional Children*, 68(2), 239-257.

Solar, C., Tremblay, N. (2008). *Bilan des recherches en français au Canada sur l'apprentissage des adultes : 1997-2007*. Centre du savoir sur l'apprentissage chez les adultes : Ottawa.

Turgeon. M. et Wagner, R. (1998) *La scolarisation de l'éducation des adultes au sein du réseau scolaire du Québec et son impact sur la formation des formateurs. Document 1*. Montréal : Université du Québec à Montréal.

Van der Maren, J.-M. (2003). *La recherche appliquée en pédagogie. Des modèles pour l'enseignement*. 2ème édition. Bruxelles : De Boeck

Vygotsky L.S. (1927/1994). The problem of the environement. Dans Van der Veer, R., et Valsiner, J. (Eds.). *The Vygotsky Reader*. Oxford: Blackwell

Enrique Correa Molina and Carine Villemagne are professors at the Université de Sherbrooke faculty of education and regular members of the Institut de recherche sur les pratiques éducatives (research institute on educational practices).

Enrique Correa Molina et Carine Villemagne sont professeurs à la Faculté d'éducation de l'Université de Sherbrooke et membres réguliers de l'Institut de recherche sur les pratiques éducatives.

AN ELEMENT OF PRACTICAL KNOWLEDGE IN EDUCATION: PROFESSIONAL ROUTINES

FRANCE LACOURSE *Institut de recherche sur les pratiques éducatives (IRPÉ), CRCIE/CRIE, Université de Sherbrooke*

ABSTRACT. The question of practical knowledge and its teaching has arisen more perceptibly since the appearance of the aim to professionalize teachers. How can imperceptible knowledge such as professional routines be taught? To establish a social fabric and effective class management, it is essential to call on creative and adaptive professional routines. These routines support the interpretation of daily life, effectiveness, and a sense of security among both students and teachers; it is a frame favouring successful classroom management. Professional routines come under the scope of integrated competencies, and this prompts their analysis in view of understanding a central link within initial training. This paper will present the concept of professional routines as an educational practice in which practical knowledge is combined with professional learning, then the conceptual frame, the analytical method, and the results of two research projects, followed by a concluding reflection.

ÉLÉMENT D'ANALYSE DU SAVOIR PRATIQUE EN ENSEIGNEMENT: LES ROUTINES PROFESSIONNELLES

RÉSUMÉ. La question du savoir pratique et de son enseignement se pose de manière plus perceptible depuis la visée de professionnalisation de l'enseignant. Comment enseigner un savoir imperceptible comme des routines professionnelles? Pour construire un tissu social et une gestion de classe efficace, il est essentiel de recourir à des routines professionnelles adaptatives et créatives. Les routines à l'œuvre soutiennent alors l'interprétation du quotidien, l'efficacité et le sentiment de sécurité tant chez l'enseignant que chez les élèves, c'est un cadre qui favorise la réussite en gestion de classe. Les routines professionnelles relèvent de compétences incorporées, ce qui force à leur analyse pour une articulation phare opérant en formation initiale et continue. Nous présenterons le concept des routines professionnelles comme une pratique éducative où savoir pratique et apprentissage professionnel se conjuguent, le cadre conceptuel, une méthode d'analyse, les résultats de deux recherches, pour conclure sur une réflexion.

INTRODUCTION

In the 2000s teacher education aimed to professionalize teachers (Gouvernement du Québec, 2001) in view of reasserting the value of the teaching occupation, consistent with the threefold mission of Quebec schools – to instruct, to socialize, and to provide qualifications – instituted following the 1996 États Généraux (a commission on education, which over the course of a year surveyed the population on their needs and expectaions of the future of the Quebec education system) in the province. This professionalizing aim raises the question of training in alternation (sandwich courses) developed in university programs from the standpoint of the logic of competency-based training, the paradigm of the reflective practitioner, and the tension between theoretical knowledge and explicit or implicit practice. One of the objectives of the professionalizing aim is to address the complexity of new demands made on teachers. Can this complexity be controlled by teaching relevant knowledge? Will this knowledge be pertinent to practice? What does continuing education for adults have to say concerning this knowledge? According to Malglaive (1990), observing the disciplines that make up the contents of student teacher preparation for practica does not necessarily reveal direct links between this knowledge and the competencies needed in practicum activities. Theoretical knowledge and knowledge related to professional experience are neither homogeneous, nor hermetic – a situation that sometimes leads to misunderstandings within a *dispositif* or training plan (Feyfant, 2010). What is the relation of theoretical work to practices and practitioners?

The theoretical knowledge involved in action plays a number of roles. First, according to Wulf et al. (2004) and Malglaive (1990), it plays a heuristic role of guiding action and its procedures by offering possible ways to accomplish the ends of this action. Practical thinking constantly seeks solutions, while always having at its disposal procedural knowledge previously tested in other conditions. For example, the thousands of hours spent in school by student teachers contribute to developing procedures and ways of doing things to successfully complete school activities. Second, theoretical knowledge plays a role of economy, since it enables action to take place on an abstract level – the symbolic world – before it takes place on a concrete level – in the material world. Consider the example of the conquest of space. People had no practical experience with space, but theoretical knowledge permitted enough learning about related conditions to make space exploration possible. It should be mentioned that practice must eventually take place in the conditions of reality. Finally, theoretical knowledge enables control of action exerted on reality by allowing one to learn of the transformation undergone by reality over the course of this action. An example would be the teacher who questions students about their understanding of a text. Theory explains the learning process involved in this questioning, but does not identify the means required within action to regulate the cognitive process. It is the theoretical relation of academic or

theoretical works to practices and practitioners that must be examined. The relation is not one of application, as is too often said, but rather of "intervention." Theory is what comes in between. It contributes to practice, becoming the object of knowledge that permits more efficient action on reality, as in the above example. This is what must be described in work on the observation of practice in education.

