

New Teachers' Career Intentions: Factors Influencing New Teachers' Decisions to Stay or to Leave the Profession

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This study examines the relationship between the reported career intentions and perceptions of preparedness of graduating secondary teachers in Quebec, across a two-year period, in an effort to identify factors which contribute to growing attrition rates among beginning teachers. The study reveals that those beginning teachers most concerned with their lack of preparation in the areas of classroom management and assessment of students' learning are more likely to consider leaving the profession. While evidence suggests that beginning teachers do develop increasing confidence in terms of classroom management in their second year of teaching, their challenges with effectively assessing student learning endure through the first two years of teaching. Findings from this mixed method study suggest that both initial teacher education and employers have a shared responsibility to give greater attention to the ways in which teachers are introduced to and have experience with strategies for the assessment of student learning.

Cette étude porte sur le rapport entre les intentions de carrière et les perceptions qu'ont les finissants en enseignement secondaire au Québec quant à leur niveau de préparation. La recherche s'est étalée sur deux ans et visait à identifier les facteurs qui contribuent au taux grandissant d'attrition chez les enseignants débutants. L'étude a révélé que les enseignants débutants qui sont les plus préoccupés par leur manque de préparation en matière de gestion de classe et en évaluation des apprentissages sont également susceptibles de penser à quitter la profession. Bien que les résultats montrent que les enseignants débutants tendent à devenir plus confiants en gestion de classe pendant leur deuxième année d'enseignement, leur défis quant à l'évaluation des apprentissages persistent tout au long de leur deuxième année d'enseignement. Les résultats de cette étude qui reposent sur une méthode mixte indiquent également que, tant la formation initiale des enseignants que les employeurs, doivent porter attention à la présentation des notions relatives à l'évaluation des apprentissages et aux expériences qui sont offertes aux enseignants en début de carrière.

New teachers are leaving the profession at an alarming rate and this is affecting the educational systems of the developed countries (Organisation for Economic Co-operation and Development [OECD/OCDE], 2005). American studies indicate that between 25% and 50% of novice teachers resign during their first three years of teaching (Fleener, 2001; Voke, 2002). More recently, Levine (2006) speaks of an *acute shortage* of teachers in United States in *The Education School Project* conducted between 2001-2007. The union of secondary school teachers in New Zealand,

reports that 20% of secondary school teachers abandon their career within the first five years (Post Primary Teacher Association, 2005); a claim supported by a subsequent national study (Kane & Mallon, 2006). A similar situation is found in Finland where 10% to 12% of beginning teachers leave during the first four years (Webb, Vulliamy, Hämäläinen, Sarja, Kimonen, & Nevalainen, 2004) as well as in Quebec, Canada, where 20% of the beginning teachers leave the profession within the first five years (Fédération autonome de l'enseignement, 2010; Centrale des syndicats du Québec, 2008). Furthermore, when asked about career plans, 23% of the teachers—beginning and experienced—interviewed in a recent study indicate a desire to leave the profession within the next five years (Houlfort & Sauvé, 2010). Participants' reasons for considering leaving the profession include burnout, difficulties in maintaining classroom discipline, unreasonable workloads and lack of support from the administration. There are costs associated with such attrition which are difficult to assess in financial terms, but are nevertheless borne by education systems. These include the decline of school stability, school climate and staff morale (Smith & Ingersoll, 2004). In a recent research report on teacher retention, the Consortium on Chicago School Research (CCSR) identified other costs such as discontinuity in professional development, shortages in key subjects and loss of teacher leadership (Consortium on Chicago School Research, 2009). Ingersoll (2001) argues that school staffing problems (through teachers moving to another school or leaving the profession) need to be addressed if we are to aid the performance of schools in achieving their key goal of enhancing student learning.

The critical role of teachers in promoting and supporting student learning and achievement has been illustrated in numerous studies (Cochran-Smith & Zeichner, 2005; Alton-Lee, 2003; Farquhar, 2003; Cochran-Smith, 2003; Hattie, 2002, 2005; Lingard, Hayes, & Mills, 2002; Nuthall, 2002; Opdenakker & Van Damme, 2000). There is also evidence that initial teacher education is strongly correlated to quality of teaching within school classrooms (Cochran-Smith, 2001; Darling-Hammond, 2000a, 2000b; Rice, 2003). Learning to teach is a complex undertaking and teacher preparation is a concern shared by scholars across the world (Gore, 2001; Britzman, 2003; Cochran-Smith, 2003; Darling-Hammond & Bransford, 2005; Gervais & Derosier, 2005; Loughran, 2006; Levine, 2006). The OECD report, *Teachers Matter: Attracting, Developing and Retaining Effective Teachers* (2005) comprises a study of 25 countries and speaks to the importance of good preparation for teachers in today's school environments. In the province of Quebec, the growing interest in the nature of teacher preparation is illustrated in studies investigating (a) initial teacher education programs (Giroux, 2000; Laforce, 2002; Desjardins & Dezutter, 2009; Jobin, Gauthier, & Bidjang, 2010), (b) teachers' professionalization process (Mukamurera, 2005), and (c) new teacher induction programs (Nault, 2005, 2008; Portelance, Mukamurera, Martineau, & Gervais, 2008; Martineau & Portelance, 2005; Vallerand & Martineau, 2006).

While it used to be the norm to remain in teaching for 30 years, today, individuals across all careers are facing many professional opportunities and career mobility seems to have become a popular way of conceiving a career. Indeed, a student with a baccalaureate in education could choose to work in the larger field of education (e.g., as an education specialist for government agencies, museums educational programs, curriculum design, NGOs, etc.) or to leave the education field and use his/her qualifications in the broader field of training. Teaching is competing against multiple interesting career options both within the broader field of education and beyond (Peske, Liu, Johnson, Kauffman, & Kardos, 2001). While career mobility is typical of all professions, we suggest that in the case of teaching, the potential disruption to school

climate, and to children's learning and progression gives just cause to question whether an examination of teachers' career intentions might shed light on issues of teacher attrition. There is a need to consider questions such as:

1. Are new teachers beginning their careers with long-term career perspectives?
2. Are they leaving the profession because they perceive themselves to be ill- prepared?
3. Are there links between the preparation they received at university, their early career experience into the profession and their intention to pursue, or not, a career in teaching?

These questions and others must be addressed in order to enhance our understanding of beginning teachers' attrition. Making beginning teachers' career intentions explicit at the early stages of their careers, and identifying the factors that influence these intentions, could enhance understanding of beginning teacher attrition and inform the development of retention strategies that may be relevant during initial teacher education and beyond. The study reported in this paper seeks to understand the ways in which initial teacher preparation and early career experience is linked to the career intentions of beginning teachers.

Conceptual Framework

Teacher preparation, induction, attrition, retention and professional career trajectories are key concepts which underpin this study and interact in complex ways to influence beginning teachers' decision making with respect to their careers. While research in each of these areas is wide ranging, there is evidence to suggest that teachers' career decisions (with outcomes of attrition or retention) are potentially influenced by how teachers are prepared and by their early experiences in the classroom.

Teacher Preparation

Over the past 20 years, several studies in education have contributed to the development of our knowledge of teacher preparation in the 21st Century. Studies reported (a) by Cochran-Smith and Zeichner (2005), Darling-Hammond and Bransford (2005), and Darling-Hammond (2006) in the United States of America; (b) by Menter, Hulme, Elliot, & Lewin (2010), Menter and Hulme (2008), and Donaldson (2011) in Scotland; (c) by Perrenoud, Altet, Lessard, and Paquay (2008) in Europe; (d) by Crocker and Dibbon (2008), and Beck and Kosnik (2006) in Canada; and, (e) by Gauthier and Mellouki (2006) in Quebec, are just a few examples of the importance of research on teacher preparation. In Canada, the *Accord on Initial Teacher Education* (Association of Canadian Deans of Education [ACDE], 2006) articulates the importance of shared goals and principles across all Canadian universities to enhance the quality of teacher preparation. The ACDE Accord signals a move towards teacher education reform in Canada; however, it is important to note that such change is complex and takes time to be operationalized in practice. This body of both domestic and international research underlines the growing momentum towards reform in teacher education programs.

Teacher Induction

The initial years of teaching serve as a critical stage in a beginning teacher's continuum of professional learning (Feiman-Nemser, 2001; Watzke, 2007). International studies reflect an increasing focus on induction programs which typically include some combination of targeted support elements such as mentoring, observation of teaching practice, professional development opportunities and formative evaluation tools designed to provide beginning teachers with feedback (Anthony, Bell, Haigh, & Kane, 2007; Anthony et al., 2008b; Bartell, 2005; Britton, Raizen, Paine, & Huntley, 2000; Britton, Paine, Pimm, & Raizen, 2003; Carver & Feiman-Nemser, 2009; Glazerman et al., 2009; Smith & Ingersoll, 2004). Research indicates that beginning teachers who are mentored are more effective teachers in their early years, since they do not have to rely solely on trial and error to advance their teaching practice but have the benefit of guided practice and support (e.g., Holloway, 2001). There is also increasing evidence that the mentoring relationship is very beneficial to the mentor teachers as well (Holloway, 2001). A finding supported by the recent three-year, province-wide evaluation of the New Teacher Induction Program in Ontario demonstrates the positive impact of the induction program as reported by teachers, mentors and principals (Kane, Jones, Rottmann, & Conner, 2010). While the Ontario study does not focus on attrition, other studies such as Smith and Ingersoll (2004) demonstrate that beginning teachers provided with induction activities, including mentoring and collaborative planning with other teachers, were less likely to leave the teaching occupation after their first year in the profession.

Teacher Attrition

There is no consensual definition for teacher's attrition in the literature. The definition provided by Buckley, Schneider, and Shang (2005), for example, involves teachers leaving the teaching profession. For Smith and Ingersoll (2004), attrition involves leaving the teaching profession but it could also mean teachers—novices and experienced—moving from one school to another. Inman and Marlow (2004) restrict their treatment of the attrition phenomenon to new teachers. These inconsistencies in conceptualizing attrition add a further dimension to understanding the exact extent of attrition across different jurisdictions. Many reasons have been evoked for leaving the profession in the aforementioned studies: (a) family reasons (raising one's own children), (b) personal (health, returning to school), (c) professional (promotion, career move, opportunities for professional development), or (d) job dissatisfaction (low salary, lack of administrative support, school facilities, experience with students and colleagues). Through a review of American research, Guarino, Santibanez, and Daley (2006) concur with the aforementioned causes for teacher attrition and add that those who choose to leave the profession are mostly women, and the teaching subjects most affected are the sciences and mathematics.

Teacher Retention

Parallel to the research on attrition are studies concerned with the identification of factors that promote perseverance in the job. The rationale underlying these studies is that better knowledge of factors that have an influence on teachers' decisions to stay in teaching may lead to better strategies to support teacher retention. Retention factors can be linked to internal and external

conditions; although it is important to acknowledge that while presented as theoretically distinct in the examples below, the factors seldom operate in isolation and in reality are experienced as a complex interaction of several internal and external factors. External factors that have been identified as influencing teacher retention include: (a) work environment and access to induction programs (Berry, 2004; Kelley, 2004); (b) benefitting from mentoring and coaching (Roy, 2002); (c) obtaining support of administration (Inman & Marlow, 2004; Johnson & Birkeland, 2003; Taylor, 1998); (d) opportunities for promotion and personal development (Brewer, 1996; Taylor, 1998); (e) job status (part-time vs. full-time) and associated feelings of safety and security (Anderson, 2002); (f) school size and job schedule (Gary, 2003), and availability of teaching resources (Lapin, 2004). Within Quebec specifically, external conditions such as salary, benefits, and recruitment procedures have been identified as incentives (Ministère de l'éducation du Québec, 2004). Internal conditions include factors related to teachers' personal characteristics: (a) number of years before retirement; (b) age when entering the teaching profession; (c) family status; (d) education background; and (e) work experience inside and outside the education system (Gary, 2003; Lapin, 2004). Teachers' perceived sense of preparedness (Bateman, 2001; Darling-Hammond, Chung, & Frelow, 2002), perceived self-efficacy and motivation to teach (Watt & Richardson, 2008) have also been identified as internal factors that influence retention.

Teaching as a Career

Beginning teachers today belong to a generation where typically one job (e.g., teaching) can be a phase in their working career, rather than a lifelong commitment. This new conception of career in our society gives rise to a distinct body of research. Interested in students' motivation to teach, Watt and Richardson (2008) administered the FIT-Choice Scale questionnaire to 510 teacher education students in three Australian universities at the entry point to their program and immediately prior to their graduation. They identified three types of motivational profiles:

1. "highly engaged persisters," dedicated to teaching and aspiring to a life-long career,
2. "highly engaged switchers," valuing challenges, diversity, leadership and considering a five-year career plan, and
3. "lower engaged desisters" who were the least likely to foresee a career in teaching for various reasons linked with their experience of initial teacher education (ITE) and practicum placements.

Each profile showed considerable variation in their predicted commitment to the profession. However, Watt and Richardson did not investigate how this predicted commitment evolved following graduation and entry into the teaching profession.

Smethem (2007) followed three cohorts of six students each to investigate beginning secondary teachers' view of the profession over a three-year period. She identified three profiles of beginning secondary teachers:

1. the "career teacher" interested in a long-term career with opportunities for promotion,
2. the "classroom teacher," happy with his/her students and not too concerned with career advancement, and

3. the “portfolio teacher,” for whom teaching is a temporary experience.

From a study conducted within the *Project on the Next Generation of Teachers*, Peske et al. (2001) proposes two profiles: long-term career and short-term career. They stress however that respondents viewing teaching as a lifelong career often meant a lifelong career in the field of education rather than exclusively as a classroom teacher. This implies mobility within the education field during one’s career, which Ingersoll (2001) argues also impacts schools and students. The short-term career category comprises either individuals at a career exploration phase or individuals wanting to make a “short-term contribution to student learning and society” (p. 306). Darling-Hammond et al. (2002), in a study of nearly 3,000 beginning teachers in New York State, found that “teachers’ sense of preparedness and sense of self efficacy seem related to their feelings about teaching and their plans to stay in the profession” (p. 296). Johnson and Birkeland’s (2003) investigation of the “new teachers’ career movement over time” (p. 582) advances understanding of factors that influence career decisions in the early stages of professional life. They identify three profiles of teachers’ career intentions (the leavers, the movers and the stayers) and conclude that, although career intentions have an impact on teachers’ perseverance in teaching, dissatisfaction with school environment (colleagues, administration) at the beginning of a teacher’s career and negative experiences with students are the most important predictors of a teacher’s decision to leave school or teaching permanently.

Drawing on the aforementioned research, our study seeks to explore the potential links between teachers’ preparation, early career experiences and teachers’ career intentions. This longitudinal study, conducted in 11 universities in the province of Quebec between 2006 and 2009, examines beginning teachers’ perceived sense of preparedness, their career intentions and factors that impact on these intentions. In Phase One of the study, a questionnaire was administered to 371 graduating secondary teacher education students in the spring of 2007. In Phase Two of the study, we conducted three semi-directed interviews over a period of 18 months with a sample of 40 beginning teachers selected from the initial population. We examined (a) the relationship between beginning secondary teachers’ experiences of ITE, (b) their early career experience, and (c) their intention to stay, or not, in the profession after 18 months of teaching.

Specific Context

Teacher education in Quebec went through a major reform in the early 1990s in an effort to professionalize teaching (Ministère de l’éducation du Québec, 2001). The aim was to provide programs that would ensure the development of responsible teachers able to work autonomously; two ascertained characteristics of the professional teacher. Since early 2000, the ITE program in the province of Quebec is grounded in a competency-based approach. Student teachers must develop 12 professional competencies during the course of a four-year program that also includes 700 hours of practicum in school classrooms. The 12 professional competencies are presented in Appendix A.

Methodology

For the purpose of this paper, we focus on exploration of the links between the participants’ perceptions of ITE, reports of their early career experiences and their career intentions related to the teaching profession. We draw data from the preparedness scale and participants’

responses to the career intentions questions from the questionnaire. These data are supported with data generated from the three interviews.

Phase One: Student Survey

The size of our initial population (estimated at 855 graduating secondary teachers in 2007) and the need to explore potential associations between variables (level of preparation and career intentions) guided our decision to use a questionnaire. We adapted a questionnaire used for a similar study we conducted in New Zealand (Kane & Fontaine, 2009) which was based largely on the New York study by Darling-Hammond et al. (2002). The questionnaire was translated into French and adapted to reflect the 12 competencies underlying the secondary teacher education programs in Quebec. The Quebec version of the questionnaire was reviewed by a group of experts in the field of education for content validity. The questionnaire was adjusted according to experts' feedback, mostly wording issues and removal of unnecessary duplication of questions, and the new version was trialed with a subgroup of 40 students. Statistical analysis of the trial allowed us to prepare the final version of the instrument.

The questionnaire is divided into six sections that include six scales and a number of individual questions comprising in total over 150 items. Personal data are requested in section one. Questions from section two are related to career choice and were developed from the fourth area of research presented in the conceptual framework. Sections three and five are concerned with graduating secondary teachers' experience during practicum and their perception of the preparation provided by their ITE program respectively. The preparedness scale includes 36 statements based on the competencies to be developed during the initial teacher education (see Appendix B). For each statement, students had to indicate their perceived level of preparation with respect to various components of teaching practice using a Likert-type scale with four levels: *very well prepared* (4), *prepared* (3), *somewhat prepared* (2), and *not at all prepared* (1). Questions in section three and five were developed to reflect the 12 professional competencies in the Quebec teacher education program (see Appendix A). A self-efficacy scale, adapted from the one used by Darling-Hammond et al. (2002) comprises section four. The last questions focused on participants' perception of their identity status. This paper reports exclusively on questionnaire results from section two, section five and questions related to participants' career intentions.

The questionnaire was administered in the spring of 2007 to all graduating secondary teachers in 11 universities in Quebec¹. It was administered during class time by a member of the research team in 10 of the 11 universities between February and April 2007. Upon the request of one university, we provided an electronic version of the survey. On average, participants required 30 minutes to complete all sections of the questionnaire. Altogether, 371 graduating secondary teachers completed the questionnaire (43%). Data was analyzed using SPSS (version 12). We conducted descriptive statistics, factorial analysis and *t*-tests.

Phase Two: Interviews With Beginning Teachers

Participants in Phase One were invited to indicate, on the last page of the questionnaire, if they would like to participate in three interviews that were to be held in November 2007, May 2008 and November 2008. A list of potential volunteers was created and we selected individuals (10% from the initial sample) according to three criteria: gender, teaching subject and geographical

location. We wanted male and female participants teaching various subjects in secondary schools across the province. All participants had to respond to the same set of questions during semi-directed interviews conducted by telephone. The average time for the interviews was between 20 and 30 minutes. As illustrated in Table 1, the topics discussed during the interviews were repeated each time except for *choosing teaching*; that was addressed in the first interview only. All interviews were recorded, transcribed and analyzed with the assistance of NUD•IST software to manage the data. Analysis of interviews involved repeated readings of the transcripts by the authors to arrive at a consensus of themes that either supported or challenged the analysis of the survey data. When themes were identified, the transcripts were re-read and segments coded.

Interview questions were developed through consultation with the literature reported in the preceding conceptual framework (see Table 1). This paper reports on results from two areas of the interview, beginning teachers' perceptions of their level of preparation to teach (topic two) and participants' career plans (topic seven).