We have just stated that practice derives from theory, but is it also a producer of theory? This is a difficult question to answer; following Malglaive (1990) one could say that the historical development of theory is rooted in practice. Of the complexity of the many dimensions of action, theory chooses only those that are distinctive for action and its effectiveness. This freedom from practices favours better piloting of professional practices, such as routines in education. Our research perspective is thus part of a greater effort to understand the process of professional development and of formalizing teaching practice among student teachers and experienced teachers. Within the current framework of professionalization, teaching is recognized as a practice requiring substantial expertise. Studying practice – rather than neglecting its existence or considering it only as an art – is thus a priority.

One challenge of the two research works here cited to is to focus on actual teaching practice and not only on declared practice, which is sometimes marked by a discourse of desirability. To what extent are teachers able to construct, install, and consolidate their professional routines? We have questioned the paradoxical silence surrounding the process of building professional routines to support successful classroom management. Educational researchers such as Kagan (1992), Reynolds (1992), Wang, Haertel & Walberg (1993), Gelin, Rayou & Ria (2007), and Archambault & Chouinard (2009) underscore the importance of teaching professional routines to student teachers, but omit to specify how to construct them. Can this act be constructed? How? An imperceptible grey area remains when it comes to the training plan established to support the construction of this integrated competency. According to Leplat (1997) and Wulf et al. (2004), integrated competency in a sense adheres to action; it is easily accessible, difficult to verbalize, economical with regard to mental demands, and closely tied to (and difficult to dissociate from) a situated context, all of which renders it invisible within successful professional action. It is nevertheless essential to recognizing and assessing a more complex competency such as that of classroom management.

The conceptual frame used in our analysis draws from the sociology of work and the theory of knowledge investment and formalization. These components have led to characteristics of the construction process as a way to favour investigation of the actual practice of student teachers at the secondary level. They previously contributed to data analysis in the author's doctoral research (2004) on the construction of professional routines among future teachers of

secondary school, as well as educational intervention and classroom management.[1] They also supported data analysis in the frame of research funded by the SSHRC[2] concerning the development of a professional framework based on teaching practice (Référentiel professionnel [RÉFÉPROF], 2007).[3] The primary question was, how do future secondary-level teachers and experienced primary-level teachers build professional routines? The secondary questions were, what are these routines? What are their functions? How are they learned (construction of practical knowledge)?

This article will first highlight the importance of professional routines as a competency integrated into action, then address the relevance of professional routines and the conceptual frame adopted. The methodology and empirical results of both research projects will be presented to answer the primary question as well as certain elements of the secondary questions.

PROFESSIONAL ROUTINES IN CONTEXT

Professional routines have often been viewed negatively, as common sense tends to look down on them (Lacourse, 2004, 2008). Expertise in professional routines is nevertheless recognized in many professions (routine examination, routine investigation) and much research on work analysis recognizes its necessity. This recognition enables the sharing of effective structuring practices between members of a practice community, a reduction in the complexity of work situations, the avoidance of contempt, and the creation of a social fabric. Professional routines favour a sense of psychological security at work because they offer procedures to guide everyday actions and ways of doing. De Certeau (1990) and Wulf et al. (2004) mention that they are anchored in action schemes relative to interpreting daily life. The lack of professional routines generally entails frequent loss of time and irregularities in pacing and momentum in teaching/learning situations. This does not, however, preclude the existence of erroneous or calcified routines that yield dysfunctional practice, loss of motivation, and resistance to change. Moreover, some authors cite routines as an obstacle to change when introducing a given innovation. Many North American researchers and expert teachers refer to routines as a mandatory passage for student teachers and novices who want to succeed in classroom management (Carter, 1990; Doyle, 1986; Kagan, 1992; Reynolds,1992; Lacourse, 2004, 2008; Eyster & Martin, 2010). Altrichter, Posch and Somekh (1993) point out that although some denigrate routines in education, their use presents numerous advantages. For example, they can:

- decrease the amount of information to deal with at the same time;
- decrease the number of decisions to make during action;
- increase the stability of activities;
- increase the teacher's availability to student reactions; and

• decrease anxiety among primary and secondary school students, by making the teacher's expectations more predictable.

The concept of professional routine is more complex than it might appear at first glance and warrants a definition.

THE PROBLEM OF PROFESSIONAL ROUTINES IN EDUCATION

To accurately describe the professional routines used in effective everyday educational intervention, this article will analyze four dimensions: situated action, teacher thinking, functions, and characteristics.

Situated action

Daily sequences of implemented lessons constitute recurrent cycles, and situated action plays a significant role in elaborating and implementing action. Suchman (1987) specifies that the realization of action is not entirely regulated by a prior plan. For her, the objective of a lesson plan is not to determine every detail of an undetermined educational situation, but to provide teachers with the conditions for an effective use of the incorporated competencies on which their success depends. Anticipating the details of the course of action within interaction is impossible for teachers before they reach a certain point in their action. In this conception, the actor, the activity, and the world constitute one another in a situated manner, and a sort of social fabric is created. As a result, we can consider that routines—these incorporated competencies—can, in the course of action, adjust to the particularities of the situation, to external factors such as student mood and incidents that are likely to arise.

Teacher thinking

Studies on teacher thinking that take into account the expert/novice paradigm (Desgagné, 1994; Gauthier, Desbiens, Martineau, 1999; Leinhardt, Weidman and Hammond, 1987; Tochon, 1993) also confirm the existence of routines in the professional action of expert[3] and experienced teachers. They note that these teachers generally have a repertoire of 15 or so routines, including 3 or 4 variants. However, they also suggest that metacognitive competency is less developed among student teachers and beginning teachers, who consequently neglect contextual clues and useful information pertaining to the students they manage. This shortcoming slows the creation of relevant routines and hinders their effectiveness, saps their energy, and prevents them from establishing the critical distance required to correct their errors. It should be noted that 15-20% of beginning teachers abandon the profession within the first five years of work. Professional routines generally help to transform the negative element of a situation into a positive one.

Management functions

Based on the work tools of expert teachers, researchers have been able to identify certain functions of routines. Leinhardt, Weidman and Hammond (1987) analyzed the logbooks of six mathematics teachers at the secondary level, as well as their planning and filmed interventions, then categorized the data. They identified three functions: a management function, a support function, and an exchange function (involving teacher-student communication). According to these authors, a sense of disorder and time loss is experienced when these routines are absent. The teacher ends up talking to himself and the students do not listen. For these authors, as well as Nault and Lacourse (2008) and Eyster and Martin (2010), it is crucial that teachers establish their management routines gradually from the beginning of the school year – that is, in the first three or four days of school – by training their students. When an action is successful, students should be congratulated to provide positive reinforcement; when an action is poorly carried out, the action should be corrected. In the first level of secondary school, a larger number of management routines are introduced at the beginning of the school year, while in the second level, teachers emphasize socio-communicational routines and routines that support teaching. At the middle of the school year, and regardless of the level, one can observe the maintenance of many routines that support teaching, including questions and transitions. The other functions wane. It is in transition moments that teachers use the most routines, that is, before activities and between the activities of a teaching cycle. Transitions prove to be the most difficult management moments to master for future teachers (Nault & Lacourse, 2008). Student teachers must be familiar with and understand their associate teachers' routines. If there is a change in procedure, the students must be made aware of it. Student teachers must be ready to create and maintain professional routines to attain fluid practice without idle time. The inconstant application of professional routines among student teachers leads to inconsistencies that destabilize students. It is important to get student teachers in the habit of installing professional routines during their practical training. Yinger (1979) spent five months examining the planning and planning-related discourse of an experienced primary school teacher. He identified four functions of routines: 1- managing the activities, 2- managing the teaching, 3- managing the classroom (time, configuration, and behaviour), and 4- managing the implementation of planning. He notes that "routinization" is not centred on the knowledge to teach, but on elements of the work context: participants, sequences, durations, conduct, and a positive atmosphere conducive to learning. According to this author, the routinization of planning frees more time to reflect on the teaching content and to develop original approaches to transmit this content.

Can these functions really be generalized in teacher education? This can be doubted, since it is experienced teachers who contributed to these works

prior to the 2001 reform. To summarize, three functions dominate: teaching management, spatio-temporal management (space, time, conduct), and socio-communicational management (questions, inter-communicational relationships). The teacher's implementation of a routine can cover one management function or more, since the functions are not impermeable or exclusive and, in general, the educational practice of an individual must be multi-dimensional (cognitive, affective, spatio-temporal, relational) to bear fruit.

CHARACTERISTICS TO DISTINGUISH WAYS OF DOING THINGS

Routines have characteristics that enable, among other things, specification of the individuals concerned by the intentions of the teacher's action, thus giving students a feeling of security. Selleri and Carugati (1999) mention the academic macroroutines that organize microroutines. According to these authors, the macroroutines that shape lesson structure are clearly identified by teachers and students. These include, for example, welcoming students, discussions on modern themes, sessions for questions or written reports, exercise sessions, the end of class, in short "activities that characterize the life of the entire class, insofar as they belong to devices established by the school system" (p. 282, our translation). These macroroutines contain microroutines such as granting permission to speak, allowing or disallowing students to move around during class, and the like. Routines are collective when they address the entire class, individual when they concern a single student, and sometimes both.

As previously mentioned, routines can be explicit or implicit. They are primarily implicit because they are not conscious or formalized. They constitute a series of modular procedures put into place like an algorithm according to an arrangement relevant for attaining the initial intention. As in an expert system, one can find a variant of the procedure when an obstacle or a discrepancy from the intention appears. Using a heuristic allows the teacher to find an immediate solution. The characteristics just mentioned distinguish routines and are summarized in Table 1 below.