Results

The group of participants who completed the questionnaire comprised 65.4% women and 34.5% men, which closely reflects the gender distribution of teachers in the current Quebec secondary school environment. Forty beginning teachers were involved in the first interview (16 males; 24 females). Twenty-eight of them were full-time teachers. The remaining participants had part-time positions. Nine participants could not be reached for the second interview. We went back to our initial group of volunteers and contacted new participants according to our criteria (gender, teaching subject and location). Thirty-nine beginning teachers participated in the second interview (16 males; 23 females). Twenty-six of them were full-time teachers. For the eight new participants, we made sure to address the questions from the first interview (choice of career and difficulties at the beginning of the year). For the third interview we lost four participants and the remaining group comprised 35 beginning teachers (16 males; 19 females); 20 of whom were full-time teachers. Because one of our goals was to explore how beginning teachers progressed over time, we did not replace the missing teachers from interview two. The average time for the semi-directed interviews was between 25 and 30 minutes.

Table 1
Topics for the Interviews

Category	Interview 1	Interview 2	Interview 3
Conceptual Framework	November 2007	May 2008	November 2008
Teacher preparation	Preparedness	Preparedness	Preparedness
Teacher induction	Induction	Induction	Induction
Teacher attrition and retention	Looking ahead	Looking ahead	Looking ahead
Teaching as a career	Choosing teaching Being a beginning teacher Self-efficacy Identity status	Beginning teacher: 1 st year Self-efficacy Identity status	Beginning teacher: 2 nd year Self-efficacy Identity status

Table 2
Preparation to Teach

	Factor loadings									
	Classroom management	ICT	Collaboration	Assessment	Planning	Prof. Develop.	Language	Competencies	Research skills	
EIGENVALUE	3.78	3.24	3.00	2.99	2.71	2.44	1.85	1.79	1.72	
VARIANCE	10.50	9.01	8.35	8.30	7.54	6.78	5.15	4.96	4.77	
Facilitate cooperative work processes with students	.44									
Maintain routines for effective roll out of everyday activities	.60									
Rectify process problems that hinder effective functioning of the class	.82									
Plan measures that will prevent problems with activity roll out	.76									
Effectively respond to students' inappropriate behaviour	.74									
Collaborate in development and implementation of specific intervention aimed at students	.46									
Act professionally	.53									
Justify actions with strong and supporting arguments	.45									
Recognize advantages and limits of ICT for learning		.82								
Integrate ICT when relevant		.91								
Effectively use ICT		.91								
Teach students how to use ICT		.74								
Work with others specialists in a complementary way			.46							
Cooperate in school projects			.60							
Establish relationships of trust with parents			.68							
Contribute to the work of the teaching team			.78							
Being constructively critical of team's work			.67							
Identify students' learning strengths and challenges				.46						

	Factor loadings									
	Classroom management	ICT	Collaboration	Assessment	Planning	Prof. Develop.	Language	Competencies	Research skills	
EIGENVALUE	3.78	3.24	3.00	2.99	2.71	2.44	1.85	1.79	1.72	
VARIANCE	10.50	9.01	8.35	8.30	7.54	6.78	5.15	4.96	4.77	
Work with peers to prepare assessment material				.56						
Communicate results of a diagnosis evaluation to students				.74						
Propose interventions required in relation to the diagnosis				.75						
Develop a variety of teaching-learning activities					.83					
Integrate teaching-learning activities in long-term planning					.78					
Guide students in accomplishing learning tasks					.68					
Critically reflect on progress in teaching						.52				
Identify adjustments that teaching requires						.68				
Identify personal goals and means to achieve them						.63				
Reflect on own teaching						.70				
Express myself with a correct language							.87			
Master the rules and use of oral and written language							.86			
Understand disciplinary and curricular knowledge								.75		
Demonstrate critical understanding of knowledge to be taught								.74		
Utilize resources available for teaching (research and professional literature, etc.)									.72	
Undertake research projects on targeted aspects of my teaching										.74

Note. ICT = Information & communications technologies

Table 3
 Mean for Each Factor Identified Through Factor Analysis

	<i>N</i>	Minimum	Maximum	Mean	Std. Dev.
Quality of language	369	1.50	4.00	3.44	.61
Professional development	369	1.75	4.00	3.26	.44
Planning	369	1.00	4.00	3.14	.60
Competencies	368	1.50	4.00	3.13	.58
Technology	367	1.00	4.00	3.08	.68
Classroom management	369	.60	4.00	3.08	.55
Collaboration	369	1.00	4.00	2.88	.59
Research skills	369	1.00	4.00	2.86	.68
Student assessment	368	1.00	4.00	2.58	.68
Valid <i>N</i> (listwise)	366				

Results From the Questionnaire

Exploratory factor analyses were conducted to clarify the underlying structure of the preparedness scale. Using a Varimax rotation with Kaiser normalization, the analysis generated nine factors explaining 65% of the variance as illustrated in Table 2. Items with the level of saturation between the observed variable and the factor less than 0.35 on 1 or -0.35 on -1 were not considered to display a strong enough loading on any factor and were excluded from further analysis. The factor loading presented in Table 2 provided confidence to pursue further analysis based on factors rather than individual items.

Means were calculated for items under each factor. As we can see in Table 3, at the end of their initial teacher education program, graduating secondary teachers perceived themselves as being less prepared in the area of student assessment with a mean of 2.58, which is between *somewhat prepared* (2) and *prepared* (3). Means for items under all other factors are closer to 3 (*well prepared*), as indicated in Table 3.

Participants were offered a list of potential options for future career choices. The options provided fell under two overarching categories: (a) stay in teaching or (b) leave teaching eventually. Choices like leave teaching to have a family, go back to university, apply for another type of work (e.g., administration) fell under the leave teaching category. Frequency analysis shows that 54% of the graduating secondary teachers who completed the questionnaire already indicate an intention to leave the profession eventually. The links between career plans and the level of preparedness have been explored using *t*-tests. The results indicate that the two groups (group 1: stay in teaching; group 2: leave teaching eventually) are significantly different ($p < .05$) with regard to *classroom management* and *student assessment* (see Table 4). Participants who do not intend to stay in teaching perceive themselves to be less well-prepared in student assessment and classroom management.

Results From the Interview

One of the interview questions under the theme of preparedness asked the participants to identify what areas of teaching they were struggling with the most as beginning secondary

Table 4
Preparedness and Career Plans

	Group	Mean	Std. Deviation	<i>t</i>	<i>df</i>	<i>p</i> *
Language	1	3.48	.58	0.90	1,351	n.s
	2	3.42	.61			
Professional development	1	3.27	.45	0.95	1,351	n.s
	2	3.23	.44			
Planning	1	3.17	.60	1.00	1,351	n.s
	2	3.10	.61			
Competencies	1	3.15	.58	0.62	1,351	n.s
	2	3.11	.59			
Information & communications technologies	1	3.02	.69	-1.23	1,351	n.s
	2	3.11	.65			
Classroom management	1	3.18	.48	3.40	1,351	s
	2	2.98	.57			
Collaboration	1	2.90	.58	1.00	1,351	n.s
	2	2.84	.61			
Research skills	1	2.87	.66	0.63	1,351	n.s
	2	2.82	.69			
Classroom assessment	1	2.66	.67	2.22	1,351	s
	2	2.50	.67			

* $p < .05$

Note. Group 1: Permanent, Group 2: Temporary

teachers. The same question was repeated during each interview in order to explore how beginning teachers' challenges evolved over time. In the findings presented below, we include verbatim quotations from the transcript that represent the themes identified through the analysis. We identify the verbatim quotations through the participant's pseudonym and the interview number.

The beginning secondary teachers' difficulties with issues surrounding the assessment of student learning remain a key area of challenge throughout the first 18 months of teaching. There are various ways in which participants report challenges related to assessment and these are supported below with sample verbatim quotations from participants and an indication of the degree of representation.

Over one third of the participants report that they received no instruction during ITE on how to assess competencies: ". . . during our initial teacher education program, we were not taught how to assess competencies, the subject was not discussed at all" (Mathis, 2nd interview). While half the participants report receiving classes on student assessment, they remain confused as to how to operationalize assessment in the classroom, exemplified by the following statement: "I had a 45-hour class on student assessment but I'm still confused. I still don't know how to assess my students" (Olivier, 3rd interview). Furthermore, many argue that the time spent on assessment during ITE was insufficient.

A large majority of the participants report that in spite of their classes on assessment, they remain unclear as to how to assess competencies, and there is a perception that the assessment

classes during ITE were not necessarily coherent with the assessment philosophy nor practice in secondary schools (competencies-based assessment): “I find it difficult to assess competencies, I feel it’s like a judgment call from my part and I am not ready to do that” (Anthony, 1st interview). Anthony reported being more confident with assessment in the third interview but indicated that he still had a lot to learn about assessment. Twenty beginning teachers were in agreement with Anthony in regard to students’ assessment. The challenge is not always presented as assessment per se, but rather the assessment of competencies in particular:

What I find hard is to build an exam that is going to cover everything using competencies as the assessment target. It is hard to say if a student is competent or not and in which way. It is harder to assess competencies, to find criteria and do it the right way. (Alexandra, 2nd interview)

A smaller proportion of students (20%) called for a specific focus on assessment including practice in developing and using assessment protocols with peers: “During initial teacher education, the emphasis should be put on assessment, how to assess, practical applications. We could assess our colleagues, we need to know how it works, interdisciplinarity matters” (Danielle, 1st interview).

Participants also reveal an ongoing challenge with classroom management during their first year of teaching which is reportedly exacerbated by the diversity of ability and behaviour exhibited by students within their classes. Data from participant interviews reinforces the commonly held perception that beginning teachers are often assigned challenging classes for which they feel ill-prepared to teach. William’s comment below is typical of comments from five other participants who lament the accumulation of pressure in the first year of teaching when, it could be argued, the beginning teachers need the most support.