TABLE 1. *Conception of routine characteristics*

Macroroutines	Microroutines
Collective	Individual
Adaptive	Calcified or Fixed
Explicit	Implicit
Algorithmic	Heuristic

Table 1 uses two columns to present the eight characteristics of routines in their polarity, magnitude, and adaptive capacity.

In education, when routines are installed and maintained properly by the teacher, we observe effects on those of the students; this is the *effet maître* or teacher effect (Bressoux & Dessus, 2003). Established management rou-

tines therefore greatly contribute to raising student awareness and to making students autonomous in their commitment to the learning process. The students identify the type of support that will be provided. Many authors (Blin & Gallais-Deulofeu, 2001; Davisse & Rochex, 1997; Gauthier, Desbiens & Martineau, 1999) point out a number of problems at the source of a lack of discipline among students when the teacher has not routinized a large part of his or her actions related to the teaching process on a didactic-pedagogical level. To cite a few problems of classroom behaviour:

- student or classroom refusal to cooperate (lateness);
- refusal to follow rules of conduct and work procedures (chattering);
- rejection of certain individuals (mockery, scapegoating, bullying);
- lack of autonomy and attention (repetition of instructions, cheating);
- approval of deviant behaviour (approval of "class clown," insolence);
- public criticism of the teacher (claims, accusations of injustice); etc.

The researchers referred to above submit without exception that the entire construction process appears to be implicit, natural, or spontaneous, though they also note the required repetition of action. The question now arises: How are professional routines constructed?

A CONCEPTUAL FRAME TO INCREASE UNDERSTANDING

In light of certain unknowns, it seems essential to specify how the construction of professional routines is conceived through educational intervention, the sociology of work, and the theory of knowledge investment and formalization proposed by Malglaive (1990).

Educational intervention

The concept of educational intervention enables the analysis of practice in all its complexity while taking into account, in particular, its organizational dimension, to which classroom management belongs. It makes possible an analysis of practice in its various phases (preactive, interactive, and postactive) and sheds light not only on the interactive relation between the students and the teacher (and vice versa), but also on the teacher's cognitive and affective mediating function in the learning relation established between the students and the knowledge objects (Lenoir, Larose, Deaudelin, Kalubi & Roy, 2002).

Educational intervention implies meaningful justification; it involves a meaning that action alone does not require. In this sense, as Couturier & Daviau (2003) explain, intervention appears as the rational application of a method. This application is gradually constituted from tacit and implicit elements and requires a good relational climate – created by verbal means and by the social

fabric – to be effective. Consequently, the notion of educational intervention underscores the need to conceive of the relationship created between the learners and the teacher by using concepts (situation, mediation, device) that permit a description of this interactive phenomenon. Intervention also highlights the need to understand educational and training practices as a situated, collective, shared, and concerted undertaking (Tardif, Lessard, Lenoir & Gauthier, 2001).

It could be said that educational intervention is a condition for professionality and is directly related to the current of professionalization in Quebec educational policies (Gouvernement du Québec 1992, 2001). To work on the educational intervention of teachers is to acknowledge the diversity of teachers' real know-how, such as professional routines, which are often perceived as unconscious but geared toward influencing learners. Using the notion of intervention nonetheless leads to recognizing the need to manage grey areas in the teacher's work. It requires an effort of rationalizing this work, its situation in the world of systems, with the technical- and Taylorization-related issues this entails.

A sociology of work

One of the concepts most closely related to the idea of the routine is undoubtedly the "habitus" elaborated by the prolific French sociologist Pierre Bourdieu (1980). This habitus generates social practices learned by assimilation, social facilitation, and imitation: it is "a generative grammar of actions," a variable syntax of know-how, a mediation between internalized objective relations and the social and individual behaviours to create a functional social fabric. The more social relationships are standardized and institutionalized, the more likely learners are to fulfil typical expectations. This "how to" knowledge learned by social assimilation – without the intention of learning – will transmit ways of doing things that imply a certain reproduction (Wulf et al., 2004), sometimes with pernicious effects. Resorting to a pedagogical approach consisting only of lecturing in one's teaching practice, rather than favouring differentiated instruction, is a good example of the sometimes harmful effects of social reproduction. The habitus thus appears to concern practices that are learned, but repeated more or less consciously, without always being directly related to the situation at hand. Bourdieu (1980) nevertheless relegates the key role in constructing the habitus to a tacit process.

For Giddens (1987), routines are not carried out without thought, but must be continuously exercised in undetermined daily situations together with the other individuals present. For this British sociologist, social actors maintain a sort of interdependence, so that even from a position of subordination, they can influence the circumstances of action. One could cite students who spontaneously decide, on a Friday afternoon, to end the lesson five minutes early. What can the teacher do? Hence, all structuring of practice requires both a reproduction related to the notions of continuity and stability, and a

transformation that ensures change in practices. One cannot exist without the other. This observation establishes a relation of change and continuity that appears interesting insofar as it supports creativity.

A theory of knowledge investment and formalization

What does it mean to construct, cognitively speaking? Constructing designates an abstract action that goes from the inside to the outside, an action by which constituents are organized in a stable and flexible way according to a proper serial order. All know-how has a beginning and an end, a trajectory, but it remains abstract as long as it is not integrated into an activity and thus made part of a procedure (Malglaive, 1990). As a result, all construction is elaborated based on prior knowledge and comparisons with other members of a professional milieu, so that each member creates a distinct syntax, a distinct grammar of action. In other words, cognitively speaking, know-how is broken down into component parts and reconstituted in a verbalizable and observable discourse. Constructing, in the frame of this study, means that the actor:

- invests procedural knowledge in action, within a stage that concerns a mode of action or know-how;
- transforms recurrently successful know-how into his or her practical knowledge; and
- formalizes discourse in a conceptual mode so as to ensure communication or transferability (if the know-how / practical knowledge pair is enunciated in discourse).

Verbalization of the steps of action and heuristics referred to as variants enables one to infer that a cognitive construction process has taken place. Malglaive (1990) clarifies this progressive construction process when he mentions, following Bruner (1983/1987),[5] that it is under the control of an intervention targeting an object that the modular actions of know-how are organized into a sequence. This intention precedes and guides action, providing it with the end criterion. For this author, intentionality is not an element that constitutes action, but rather an element that organizes the functionality of action. The key element to understand is that action is the visible and operational expression of intentionality. It is at the modularization stage that action presents a supple form of organization, as in the assembly of units on a wall shelf. The long-term intention ends up taking charge of the correct control and syntax of actions that it requires, and putting them together in a single act that can be described as modular know-how. If this action is analyzed, there will be a division of the serial whole in view of an explicit reconstruction. It should be noted that the situation analyzed in action must be seen as compatible with the next state expected or the next activity. This construct serves as a lever in our analysis of professional routines. Figure 1 presents the intra-structuring of the process of building a professional routine.

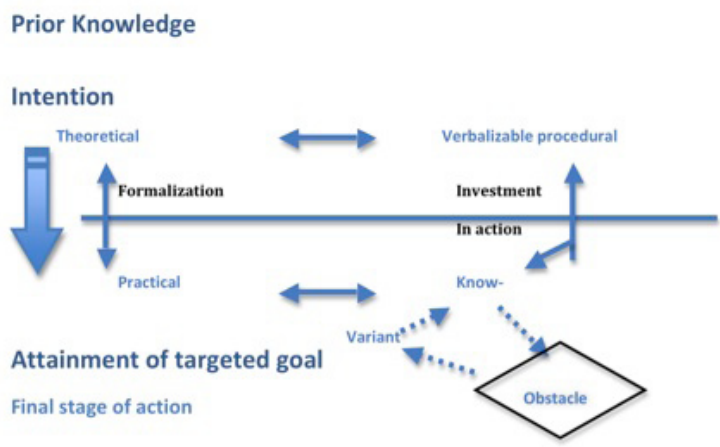

FIGURE 1. *Diagram of the process of constructing a routine (adapted from Lacourse, 2004)*

Figure 1 shows that the process of constructing a routine can be verbalized. Procedures are the steps that can be modelled, and thus illustrated, in a diagram. The intention animates, defines, and organizes the professional routine, in addition to making it functional. The two works referred to in this article postulate that, based on Malglaive's (1990) investment/formalization theory, it is possible to question the procedural knowledge invested in know-how by student teachers at the secondary school level as well as by experienced teachers at the primary school level. This conception of knowledge has the merit of accounting for real action by creating a network of logical links between actions. This process, which is presented in Figure 1, illustrates that the variant produced by the heuristic is central to our conception of construction. It is at this point that it is possible to confirm the integrated competency. It is this construction, through the creation of variants, that will allow routines to adapt to the situated actions involved in educational practice; these variants can then be integrated by the actor as know-how and may become practical knowledge, a component of professional *savoir agir* or "knowing how to act." This transformation completes the investment-formalization process as understood by Malglaive. The next section will address the methodology used to validate our conceptual frame.

METHODOLOGY

This research is exploratory and descriptive. It has enabled the elaboration of tools that can be reinvested in research and in training. Following doctoral

research, a reinvestment was carried out in the context of a SSRHC grant, and titled RÉFÉPROF.[6] Given the aim pursued in the frame of both research projects – that is, understanding and describing the process of constructing routines among future teachers and experienced primary school teachers, as well as establishing a certain modelling approach – the semi-structured interview was chosen. A pre-testing phase allowed validation of the manual for the semi-structured interview and the addition of probing or follow-up questions. The objective was to reveal the syntax of procedural knowledge that composes the typical routines of student teachers and experienced teachers so as to infer the construction process. Finally, five themes in line with sought-after observable elements were identified: 1) intentions, 2) procedural knowledge, 3) know-how and its variants, 4) the functions and characteristics of routines, and 5) origins and influences.

The participants

For the doctoral project addressing the secondary level, thirty graduates of the 1999-2003 cohort accepted to participate as volunteers in the summer of 2003, including students from the following profiles: English as a second language, French/history, French/geography, the humanities, mathematics/computer science, mathematics/physics, and experimental sciences. For the RÉFÉPROF research, six experienced primary school teachers (between 8 and 29 years of experience) – volunteers from the three cycles of primary school – participated in the semi-structured interviews in spring of 2006.