In your most vulnerable years, they expect the most of you. They are your first years, you need help, you don’t have resources, you’re less experienced and at the same time, they ask you to prove yourself, to avoid mistakes, you’re kept under observation, they see if you’re good or not, the pressure is high. (William, 2nd interview)

Again, beginning teachers feel that the teacher education courses were not sufficient to prepare them, especially in cases where they had to integrate students with learning difficulties, behavioural problems or special needs into their classrooms. “Even if you teach a regular program, you end up with all kinds of students. There are specialists, but usually they don’t have much time, they’re already working in special education classes” (Pascal, 2nd interview). For half the beginning teachers it was a challenge to even begin to apply their planned classroom management approaches. “I have problems with discipline. Being young teachers, students tend to argue more with us, it is very difficult to apply rules for classroom management” (Mathis, 1st interview).

The challenges surrounding effective management of their classrooms were less of a concern to the participants during their second year of teaching (as evident from the participants’ third interviews). Participating beginning teachers reported feeling more confident, having explored various management strategies that they had become comfortable with: “I see a great improvement, I feel more efficient, I know how it works, I am firmer with students even if I sometimes tell a few jokes” (Tony, 3rd interview). They report having come to know what works better for them.

A small number of participants report that by the second year, classroom management had become more of a strength than an area of challenge, as indicated in the following comment:

Class management is now a personal strength. In fact you need rigor, you explain the consequences and you put them in practice. Students end up knowing you. In my class, if homework is not done, it is an automatic detention. (Alexandra, 3rd interview)

Another area of challenge reported by the participating beginning teachers was the workload associated with the demands of the job itself. Indeed, even if most participants indicated a certain level of pleasure and satisfaction was gained from teaching, many of them also indicated a feeling of being overwhelmed with work: “I find the complexity of the task monopolizes our energy and our time” (Camila, 3rd interview). Participants draw attention to the long hours of work in preparation for classes: “We have to work from morning to night to prepare our classes, we practically never stop” (Julien, 2nd interview), but at the same time they acknowledge that they are enjoying their new roles as teachers.

The complexity and overwhelming nature of the job of being a beginning teacher is further emphasized by some participants reporting that they were ill-prepared to interact with parents, to deal with administrative paper work or to meet with specialists in the school. However, these areas were of a lesser concern across all participants, than were student assessment, classroom management and workload issues.

During all three interviews, the beginning teachers were asked to indicate their career plans at that stage of their career. The majority of the participants (65%) do not expect to leave the teaching profession and they accept the fact that the first few years are more difficult. They feel they still need to learn a lot before getting comfortable in their work.

I really want to continue teaching in high school, I already thought about starting a master's in history but I'm going to wait until I have a working stability with only one class preparation to do in my subject matter. That would give me more time to study. (Christopher, 2nd interview)

Participants were asked in all three interviews to respond to the same question about their career intentions. A finding that is consistent throughout the three interviews is that 12% of the participants speak explicitly about leaving teaching if they do not reach specific goals (e.g., financial security, better teaching conditions) within the first years in the profession. Beginning teachers for whom teaching is a second career, or those who have another field of expertise (degree or diploma), appear to be more inclined to leave teaching if they do not attain a permanent job within a nominated timeframe or if the teaching situation proves too demanding (e.g., large number of students, teaching a subject matter they are not trained in, conflicts within school). Some even run two careers in parallel in order to have something to fall back on if teaching gets too difficult.

Discussion

This research explored links between graduating secondary teachers' perceived sense of preparedness for teaching, their early career experiences as beginning teachers and their self-reported intentions to continue to pursue, or not, a career in teaching. We acknowledge that teachers' perceptions may vary according to the school context, the teaching assignment, the

principal leadership, and individual differences and that perceptions of preparedness are not presumed to be a "de facto measure" of teacher effectiveness. Rather, the beginning teachers' perceptions of preparedness, coupled with their declared career intentions, do enable us to explore relationships between initial teacher education, early career experiences and career decisions. While the study reports the intentions of the beginning teachers, it did not have the scope to follow participants through to actual decisions to leave the profession, so the claims are presented to shed light on those aspects of initial teacher education and early career experience that deserve focused attention through further longitudinal research.

It is worthwhile to note that the majority of the participating beginning teachers, at the conclusion of their ITE program, perceive themselves to be *well-prepared*. The participants feel ready to begin their career in teaching and they report that they would not hesitate to choose teaching if they had to start again. This suggests that, at the point of graduation, the participating beginning secondary teachers are confident in their choice and are ready to begin their career. This finding is consistent with international research showing that upon graduation from an initial teacher education qualification, beginning teachers are motivated and confident in their ability to teach, although this confidence is often called into question once they begin teaching (Loughran, Brown, & Doecke, 2001; Anthony, Kane, Haigh, & Sandretto, 2008a). The participants' perceived sense of preparedness was indicated from a set of statements relating to the competencies underlying the education programs in Quebec universities. While their general confidence at graduation is noted, analysis revealed some challenges which were subsequently further evident through the interview data. Within a general perception of preparedness, three areas were reported by graduating secondary teachers as being particularly challenging in their first year of teaching: (a) assessment of student learning, (b) classroom management, and (c) workload and conditions. Furthermore, the participants who indicated that they felt poorly prepared in these three areas were more likely to report considering leaving teaching. This perceived lack of preparation within these three areas was further supported through participants' interviews.

Participants' challenges with assessment of student learning were evident across the three interviews where participants' comments highlight a lack of synergy between initial teacher education course work and the reality of having responsibility for assessment in the classroom. The challenge is framed as participants' lack of understanding and practice in competency-based assessment. Given the recent changes in assessment with the education curriculum in Quebec, this finding is not surprising. Indeed, since the adoption of competency-based education programs in 2001, teachers' feelings of inadequacy in the area of assessment of students' learning is evident in a number of studies in Quebec (Martineau & Pesseau, 2003; Bidjang, Gauthier, Mellouki, & Desbiens, 2005). A similar situation seems to exist in the United States (Mertler, 2009; Pecheone & Chung; 2006). Assessment of learning in a competency-based curriculum requires new ways of doing things and changes in the design and use of assessment protocols (Scallon, 2004). In parallel to these new requirements, parents' concerns about students' assessment and related report cards, ministerial decisions and media reports on this subject have undoubtedly contributed to a climate of teacher insecurity (Baillargeon, 2008; Cauchy, 2008). While Ontario (the neighbouring province to Quebec) does not have competency-based curriculum, findings from a recent three-year province-wide study of beginning teachers identify assessment of student learning as a key challenge to beginning teachers (Kane et al., 2010).

Notwithstanding the current context of curricular reform, the data reported in this paper reveal a concern among participating beginning teachers with respect to appropriately assessing student learning. Furthermore, these concerns are linked to the beginning teachers' career intentions. There is a shared belief that there is not enough time allocated in teacher education to learning how to assess students in line with the required competencies and not enough opportunities to explore practical applications during initial teacher education class time. Collectively, these gaps result in the beginning teachers' lack of confidence for this important component of teachers' work. The time devoted to teaching assessment in the majority of the Quebec universities' education program is limited to one 45-hour course across the four-year Bachelor of Education program. This seems somewhat inadequate given that classroom teachers spend a significant amount of their class time on activities related to assessing students' learning: (a) planning assessment protocols, (b) providing feedback on students' learning activities, (c) preparing assignments, tests and exams, (d) marking, and (e) communicating assessment results to students and parents.

Other studies have found, like ours, that assessment of student learning is a key challenge for beginning teachers (Anthony et al. 2008b; Cohen & Singer, 2011; Darling-Hammond et al., 2002; Kane et al., 2010). During initial teacher education, student teachers often have limited opportunity to experience the reality of following an assessment protocol from design, through implementation with students, to evaluating and reporting back to students and/or parents. This is, for some, a new experience in the first year of teaching. Given the evidence of this study, it might be prudent for teacher education programs in Quebec to reconsider how they approach the teaching of assessment. Participants within this study would not have experience with competency-based assessment when they themselves were at ITE. Teacher educators need to take into account the ways in which they introduce their students to the purposes and processes of assessment of student learning and how the evidence of these assessments can be best used to provide feedback to students and to inform future teacher planning.

Teacher educators could include authentic examples of student responses to assessment items and provide opportunities for student teachers to evaluate these and to discuss aspects of these evaluations with peers and more experienced others such as professors and experienced teachers. In addition, assessment protocols developed by student teachers should ideally be subsequently "tested" with students in classrooms during practicum, thus enabling the student teacher the experience of following the process of design, implementation and evaluation of the student response.

The current educational context in Quebec (as in most jurisdictions) calls for all teachers to be able to collect data on student learning outcomes and be able to use this data in future planning and in reporting to students and parents. The evidence from this study suggests that many beginning teachers do not feel confident in fulfilling this responsibility. Support during the initial years of teaching in the form of targeted professional development would arguably be justified. Given that a recent study by Hattie (2008) indicates that the most important factor influencing variation in student success in the classroom is teachers' feedback (a critical component of assessment), these findings also signal a possible need for a focus on assessment in professional development and induction programs for beginning teachers.

The second area of challenge revealed in the data were participants' concerns with ensuring appropriate classroom management within what were described as very diverse classrooms. Participants in the first year struggled to meet the diverse learning needs and to effectively address the behaviour of all students within their classrooms. Today's Canadian classrooms are

increasingly diverse in terms of linguistic backgrounds of students, ability levels, learning abilities and mental health issues. A recent study in New Zealand that the authors were part of, found that beginning teachers perceived themselves to know a lot about diversity, but struggled to know how to adequately respond to students' diverse needs in the classroom context (Anthony et al., 2008b). Meeting the needs of diverse learners has been implicated as a challenge to beginning teachers in other studies including Cohen and Singer (2011), Darling-Hammond et al. (2002), and Kane et al. (2010). This signals that ITE, while providing student teachers with knowledge about diversity, may not be effectively linking this knowledge to the reality of how to address issues of diversity in practice in the classroom. Thus there is potential for a greater focus on application of knowledge within ITE with respect to meeting the diverse needs of students.