Data collection and analysis

Data analysis was carried out using semi-structured interviews and video recordings. The interviews followed a certain progression. The data collection method was situated in a face-to-face relationship between interviewer and interviewee. The interviews were audio-recorded, then transcribed in accordance with the approved code of ethics. Finally, to analyze the corpus of data, our approach was based on extensive analyses of participant discourse. It can be summed up in four moments: pre-analysis, coding and counting, categorization, and interpretation. These four steps do not equate with operations that must be carried out sequentially and linearly, but with operations that must be carried out in a dynamic of mutual enrichment (Hasni, 2001). This way of processing the corpus of data from the textual discourse enabled validation of the analysis during at least three moments: the identification of discourse segments, the grouping of segments, and the answering of the objectives and of the research question during the introduction of inferences.

A FEW RESULTS CONTRIBUTING TO THE FIELD OF KNOWLEDGE

Salient points of secondary-level research

When it comes to the dimension of the procedural knowledge and know-how that compose a routine, among the 300 routines identified in the discourse of the 30 student teachers, we grouped ideas that were similar and that were mentioned by five or more participants, thus generating a typology of 15 routines. Table 2 presents these routines.

TABLE 2. *Distribution of student teachers in terms of typical routines (adapted from Lacourse, 2004)*

Number of student teachers	Routine name
5	Vocabulary (new words, language, etc.)
5	Example (everyday life or environment)
7	Correction (exercises, tests, exams, homework)
7	Obtaining attention (obtaining silence)
7	Feedback (motivation, reinforcement, feedback)
9	Instructions
9	Management of instructional materials (distribution and collection of handouts, etc.)
10	Content (visual illustration, overview of upcoming notions, module introduction, spatial geographical situation, drawing on the board, transparencies, links with content, de-dramatization of concepts, links with math notions)
11	Questions (personal, didactic, pedagogical, interactive question-answer)
13	Roll call
13	Active supervision of students (walking around the rows)
14	Agenda on the board
14	Review of... (last class, lesson, activity, learning, reminder, planning)
20	Welcome (greeting, introduction, daily announcements, activity introduction)
24	Conclusion (end of class, summary, recapitulation)

The left column of Table 2 shows the number of student teachers who mentioned the term either explicitly or through a closely related idea. The number of routines per student teacher ranged from five to thirteen, regardless of profile. The data reduction process revealed the diversity of terms used by student teachers to discuss the same action. In addition, few variants (heuristics) were identified. The temporal pedagogical structure of various routines involved in a lesson cycle was also generated. Moreover, a threefold structure of lesson progression can be observed: 1) the opening, 2) the development of teaching and the organization of action, and 3) the closing.

As for the dimension of routine characteristics and functions, the results obtained are largely consistent with the data results of other North American studies (Kagan, 1992; Leinhardt, Weidman & Hammond, 1987; Reynolds,

1992). The professional routines of student teachers are primarily characterized by the fact that they are collective, micro, and implicit. The characteristic of adaptability was impossible to validate based on the corpus of data examined, and caution remains necessary in regard to the rigidity of routines used by student teachers. In terms of the functions of the various routines, the results show the predominance of the teaching management function related to students' relation to knowledge and the pedagogical-didactic dimension of educational practice.

The result of the corpus analysis allows us to identify three categories of non-exclusive origins of routines: training program courses, spontaneity, and practicum experience. With regard to this last category, what is surprising is that the "roll call" routine is preponderant and exclusively comes from experience gained in practica, which means that it appears to be addressed only by the school environment. The nine routines referred to for practicum learning are the welcome, roll call, review of..., the content, the management of materials, the conclusion, obtaining attention, and instructions. The student teachers stated that nine routines were spontaneous and natural: vocabulary, questions, content, examples, management of materials, correction, class conclusion, and feedback. It is surprising that the "questions" and "correction" routines are exclusively related to spontaneous origins. What is taught in training? The observation of the implicit nature of professional routines is hence not exaggerated. The category of the influence of courses involves nine routines: class agenda, welcome, review of..., vocabulary, correction, conclusion, feedback, active supervision, and instructions. In this category, the student teachers attest to the contribution of university knowledge, so that one might consider that university learning does indeed play a part in the construction of professional routines. The devices that allow retention of this learning nevertheless remain to be identified. Finally, it is possible to say that the construction process is a non-linear process of knowledge investment/formalization. Based on prior knowledge, this process leads to procedural knowledge that is invested in know-how in action without, however, possessing variants.

Elements of the primary-level research (RÉFÉPROF)

A larger number of variants were observed among the six experienced primary-level teachers. By extension, one can speak of integrated competencies among these teachers. The results of data analysis allowed identification of 90 routines for the six teachers. Similar statements were grouped and those mentioned by two or more teachers were taken into account. This led to a typology of 12 routines. Table 3 presents these routines.

TABLE 3. *Typology of professional routines among six experienced primary-level teachers*

Routine Names	Teachers
Brainstorming new words with ABCs (*Tempête des lettres-syllabes)*	1-6
Individual reading	2-5
Reinvestment	1-4
Instructions	4-7
Reinforcement	1-2-6
The work method	2-4-5
Adaptation of teaching	1-4-6
Checking understanding	4-5-7
Materials	2-5-7
Implementation of attention-listening	1-2-4-6
Transition	1-2-4-7
Reminder	2-5-6-7

Table 3 confirms the results of other research according to which teachers control the organization and sequencing of events in interaction, while the students contribute to defining the work and expert teachers have three to four variants per routine. The first two routines are specific to the teaching of French, while the ten others are common to a number of disciplines. It can be seen that three routines, namely attention-listening, the transition, and the reminder are common to a larger number of teachers (four). We can observe that six of the routines are comparable to those identified by secondary-level student teachers: 1) the *tempête des lettres-syllabes* or brainstorming new words with ABCs (vocabulary), 2) reinforcement (feedback), 3) instructions, 4) management of materials, 5) establishing attention-listening, and 6) the reminder. This observation offers a glimpse of the feasibility of developing a common language to describe professional routines in education.

Analyzing the corpus of primary-level teacher discourse enables improvement of the analytical frame used in the doctoral research in terms of the functions of routines. The three basic functions (teaching, spatio-temporal, and communication) could be supplemented with the "socio-affective management function" developed by primary-level teachers to support child development. Socio-affective management considers the relation to emotions, feelings, values, the need for security and motivation.

CONCLUSION

This article has explained the meaning here given to the term "construct" to meet the dual objective of advancing a frame of common understanding and to explain how we can then infer the process by which student teachers and in-service teachers construct professional routines. As recognized in this paper based on the knowledge formalization/investment theory of Malglaive (1990),

the process of constructing a professional routine can be described as follows: 1) to be able to verbalize the procedural knowledge that constitutes a routine, 2) to be able to invest procedural knowledge in action, and 3) to adapt action by means of variants as incidents are encountered. This construct brings the process of constructing professional routines out of the shadows, out of what is imperceptible and tacit. It touches on the potentiality of human intention in all situated action.

The results of the corpus of research data concerning student teachers at the secondary level show that the construction is a non-linear process of knowledge investment/formalization undertaken by the individual. The results of the corpus of research data concerning primary-level teachers confirm the adaptive integration of routines among experienced teachers, and serve as a reminder that functional professional routines are both adaptive and creative.

Finally, this paper highlights the help student teachers and in-service teachers can receive to identify the construction of their professional routines using two of the methodological tools: semi-structured interviews and video recordings. The results also point out the need to develop a professional vocabulary and to establish relations with the professional induction of beginning teachers and continuing education.

NOTES

1. La construction des routines professionnelles chez des futurs enseignants de l'enseignement secondaire : intervention éducative et gestion de la classe.

2. SSRHC Standard Grant 410-2004-1887 (2004-2007). Contribution au développement d'un référentiel basé sur la pratique enseignante : à quelles compétences professionnelles les enseignants du primaire recourent et disent recourir dans leur pratique?

3. "Référentiel professionnel," Contribution au développement d'un référentiel professionnel basé sur la pratique enseignante (contribution to developing a professional framework based on teaching practice).

4. Tochon (1992) describes teachers according to three research orientations. First, expert teachers are those who are able to solve complex problems specific to their field (in the research, expert teachers are often consulted regarding their action plans and practices). Second, effective teachers are those whose behaviours and relationships with students enable the latter to attain superior results. Third, good teachers appear to be more human in their relationships with students. Very much at ease with their subject matter, these teachers are able to free themselves from the content and to adapt it to students. Research uses autobiographical narrative and other ethnomethodological approaches to learn about the ways good teachers think.

5. Malglaive cites Bruner's 1987 book, but this information can be found in pages 118-121 of Bruner (2002).

6. REFEPROF: Research on the professional frameworks of teachers, funded by the SSHRH and directed by Yves Lenoir, Université de Sherbrooke.

REFERENCES

Altrichter, H., Posch, P. and Somekh, B. (1993). *Teachers investigate their work: An introduction to the methods of action research.* New York: Routledge.

Archambault, J. et Chouinard, R. (2009). *Vers une gestion éducative de la classe* (3e éd.). Montréal : Gaëtan Morin.

Blin, J.-F. et Gallais-Deulofeu, C. (2001). *Classes difficiles. Des outils pour prévenir et gérer les perturbations scolaires.* Paris: Delagrave.

Bourdieu, P. (1980). *Le sens pratique.* Paris: Éditions de Minuit.

Bressoux, P. et Dessus, P. (2003). Stratégies d'enseignement en situation d'interaction. Dans M. Kail et M.Fayol (dir.), *Les sciences cognitives et l'école* (pp. 213-357). Paris : presses Universitaires de France.

Bruner, J. S. (1983/1987). *Savoir-faire, savoir dire* (2e éd.). Paris : Presses universitaires de France.

Bruner, J. S. (1983/2002). *Savoir-faire, savoir dire* (7e éd.). Paris : Presses Universitaires de France.

Carter, K. (1990). Teachers' knowledge and learning to teach. *In* R. Houston (dir.), *Handbook of research on teacher education* (pp. 291-310), New York: MacMillan.

Couturier, Y. et Daviau, J. (2003). Modèles de pratique en sciences infirmières et nécessités d'intervenir. Mais que vient faire la notion d'intervention dans la conception de la pratique infirmière? *Esprit critique*, *5*(1). Document téléaccessible à l'adresse <http://www.espritcritique.org/>.

Davisse, A. et Rochex, J.-Y. (dirs.). (1997). *«Pourvu qu'ils m'écoutent...». Discipline et autorité dans la classe.* Créteil: CRDP de l'Académie de Créteil.