Results from the third interview however, suggest that the participants' classroom management skills have developed over time, and by the second year, there are clear indications that the participating beginning teachers are building on their own experiences. With the assistance of more experienced colleagues they report being more able to develop strategies that support enhanced classroom management. The evidence from this study suggests that, given an ongoing situated experience, new teachers develop increasing capacity to establish learning environments in which they have increasing confidence as educators within the first two years. One may then ask, what can ITE realistically hope to achieve in the university classroom with respect to equipping beginning teachers with effective classroom management skills?

Initial teacher education does have a role to play in ensuring that student teachers graduate with an understanding of the theories underpinning contexts for learning and knowledge of the range of strategies that can be employed to support students as diverse learners. School boards, schools and principals also have a critical role in the induction of beginning teachers. Evidence from other jurisdictions demonstrates that formal induction programs that include professional development and a mentoring component provide effective contexts for ongoing development of classroom management strategies (Kane et al., 2010; Lamontagne, Arsenault, & Marzouk, 2008). This is one area that could be explored within Quebec where, to date, there are no formal induction programs at a school board level, although some school principals do ensure informal school-based mentoring and other supports for their beginning teachers.

The third area of concern for our participating beginning teachers was one concerned with the overwhelming nature of the workload associated with being a beginning classroom teacher, coupled with the tendency of schools to assign beginning teachers the least favourable and hard-to-fill teaching assignments. The staffing process used by many school boards results in a seemingly large proportion of beginning teachers being assigned challenging classes, a range of subjects to teach and short or medium term teaching contracts (Mukamurera, 2005). The entry into the profession could be different. For example, Japanese beginning teachers start their career with the best groups of students, are supported by experienced teachers that act as mentors, and have to attend 90 days of induction activities during the first year (Padilla & Riley, 2003). With an established culture of beginning teachers being assigned the "left over" classes, it is unlikely that this will change in Quebec in the near future. However, acknowledgement of this reality could be a springboard to establishing support for beginning teachers through mentoring partnerships, targeted professional development and other induction activities.

There is evidence from the participating beginning teachers of links between teachers' preparation, early career experience and their intent to pursue, or not, their career in teaching. While the study did not have the scope to follow the beginning teachers further into their careers

to determine actual attrition, it has shown that those beginning teachers who feel ill-prepared in terms of assessment of student learning and classroom management are more likely to consider leaving teaching. Peske et al. (2003) identified environment and relationship with students as being the two most important predictors of teachers' attrition. Beginning teachers who feel ill-equipped to manage a group of students and to assess those students' learning will have difficulties establishing good relationships with their students. The following section considers how this tentative evidence can inform those responsible for initial teacher education and the early career experiences of beginning teachers.

Conclusion

This study is situated conceptually within the interconnecting fields of teachers' preparation, teachers' early career experiences, teacher attrition/retention and teachers' career intentions. It is these concepts that we return to as a way of articulating the implications of this study and proposing some suggestions for further research.

Teacher preparation is a complicated and uncertain process (e.g., Borko, 2004; Spalding, Klecka, Ling, Wang, & Odell, 2011; Wilson, Floden, & Ferrini-Mundy, 2002; Zeichner, 2010); this complexity is further emphasized since the subject area that is taught (teaching), is also that which is done (teaching) (Ham & Kane, 2004). Our study suggests that there is a need for a review of teacher education with particular attention to teacher preparation in key areas including: (a) the assessment of student learning, (b) management of classrooms of diverse learners, and (c) navigation of the potentially overwhelming workload and conditions. These findings lend weight to the need for continued examination of the disconnect between the on-campus component of preservice teacher education programs and school-based realities experienced by the beginning teachers during practicum (and subsequently as beginning teachers). Recently, scholars such as Cochran-Smith and Lytle (2009), Spalding et al. (2010) and Zeichner (2010) refocus attention on this disconnect between on-campus and school-based elements of teacher education and propose alternative epistemologies of teacher education that reject the binaries of university-based theory and the school-based application of theory in practice. These reconceptualizations of teacher education, together with the findings of this study, emphasize the need for critical examination and indeed reconceptualization of teacher education programs to ensure that the interplay between university-based knowledge and practice, and the knowledge and practice of school-based teacher educators are realigned, and that student teachers are carefully mentored to ensure they are able to successfully enact complex teaching practices (Darling-Hammond & Bransford, 2005; Zeichner, 2010).

The *early career experiences* of the beginning secondary teachers in our study serve as their induction into the profession. In the teacher education literature and reflected in our study, it is clear that teacher education does not conclude upon graduation from the university degree program but rather, it is an ongoing process which begins with initial teacher education and continues throughout a teacher's career (Feiman-Nemser, 2001). The findings of this study signal that there are key areas in which beginning secondary teachers could be better supported in their transition into Quebec schools and that one way of achieving this would be through formal induction programs. Currently, induction programs are not mandated in Quebec (as is the case in the neighboring province of Ontario) and the induction of beginning teachers is typically dependent on the school context, culture and principal leadership. The areas of challenge for beginning teachers that are revealed in this study (assessment, classroom

management, workload) could well be the focus of school or board-based professional development workshops offered in the initial year of teaching. In addition, mentoring partnerships with experienced teachers would provide “opportunities for experts and neophytes to learn together in a supportive environment promoting time for collaboration, reflection and gradual acculturation into the profession of teaching” (Howe, 2006, p. 295).

The *teacher attrition and retention* aspects of our study serve as alternate sides of the same issue – on one hand there is a focus on who is leaving teaching and why, and on the other, attention is paid to why teachers remain in the profession. In this study, despite the fact that some teachers speak of leaving teaching, the duration of the study does not allow us to determine if they do in fact become leavers or if they eventually change their mind and become stayers (Johnson, Berg, & Donaldson, 2005). However, this study does reveal that beginning teachers early career experiences in Quebec are not aligned with recent research that demonstrates the importance of mentoring and induction (e.g., Anthony et al., 2007, 2008b; Bartell, 2005; Britton et al., 2003; Carver & Feiman-Nemser, 2009; Glazerman et al., 2009; Howe, 2006; Smith & Ingersoll, 2004). In a national study of first year teachers Smith and Ingersoll (2004) conclude that teachers participating in some combination of “mentoring and group induction activities were less likely to migrate to other schools or to leave teaching at the end of their first year” (p. 706). Smith and Ingersoll have demonstrated clearly that there is a need to focus on teacher retention, including retention of teachers in particular schools, which requires addressing issues of school culture, school leadership, school support.

A teacher potentially considers his/her *career intentions* at every stage of his/her professional career. For the participants in this study, consideration of whether to stay or leave the profession is linked to teachers' perceptions of their preparation and their early career experiences. This study responds to calls by Susan Moore Johnson and others (n.d.) in their *Project on the Next Generation of Teachers* at the Harvard Graduate School of Education, for closer attention to be paid to the contexts of teachers' work in the 21st Century, with the understanding that teachers today, like all professionals, are faced with numerous career options. Further, to understand teachers' decisions about their career, the complexity of the teaching context must be taken into account. Through examining the intersection of teacher preparation, early career experience and teachers' career intentions, we identify specific areas that need further longitudinal investigation to enhance our understanding of factors most at risk of being catalysts for career-changing decisions. It speaks to both teacher educators and school districts/administrators to give attention to the "pressure points" of the beginning teacher's career trajectory so that support can be provided to counter potential attrition.

The beginning secondary teachers who participated in this study represent a significant sample of the 2007 graduates from the 11 teacher education institutions across Quebec who offer either French or English language ITE programs leading to a baccalaureate of education and professional accreditation as a teacher. As they transition into teaching positions following graduation from ITE, these beginning teachers have a responsibility for supporting and monitoring the learning and development of classes of young people attending secondary schools across Quebec. Evidence from this study reveals that these beginning teachers experience three predominant challenges in their initial years of teaching and for some, these experiences influence their career intentions and, therefore, have a potential influence on teacher attrition.

While this study sheds light on a relationship between teachers' perceptions of their preparedness, early career experiences and career intentions, there continue to be areas that

need closer scrutiny. Longitudinal studies are needed to deepen our understanding of beginning teachers' actual career decisions, the triggers that influence them and the pathways taken. Although we add to the body of research on factors that promote retention, we are at the same time conscious that full teacher retention is not necessarily desirable without regard to quality assurance (Johnson et al., 2005; OECD, 2005; Rice, 2005). This study suggests that some beginning teachers consider leaving the profession as they perceive themselves ill-prepared for the realities they face in the classroom, which is a signal that they do not consider themselves capable teachers in some critical areas. It is thus timely that those responsible for the preparation of teachers in Quebec, both preservice (the 11 universities) and inservice (District School Boards & School Administrators), explore ways in which they can work together to support the preparation and retention of quality beginning teachers.

The preparation of teachers is a necessary partnership between ITE programs and the school boards in which student teachers undertake practicum and with whom the beginning teachers will subsequently take up positions. For example, while teacher education programs introduce the student teachers to the theory, importance, purpose and range of assessment protocols, it is only within the school boards, during practicum and in their initial teaching positions, that beginning teachers can (a) assess the learning of students as an ongoing responsibility, (b) respond to students' respective capabilities and needs, and (c) move towards the confidence required to both use the results of student learning for future planning and the subsequent step of reporting student learning to students and parents. Initial teacher education needs to take account of the particular challenges facing new teachers and work in concert with school boards to better understand what can and cannot be addressed in the ITE program, and what elements of becoming a teacher are best supported and developed after graduation. What is most important in this partnership, albeit a shifting one, is that beginning teachers are supported to become teachers both before graduation (through coherence between on-campus and in-school components) and during their transition into the initial stages of their profession (through induction and mentoring) to ensure that beginning teacher attrition is addressed.

In conclusion, we are mindful of Darling-Hammond's (2010) claim that "Teachers' preparation matters in two ways: It can both enhance initial effectiveness and increase the likelihood of staying on the job long enough to become more experienced and effective" (p. 37). Drawing on the results of this study and building on the work of other scholars, we suggest that teachers' preparation, comprising both the initial teacher education and induction into the profession, requires focused review and continued research so that teacher educators are better able to graduate beginning teachers who are able to engage with the complex realities of their roles in classrooms.

Notes

1. Université du Québec à Rimouski, Université du Québec à Chicoutimi, Université du Québec à Trois-Rivières, Université du Québec en Abitibi-Témiscamingue, Université du Québec en Outaouais, Université du Québec à Montréal, Université Laval, Université de Sherbrooke, Université McGill et Université Bishop.

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References

- Alton-Lee, A. (2003). *Quality teaching for diverse students in schooling: Best evidence synthesis*. A report to the New Zealand Ministry of Education. Wellington, NZ: Ministry of Education. Retrieved December 14, 2011, from http://intra.bay.net.nz/Learning_objects/datas/quality.pdf
- Anderson, W. M. (2002). Factors that motivate teachers to remain in the teaching profession in North Carolina. *Dissertation Abstracts International*, 62(9-A).
- Anthony, G., Bell, B., Haigh, M., & Kane, R. (2007, April 9-13). *Induction into the profession: Findings for New Zealand beginning teachers*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Anthony, G., Kane, R., Haigh, M., & Sandretto, S. (2008a, March 24-28). *Embedded induction: Is it making a difference?* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Anthony, G. J., Kane, R. G., Bell, B., Butler, P., Davey, R., Fontaine, S., Haig, M., Lovett, S., Mansell, R., Naidoo, K., Ord, K., Prestidge, B., Sandretto, S., & Stephens, C. (2008b). *Making a difference: The role of initial teacher education and induction in the preparation of secondary teachers*. Final report for the Teaching and Learning Research Initiative. Wellington, NZ: New Zealand Council for Educational Research.
- Association of Canadian Deans of Education/Association canadienne des doyens et doyennes d'éducation. (2006). *Accord on initial teacher education/Accord sur la formation initiale à l'enseignement*. Retrieved December 14, 2011, from <http://www.csse-scee.ca/CJE/Articles/FullText/CJE32-4/CJE32-4-TeacherAccord.pdf>
- Baillargeon, S. (2008, 12 décembre). Résultats québécois aux tests internationaux en sciences et mathématiques. Il faut continuer à reformer la réforme, disent les enseignants. *Le Devoir*.
- Bartell, C. (2005). *Cultivating high-quality teaching through induction and mentoring*. Thousand Oaks, CA: Corwin Press.
- Bateman, D. (2001). La formation des enseignants et des enseignantes du collégial : insertion professionnelle et formation continu. Passer le flambeau : élaboration d'un programme de perfectionnement professionnel pour les nouveaux enseignants de cégep. *Pédagogie collégiale*, 14(3), 16-21. Retrieved December 14, 2011, from http://www.aqpc.qc.ca/UserFiles/File/pedagogie_collegiale/Bateman,%20Dianne.pdf
- Beck, C., & Kosnik, C. (2006). *Innovations in teacher education: A social constructivist approach*. Albany, NY: State University of New York Press.
- Berry, B. (2004). Recruiting and retaining "highly qualified teachers" for hard-to-staff schools. *National Association of Secondary School Principals (NAASP) Bulletin*, 88 (638), 5-27.
- Bidjang, S. G., Gauthier, C., Mellouki, M., & Desbiens, J.-F. (2005). *Les finissants en enseignement sont-ils compétents ? Une enquête québécoise*. Québec City, Québec : Presses de l'Université Laval.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15. Retrieved December 14, 2011, from http://www.aera.net/uploadedfiles/journals_and_publications/journals/educational_researcher/volume_33_no_8/02_erv33n8_borko.pdf
- Brewer, D. J. (1996). Career paths and quit decisions: Evidence from teaching. *Journal of Labor Economics*, 14(2), 313-339. Retrieved December 14, 2011, from http://www-bcf.usc.edu/~dominicb/pub/Career%20Paths%20and%20Quit%20Decisions_Journal%20of%20Labor%20Economics.pdf
- Britton, E., Raizen, S., Paine, L., & Huntley, M. A. (2000). *More swimming, less sinking: Perspectives on teacher induction in the U.S. and abroad*. Retrieved December 14, 2011, from http://www.wested.org/online_pubs/teacherinduction/
- Britton, T., Paine, L., Pimm, D., & Raizen, S. (Eds.). (2003). *Comprehensive teacher induction: Systems for early career learning*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

- Britzman, D. P. (2003). *Practice makes practice: A critical study of learning to teach* (Rev. ed.). Albany, NY: State University of New York Press.
- Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: School facility quality and teacher retention in Washington, D.C. *Teachers College Record*, 107(5), 1107-1123.
- Carver, C. L., & Feiman-Nemser, S. (2009). Using policy to improve teacher induction: Critical elements and missing pieces. *Educational Policy*, 23(2), 295-328.
- Cauchy, C. (2008, 28 mars). Avis du Conseil supérieur de l'éducation – Nul besoin de mesurer les connaissances dans le bulletin. *Le Devoir*.
- Centrale des syndicats du Québec. (2008, septembre 22). Présentation d'un modèle unique d'intégration en prévention et promotion de la santé mentale au travail. Retrieved December 14, 2011, from <http://www.csq.qc.net/index.cfm/2,0,1676,9656,2323,0,html?action=display&BoxID=14198&LangID=2&KindID=2&complete=yes>
- Cochran-Smith, M. (2001). Learning to teach against the (new) grain. *Journal of Teacher Education*, 52(1), 3-4.
- Cochran-Smith, M., (2003). Teaching quality matters. *Journal of Teacher Education*, 54(2), 95-99.
- Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as a stance: Practitioner research in the next generation*. New York: Teachers College Press.
- Cochran-Smith, M., & Zeichner, K. (Eds.). (2005). *Studying teacher education: The report of the AERA Panel on Research and Teacher Education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cohen, V. L., & Singer, M. J. (2011, April 8-12). *Building a continuum of professional practice: Using a standards-based observational instrument to assess teacher effectiveness*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Consortium on Chicago School Research & Allensworth, E., Ponisciak, S., & Mazzeo, C. (2009). *The schools teachers leave: Teacher mobility in Chicago public schools*. Chicago, IL: Consortium on Chicago School Research at the University of Chicago Urban Education Institute. Retrieved December 14, 2011, from http://ccsr.uchicago.edu/publications/CCSR_Teacher_Mobility.pdf
- Crocker, R., & Dibbon, D. (2008). *Teacher education in Canada: A baseline study*. Kelowna, BC: Society for the Advancement of Excellence in Education (SAEE). Retrieved January 25, 2012, from http://www.sae.ca/upload/Teacher_Education_in_Canada.pdf
- Darling-Hammond, L. (2000a). How teacher education matters. *Journal of Teacher Education*, 51(3), 166-173.
- Darling-Hammond, L. (2000b). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1-44. Retrieved January 25, 2012, from the Education Policy Analysis Archives Web site: <http://epaa.asu.edu/ojs/article/view/392/515>
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco, CA: Jossey-Bass.
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35-47.
- Darling-Hammond, L., & Bransford, J. (Eds.). (2005). *Preparing teachers for a changing world: What teachers should learn and be able to do*. San Francisco, CA: John Wiley & Sons.
- Darling-Hammond, L., Chung, R., & Frelow, F. (2002). Variation in teacher preparation: How well do different pathways prepare teachers to teach? *Journal of Teacher Education*, 53(4), 286-302. Retrieved December 14, 2011, from <http://www.sagepub.com/eis/Darling-Hammond.pdf>
- Desjardins, J., & Dezutter, O. (2009). Développer des compétences professionnelles en formation initiale à l'enseignement préscolaire et primaire: regard sur l'organisation des programmes en contexte québécois. *Canadian Journal of Education*, 32(4), 873-902. Retrieved December 14, 2011, from the Canadian Society for the Study of Education (CSSE/SCÉÉ) Web site: <http://www.csse-scee.ca/CJE/Articles/FullText/CJE32-4/CJE32-4-DesjardinsDezutter.pdf>