De Certeau, M. (1990). *L'invention du quotidien. Vol.1. Arts de faire.* Paris : Galimard.

Desgagné, S. (1994). *À propos de la «discipline de classe»: analyse du savoir professionnel d'enseignantes et d'enseignants expérimentés du secondaire en situation de parrainer des débutants.* Thèse de doctorat, Université Laval, Sainte-Foy, Québec.

Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (ed.), *Handbook of research on teaching* (3rd ed., p. 392-431). New York: Macmillan.

Eyster, R. H. and Martin, C. (2010). *Successful classroom management.* Naperville (Il): Sourcebooks.

Gauthier, C., Desbiens, J.-F. et Martineau, S. (1999). *Mots de passe pour mieux enseigner.* Québec: Presses de l'Université Laval.

Gelin, D., Rayou, P. et Ria L. (2007). *Devenir enseignant. Parcours et formation.* Paris : Armand Colin.

Giddens, A. (1987). *La constitution de la société.* Paris: Presses universitaires de France.

Gouvernement du Québec. Ministère de l'Éducation du Québec (1992). *La formation à l'enseignement secondaire général: orientations et compétences attendues.* Québec: Direction générale de la formation et des qualifications, Gouvernement du Québec.

Gouvernement du Québec, ministère de l'Éducation du Québec (2001). *La formation à l'enseignement. Les orientations - Les compétences professionnelles.* Document téléaccessible à l'adresse <http://www.meq.gouv.qc.ca/dftps/interieur/pdf/formation_ens.pdf>.

Hasni, A. (2001). *Les représentations sociales d'une discipline scolaire – l'activité scientifique – et de sa place au sein des autres disciplines formant le curriculum chez des instituteurs marocains.* Thèse de doctorat. Éducation. Sherbrooke: Université de Sherbrooke.

Kagan, D. (1992). Professional growth among preservice and beginning teachers. *Review of Educational Research*, 62(2), 129-169.

Lacourse, F. (2004). *La construction des routines professionnelles chez des futurs enseignants de l'enseignement secondaire : intervention éducative et gestion de la classe.* Thèse de doctorat. Éducation. Sherbrooke: Université de Sherbrooke.

Lacourse, F. (2008). Les routines professionnelles en formation initiale. De la prescription à l'analyse des pratiques. *Recherche et formation*, *59*, 141-154.

Leinhardt, G., Weidman, C. et Hammond, K. M. (1987). Introduction and integration of classroom routines by expert teachers. *Curriculum Inquiry*, *17*(2), 132-176.

Lenoir, Y., Larose, F., Deaudelin, C., Kalubi, J.-C. et Roy, G.-R. (2002). L'intervention éducative: clarifications conceptuelles et enjeux sociaux. Pour une reconceptualisation des pratiques d'intervention en enseignement et en formation à l'enseignement. *Esprit critique*, *4*(4). Document accessible à l'adresse <http://www.espritcritique.org/>.

Leplat, J. (1997). *Regards sur l'activité en situation de travail. Contribution à la psychologie ergonomique*. Paris: Presses Universitaires de France.

Malglaive, G. (1990). *Enseigner à des adultes*. Paris: Presses Universitaires de France.

Nault, T. et Lacourse, F. (2008). *La gestion de classe, une compétence à développer*. Montréal : Éditions CEC.

Reynolds, A. (1992). What is competent beginning teaching? A review of the literature. *Review of Educational Research*, *62*(1), 1-35.

Selleri, P. et Carugati, F. (1999). Écoutez-moi les enfants! De l'analyse de la conversation à l'étude des routines scolaires. Dans M. Gilly, J.-P. Roux et A. Trognon (dir.), *Apprendre dans l'interaction* (p. 279-300). Nancy: Presses Universitaires de Nancy.

Suchman, L. A. (1987). *Plans and situated actions*. Cambridge, MA: Cambridge University Press.

Tardif, M., Lessard, C., Lenoir, Y. et Gauthier, C. (2001). Comment réussir la réforme actuelle des programmes de formation à l'enseignement? *Formation et profession*, *8*(1), 1-10.

Tochon, F. V. (1992). Trois épistémologies du bon enseignant. *Revue des sciences de l'éducation*, *23*(2), 181-197.

Tochon, F. V. (1993). *L'enseignant expert*. Paris: Nathan.

Wulf, C., Althans, B., Audehm, K., Bausch, C., Gölich, M. Sting, S., Tervooren, A. Wagner-Willi, M. et Zirfas, J. (2004). *Penser les pratiques sociales comme rituels. Ethnographie et genèse de communautés*. Paris : L'Harmattan.

Yinger, R. (1979). Routines in teacher planning. *Theory into Practice*, XXIII(3), 163-16.

FRANCE LACOURSE, Ph. D. is professor at the Department of pedagogy at l'Université de Sherbrooke. She is in charge of practicum activities and classroom management courses. Her research interests concern classroom management and professional writing in ePortfolio competencies as a support to professional development.

FRANCE LACOURSE, Ph. D. est professeure au Département de pédagogie de l'Université de Sherbrooke. Elle est responsable des activités de formation à la pratique enseignante et des cours de gestion de classe. Ses recherches portent entre autres sur la gestion de classe et l'écriture professionalisante dans le cyberfolio de compétences comme soutien au développement professionnel.