- Donaldson, G. (2011). *Teaching Scotland's future: Report of a review of teacher education in Scotland*. Edinburgh, Scotland: The Scottish Government. Retrieved December 14, 2011, from <http://www.scotland.gov.uk/Resource/Doc/337626/0110852.pdf>
- Farquhar, S.-E. (2003). *Quality teaching: Early foundations: Best evidence synthesis*. A report to the New Zealand Ministry of Education. Wellington, NZ: Ministry of Education. Retrieved January 25, 2012, from http://www.educationcounts.govt.nz/__data/assets/pdf_file/0003/7707/bes-quality-teaching-early.pdf
- Fédération autonome de l'enseignement. (10 février 2010). La détresse psychologique des enseignantes et enseignants: les conditions de travail mises en cause. Retrieved 7 juin 2010, from <http://www.cnw.ca/fr/releases/archive/February2010/10/c8423.html>
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055. Retrieved December 14, 2011, from http://www.brandeis.edu/mandel/questcase/Documents/Readings/Feiman_Nemser.pdf
- Fleener, C. (2001). Lower teacher attrition rates: One measure of evidence for the effectiveness of professional development schools. *ATE Newsletter*, 34(2), 1.
- Gary, K. E. (2003). An analysis of selected altruistic and practical motivators as contributors to teacher job satisfaction. *Dissertation Abstracts International*, 63(11-A).
- Gauthier, C. M., & Mellouki, H. (Dir.). (2006). *La formation des enseignants au Québec à la croisée des chemins*. Québec City, Québec: Presses de l'Université Laval.
- Gervais, C., & Desrosiers, P. (2005). *L'école, lieu de formation d'enseignants: questions et repères pour l'accompagnement de stagiaires*. Québec City, Québec: Presses de l'Université Laval.
- Giroux, L. (2000). *Enquête auprès des premiers diplômés et diplômées du baccalauréat en enseignement secondaire*. Étude commanditée par la Table du MEQ-Universités et réalisée par le Bureau du recensement étudiant et de la recherche institutionnelle de l'Université du Québec. Retrieved December 14, 2011, from http://www.mels.gouv.qc.ca/sections/publications/publications/EPEPS/Form_titul_pers_scolaire/EnquetesEmployeursPremiersDiplomesBaccEnsSec.pdf
- Glazerman, S., Dolfin, S., Bleeker, M., Johnson, A., Isenberg, E., Lugo-Gil, J., & Grider, M. (2009). *Impacts of comprehensive teacher induction: Results from the first year of a randomized controlled study* (Report No. NCEE 2009-4034). Institute of Education Sciences, U. S. Department of Education. Retrieved December 14, 2011, from <http://ies.ed.gov/ncee/pdf/20094034.pdf>
- Gore, J. M. (2001). Beyond our differences: A reassembling of what matters in teacher education. *Journal of Teacher Education*, 52(2), 124-135.
- Guarino, C. M., Santibañez, L., & Daley, G. A. (2006). Teacher recruitment and retention : A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208. Retrieved December 14, 2011, from <http://www.montana.edu/econ/gilpin/502/guarinoetal2006.pdf>
- Ham, V., & Kane, R. G. (2004). Finding a way through the swamp: A case for self-study as research. In J. Loughran, T. Russell, V. LaBoskey, & M. L. Hamilton (Eds.), *International handbook of self-study of teaching and teacher education* (pp. 103-150). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Hattie, J. (2002). What are the attributes of excellent teachers? In *Teachers make a difference: What is the research evidence?* (pp. 3-26). Wellington, NZ: New Zealand Council for Educational Research.
- Hattie, J. (2005, August 7-9). *What is the nature of evidence that makes a difference to learning?* Key note address at the 2005 Australian Council for Educational Research (ACER) conference: Using Data to Support Learning, Melbourne, Victoria, Australia. Retrieved March 15, 2009, from http://www.acer.edu.au/documents/RC2005_Hattie.pdf
- Hattie, J. (2008). *Visible learning: A synthesis from over 800 meta-analyses relating to achievement*. New York: Routledge.
- Holloway, J. H. (2001). The benefits of mentoring. *Educational Leadership*, 58(8), 85-86.

- Houlfort, N., & Sauvé, F. (2010). *Santé psychologique des enseignants de la Fédération autonome de l'enseignement*. Montréal, Québec: École nationale d'administration publique. Retrieved December 14, 2011, from <https://depot.erudit.org/bitstream/003212dd/1/30129826.pdf>
- Howe, E. R. (2006). *Exemplary teacher induction: An international review*. *Educational Philosophy and Theory*, 38(3), 287-297.
- Ingersoll, R. M. (2001). A different approach to solving the teacher shortage problem. *Teaching Quality Policy Briefs* (No. 3). Center for the Study of Teaching and Policy, University of Washington, Seattle, WA. Retrieved December 14, 2011, from http://depts.washington.edu/ctpmail/PDFs/Brief_three.pdf
- Inman, D., & Marlow, L. (2004). Teacher retention: Why do beginning teachers remain in the profession? *Education*, 124(4), 605-614.
- Jobin, V., Gauthier, C., & Bidjang, S. G. (2010). Resultats préliminaires du premier volet d'une étude portant sur la mise en place de l'approche par compétences professionnelles en formation à l'enseignement au Québec. *Revue canadienne de l'éducation*, 32(4), 850-872. Retrieved December 14, 2011, from the Canadian Society for the Study of Education (CSSE/SCÉÉ) Web site: <http://www.csse-scee.ca/CJE/Articles/FullText/CJE32-4/CJE32-4-JobinEtAl.pdf>
- Johnson, S. M. (n.d.). *The Project on the Next Generation of Teachers*. Harvard Graduate School of Education. Retrieved December 16, 2011, from <http://www.gse.harvard.edu/~ngt/>
- Johnson, S. M., & Birkeland, S. E. (2003). The schools that teachers choose. *Educational Leadership*, 60(8), 20-24.
- Johnson, S. M., Berg, J. H., & Donaldson, M. L. (2005). *Who stays in teaching and why: A review of the literature on teacher retention*. The Project on the Next Generation of Teachers: Harvard Graduate School of Education. Retrieved December 14, 2011, from http://assets.aarp.org/www.aarp.org_/articles/NRTA/Harvard_report.pdf
- Kane, R. G., & Fontaine, S. (2009). How prepared are New Zealand secondary teachers? Results from a national graduate survey. *New Zealand Journal of Educational Studies (NZJES)*, 43(2), 29-46.
- Kane, R. G., & Mallon, M. (2006). *Perceptions of teachers, teaching and the status of teachers in Aotearoa New Zealand*. A final research report to the Ministry of Education, New Zealand. Retrieved January 08, 2012, from http://www.educationcounts.govt.nz/___data/assets/pdf_file/0016/26251/889_Perceptions.pdf
- Kane, R. G., Jones, A., Rottmann, J., & Conner, M. (2010). *The Evaluation of the New Teacher Induction Program. Final Phase Three*. Report to the Ontario Ministry of Education.
- Kelley, L. M. (2004). Why induction matters. *Journal of Teacher Education*, 55(5), 438-448.
- Laforce, L. (2002). *Enquête auprès des premières personnes diplômées du baccalauréat en éducation préscolaire et enseignement au primaire (BÉPEP), (Cohorte 1995-1999)*. Université du Québec. Retrieved December 15, 2011, from <http://www.uquebec.ca/bri-public/bepep/bepep-diplomes.pdf>
- Lamontagne, M., Arsenault, C., & Marzouk, A. (2008). Les composantes des programmes d'insertion professionnelle destinés aux enseignants débutants. In L. Portelance, J. Mukamurera, S. Martineau, et C. Gervais (Eds.), *L'insertion dans le milieu scolaire. Une phase cruciale du développement professionnel de l'enseignant*, Québec City, Québec : Presses de l'Université Laval.
- Lapin, T. (2004). Job satisfaction and intention to remain in the profession among elementary teachers in Philadelphia. *Dissertation Abstracts International*, 64(12-A).
- Levine, A. (2006). *Educating school teachers*. The Education Schools Project. Retrieved December 15, 2011, from http://www.edschools.org/pdf/Educating_Teachers_Report.pdf
- Lingard, B., Hayes, D., & Mills, M. (2002). Developments in school-based management: The specific case of Queensland, Australia. *Journal of Educational Administration*, 40(1), 6-30.
- Loughran, J., Brown, J., & Doecke, B. (2001). Continuities and discontinuities: the transition from pre-service to first-year teaching. *Teachers and Teaching: Theory and Practice*, 7(1), 7-25.
- Loughran, J. J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. London, UK: Routledge.

- Martineau, S., & Portelance, L. (2005). L'insertion professionnelle : Un tour d'horizon des recherches. *ÉCHO du R.É.S.É.A.U.*, 5(1), 7-17.
- Martineau, S., & Presseau, A. (2003). Le sentiment d'incompétence pédagogique des enseignants en début de carrière et le soutien à l'insertion professionnelle. *Brock Education*, 12(2), 54-67. Retrieved December 15, 2011, from the Brock Education Journal Web site: <http://www.ed.brocku.ca/ojs/index.php/brocked/article/view/37/37>
- Menter, I., & Hulme, M. (2008). 'Is small beautiful?': Policy making in teacher education in Scotland. *Teachers and Teaching: Theory and Practice*, 14(4), 319-330.
- Menter, I., Hulme, M., Elliot, D., & Lewin, J. (2010). *Literature review on teacher education in the 21st century*. Edinburgh, Scotland: The Scottish Government. Retrieved February, 2011, from <http://www.scotland.gov.uk/Resource/Doc/325663/0105011.pdf>
- Mertler, C. A. (2009). Teachers' assessment knowledge and their perceptions of the impact of classroom assessment professional development. *Improving Schools*, 12(2), 101-113.
- Ministère de l'éducation du Québec. (2001). *La formation à l'enseignement: Les orientations, les compétences professionnelles*. Québec City, Québec: Gouvernement du Québec.
- Ministère de l'éducation du Québec. (2004, mai). *Colloque sur l'insertion professionnelle*. Comité d'orientation de la formation du personnel enseignant (COPFE), le Centre de recherche interuniversitaire sur la formation et la profession enseignante (CRIFPE). Laval, Québec.
- Mukamurera, J. (2005). La professionnalisation de l'enseignement et les conditions d'insertion dans le métier. Dans D. Biron, M. Cividini, et J.-F. Desbiens (Dir.), *La profession enseignante au temps des réformes* (pp. 313-336). Sherbrooke, Québec: Éditions du CRP.
- Nault, G. (2005). *Étude du fonctionnement et du potentiel d'une communauté de pratique en ligne pour le développement professionnel d'enseignantes novices*. Thèse de doctorat, Université du Québec à Montréal, Montréal, Québec, Canada.
- Nault, G. (2008). S'insérer grâce à une communauté de pratique en ligne : une avenue prometteuse pour le développement professionnel des enseignants novices. Dans C. Gervais, S. Martineau, L. Portelance, et J. Mukamurera (Dir.), *L'insertion dans le milieu scolaire. Une phase cruciale du développement professionnel de l'enseignant* (pp. 229-246). Québec City, Québec : Les Presses de l'Université Laval.
- Nuthall, G. (2002). Social constructivist teaching and the shaping of students' knowledge and thinking. In J. Brophy (Ed.), *Social constructivist teaching: Affordances and constraints (Advances in research on teaching, Vol. 9; pp. 43-79)*, Bingley, UK: Emerald Group Publishing Limited.
- Opendakker, M.-C., & Van Damme, J. (2000). Effects of schools, teaching staff and classes on achievement and well-being in secondary education: Similarities and differences between school outcomes. *School Effectiveness and School Improvement*, 11(2), 165-196.
- Organisation for Economic Co-operation and Development (OCDE). (2005). *Le rôle crucial des enseignants. Attirer, former et retenir des enseignants de qualité*. Paris, France: Éditions OCDE. Retrieved December 19, 2011, from <http://www.oecd.org/dataoecd/39/43/34990974.pdf>
- Organisation for Economic Co-operation and Development (OECD). (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris, France: OECD Publishing. Retrieved December 19, 2011, from <http://www.oecd.org/dataoecd/39/47/34990905.pdf>
- Padilla, M., & Riley, J. (2003). Guiding the new teacher: Induction of first year teachers in Japan. In E. Britton, L. Paine, D. Pimm, & S. Raizen (Eds.), *Comprehensive teacher induction: Systems for early career learning* (pp. 261-295). Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Pecheone, R., & Chung, R. R. (2006). Evidence in teacher education: The performance assessment for California teachers (PACT). *Journal of Teacher Education*, 57(1), 22-36. Retrieved December 19, 2011, from the Stanford Center for Assessment, Learning & Equity (SCALE) Web site: http://scale.stanford.edu/index.php?option=com_docman&task=cat_view&gid=64&Itemid=

- Perrenoud, P., Altet, M., Lessard, C., & Paquay, L. (Dir.). (2008). *Conflits de savoirs en formation des enseignants. Entre savoirs issus de la recherche et savoirs issus de l'expérience*. Bruxelles, Belgique: De Boeck.
- Peske, H., Liu, E., Johnson, S. M., Kauffman, D., & Kardos, S. (2001). The next generation of teachers: Changing conceptions of a career in teaching. *Phi Delta Kappan*, 83(4), 304-311. Retrieved December 27, 2011, from <http://blogs.law.harvard.edu/jreyes/files/2006/04/5624599.pdf>
- Portelance, L., Mukamurera, J., Martineau, S., & Gervais, C. (Dir.). (2008). *L'insertion dans le milieu scolaire: une phase cruciale du développement professionnel de l'enseignant*. Québec City, Québec : Les Presses de l'Université Laval.
- Post Primary Teachers' Association. (2005). *SCTA supplement one: Professional standards for secondary teachers*. Retrieved December 15, 2008, from <http://www.ppta.org.nz/index.php/collective-agreements/stca/106-supplement-one?showall=1>
- Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.
- Rice, S. (2005). You don't bring me flowers anymore: A fresh look at the vexed issue of teacher status. *Australian Journal of Education*, 49(2), 182-196.
- Roy, O. (2002). *Le mentorat comme soutien à des nouveaux enseignants au secondaire. Mémoire de maîtrise en éducation*. Université du Québec à Hull.
- Scallon, G. (2004). *L'évaluation des apprentissages dans une approche parcompétences*. Saint-Laurent, Québec: E.R.P.I.
- Smethem, L. (2007). Retention and intention in teaching careers: Will the new generation stay? *Teachers and Teaching: Theory and Practice*, 13(5), 465-480.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover. *American Educational Research Journal*, 41(3), 681-714. Retrieved December 27, 2011, from http://repository.upenn.edu/cgi/viewcontent.cgi?article=1135&context=gse_pubs&sei-redir=1&referer=http%3A%2F%2Fwww.google.ca%2Furl%3Fsa%3Dt%26rct%3Dj%26q%3Dwhat%2520are%2520the%2520effects%2520of%2520induction%2520and%2520mentoring%2520on%2520beginning%2520teacher%2520turnover.%26source%3Dweb%26cd%3D2%26ved%3D0CCsQFjAB%26url%3Dhttp%253A%252F%252Frepository.upenn.edu%252Fcgi%252Fviewcontent.cgi%253Farticle%253D1135%2526context%253Dgse_pubs%26ei%3DLUn6TrjSKunXiAKLoryjDg%26usg%3DAFQjCN EVh2QD-Zb562BMkgf3Kh-M7vaXvg#search=%22what%20effects%20induction%20mentoring%20beginning%20teacher%20turnover.%22
- Spalding, E., Klecka, C. L., Lin, E., Wang, J., & Odell, S. J. (2011). Learning to teach: It's complicated but it's not magic. *Journal of Teacher Education*, 62(1), 3-7.
- Taylor, A. W. (1998). Factors affecting retention of teachers in the teaching profession. *Dissertation Abstracts International*, 58(8-A), 2950.
- Vallerand, A.-C., & Martineau, S. (2006). *Plaidoyer pour le mentorat comme aide à l'insertion professionnelle des nouveaux enseignants*. Laboratoire d'analyse de l'insertion professionnelle en enseignement (LADIPE). Retrieved December 27, 2011, from http://www.insertion.qc.ca/cnipe_2/spip.php?article89
- Voke, H. (2002). *Attracting and retaining quality teachers: Understanding and responding to the teacher shortage*. INFO brief, 29. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD). Retrieved December 27, 2011, from <http://www.ascd.org/publications/newsletters/policy-priorities/may02/num29/toc.aspx>
- Wang, J., Odell, S. J., & Schwillie, S. A. (2008). Effects of teacher induction on beginning teachers' teaching: A critical review of the literature. *Journal of Teacher Education*, 59(2), 132-152.

- Watt, H. G., & Richardson, P. W. (2008). Motivations, perceptions, and aspirations concerning teaching as a career for different types of beginning teachers. *Learning and Instruction, 18*(5), 408-428.
- Watzke, J. (2007). Longitudinal research on beginning teacher development: Complexity as a challenge to concerns-based stage theory. *Teaching and Teacher Education: An International Journal of Research and Studies, 23*(1), 106-122.
- Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E., & Nevalainen, R. (2004). Pressures, rewards and teacher retention: A comparative study of primary teaching in England and Finland. *Scandinavian Journal of Educational Research, 48*(2), 169-188.
- Wilson, S. M., Floden, R. E., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education, 53*(3), 190-204.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education, 61*(1-2), 89-99.

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Appendix A

Professional Competencies

Foundations

1. To act as a professional inheritor, critic and interpreter of knowledge or culture when teaching students.
2. To communicate clearly in the language of instruction, both orally and in writing, using correct grammar, in various contexts related to teaching.

Teaching act

3. To develop teaching/learning situations that are appropriate to the students concerned and the subject content with a view to developing the competencies targeted in the programs of study.
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.
5. To evaluate student progress in learning the subject content and mastering the related competencies.
6. To plan, organize and supervise a class in such a way as to promote students' learning and social development.

Social and educational context

7. To adapt his or her teaching to the needs and characteristics of students with learning disabilities, social maladjustments or handicaps.
8. To integrate information and communications technologies (ICT) in the preparation and delivery of teaching/learning activities and for instructional management and professional development purposes.
9. To cooperate with school staff, parents, partners in the community and students in pursuing the educational objectives of the school.
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.

Professional identity

11. To engage in professional development individually and with others.
12. To demonstrate ethical and responsible professional behaviour in the performance of his or her duties.

http://www.mels.gouv.qc.ca/dftps/interieur/PDF/formation_ens_a.pdf

Appendix B

Sense of Preparedness for Teaching.

As someone about to graduate and begin teaching, please indicate below how prepared you feel to:

Very well prepared (4), Prepared (3), Somewhat prepared (2), Not at all well prepared (1)

	4	3	2	1
1. Understand the different disciplinary and curricular knowledge to be taught.				
2. Demonstrate a critical understanding of my progress as a teacher.				
3. Demonstrate a critical understanding of the knowledge to be taught.				
4. Promote the creation of significant relations among students.				
5. Master the rules and use of oral and written language so to be understood by the wider community.				
6. Express myself with correct language (ease, precision, effectiveness and accuracy) which corresponds to society's expectations of a teaching professional.				
7. Develop a variety and multi-level of teaching-learning activities to promote students' learning.				
8. Integrate these teaching-learning activities in long-term planning.				
9. Guide students in accomplishing learning tasks.				
10. Utilize the appropriate resources to respond effectively to teaching-learning problems that may arise.				
11. Facilitate cooperative work processes with students.				
12. Identify students' strengths and challenges during the learning process.				
13. Specify the adjustments that my teaching requires.				
14. Contribute with my peers to the preparation of assessment material including the development of communication tools for parents.				
15. Communicate results of a diagnosis evaluation to students.				
16. Point out to parents and to members of the educational team, the necessary interventions required in relation to the diagnosis.				
17. Maintain routines which allow for effective roll out of everyday activities.				

	4	3	2	1
18. Rectify process problems that hinder effective functioning of the class.				
19. Plan measures that will prevent problems with activity roll out.				
20. Apply the means to effectively respond to students' inappropriate behaviour.				
21. Collaborate in the development and implementation of specific intervention plans for students under my responsibility.				
22. Demonstrate the capacity to be critical in relation to advantages and limits of ICT as support to teaching and learning.				
23. Integrate ICT when they appear relevant in the development of teaching-learning activities.				
24. Effectively use ICT possibilities to support my intellectual and professional activities.				
25. Effectively pass on to my students the capacity to use ICT.				
26. Position myself in relation to other internal and external education practitioners to enable us to work together in a complementary way.				
27. Cooperate in projects that are coherent with the educational vision of the school.				
28. Establish relationships of trust with parents.				
29. Contribute to the work of the teaching team.				
30. Criticize constructively the teaching team's work and bring innovative suggestions.				
31. Utilize resources available for teaching (research and professional literature, educational networks, professional associations, data banks).				
32. Specify my personal goals and the means to achieve them.				
33. Reflect on my own teaching.				
34. Undertake research projects on targeted aspects of my teaching.				
35. Act professionally to ensure that school management has confidence in my ability with students.				
36. Justify my actions with strong and supporting arguments.				