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258 Anthony Di Mascio. *The Idea of Popular Schooling in Upper Canada: Print culture, public discourse, and the demand for education.* Montreal, QC: McGill-Queen's University Press. (2012). 243 pp. $32.95 (paperback). (ISBN 978-0-7735-4046-0).

261 Layla AbdelRahim. *Wild Children — Domesticated Dreams: Civilization and the birth of education.* Halifax, NS: Fernwood. (2013). 130 pp. $21.95 (paperback). (ISBN: 9781552665488)

265 Graham P. McDonough, Nadeem A. Memon, & Avi I. Mintz (eds.). *Discipline, Devotion, and Dissent: Jewish, Catholic, and Islamic schooling in Canada*. Waterloo, ON: Wilfrid Laurier University Press. (2012). 208 pp. $39.99 (paperback). (ISBN 13: 978-1-55458-841-1).

We are pleased and proud to publish the current issue of *MJE / RSÉM*, which represents the first collaboratively-written issue of our recently constituted inter-university editorial team, which looks forward to the influence of Marc Andre Ethier (Université de Montreal) on the MJE's presence within Francophonie. This issue features nine articles, three notes from the field and four book reviews; four of the nine articles are from French scholars within and outside of Quebec. The issue selection is eclectic, which is typical of our journal. The subject matters addressed are consistent with ongoing yet pressing preoccupations in education and society: with programs (in the key areas of literacy and youth levels of physical activity), with assessment, with issues connected to teaching and learning, such as of Aborginal youth and of boys and education; all are preoccupations shared across geographical contexts, both within Canada (including Francophonie) and globally. The contributions also address areas in the *MJE / RSÉM* that are becoming more prominent and that signal our expanding repertoire, such as in Aboriginal/Indigenous education and international education.

We are also pleased to offer three more "Notes from the Field" (a total of eleven published since the inception of the section in 2013), addressed to diverse audiences and on diverse topics that fulfill our intended hopes for this new section of: interrogating narratives of disempowerment, in Bryant's on the extent of participation of African researchers in conversations related to their field; advocacy, in Carter's petitioning of teachers, teacher educators and curriculum developers to galvanize their resources, form a community and revitalize theatre and drama education in Canada and beyond; and posing insightful questions, such as Thompson's about the otherwise taken-for-granted practice of writing field notes.

Given the sheer abundance of reading material that we face on any given day, book reviews continue to provide an indispensable service to the academic community at large while also being a way in which future scholars can 'cut their teeth' in academic publishing within the short form (which is an art) of the book review. The four book reviews in this issue are no exception, and bring our attention to publications on various topics and issues, both contemporary

and historical, that doctoral students have determined as critical for other scholars to read and/or engage with, namely: a follow-up, second edition to a seminal volume (edited by well-known Canadian scholar, Bonny Norton) on identity and language learning (Crump); the advent of popular schooling (via print culture) in Upper Canada (Garcia); a critique and alternative vision of how children are socialized into being "civilized" (Hampton); and how discipline, devotion and dissent are addressed within faith-based schools (Jewish, Islamic and Catholic) (Tiflati).

Of our peer-reviewed articles, Stagg Peterson and McClay conducted a national assessment of the teaching and assessment of writing in middle schools across Canada. Improving skill in written communication remains a core concern in education and the workforce. The researchers interviewed 216 teachers in 22 classrooms (1-3 randomly selected per province or territory). The research (SSHRC-funded) provides an invaluable snapshot of writing instruction in middle schools across Canada in terms of teacher practices, teacher beliefs, and materials at hand. An area flagged for improvement was digital technology. Research is increasingly showing that students will write more and produce quality work when using technology.

Randall, Robinson and Fletcher surveyed physical education programs across Atlantic Canada, for the purpose of determining their quality relative to others within and outside of Canada. Diversity in content and delivery can encourage greater youth participation, this in keeping with the government policy, Active Healthy Kids Canada, intended to redress low participation rates. The research results point to a predominantly white teacher staff with a program emphasis on sports, to the exclusion of alternative forms of healthy exercise, such as gymnastics and dance. The researchers earmark key areas for improvement, such as increasing instructional time to increase levels of physical activity for youth and encouraging teachers and schools to go beyond minimum standards.

Two French articles discuss learning objects, one in mathematics and the other in science. The two others examine teacher training.

In their article "Primary school students' difficulties in mathematics," Rajotte, Giroux and Voyer compare the impact of two main perspectives that enable the interpretation of the mathematical learning difficulties that are found in scholarly work. The first perspective attributes the mathematical difficulties to characteristics that are intrinsic to the student, whereas the second one considers these difficulties as resulting from the interaction between the student and the educational system. The results of this research lend support to an interpretation based on the second perspective.

Does a given evaluation situation enable the identification of students' scientific competencies? This complex question is important in the context of certificative evaluation at the secondary school level because of the training

needs identified by study programmes and because of practical constraints affecting teachers. Dionne proposes markers to create and judge the validity and reliability of scientific evaluations in his article, "An item blueprint for assessing scientific inquiry competencies in a laboratory setting," an approach which could inspire researchers interested in the evaluation of competencies in other school subjects.

Following on Randall et al., Monfette and Grenier look at physical education; here, the role of the cooperating teacher. Teachers with a strong feeling of personal efficacy (FPE) tend to engage and to persevere in the profession. FPE is developed during teacher training, most notably during the training internships in school settings. However, we ignore how teachers associated with interns contribute to the development of FPE. In order to better understand the roles that the associated teachers believe they play in this process, the author analysed feedback and comments collected during semi-structured interviews. According to Monfette and Grenier, the associated teachers believed they influenced four sources of FPE development: offering occasions to self-develop, exchanging ideas, establishing good relations, and disseminating knowledge.

The final French article sheds light on the little-known situation of vocational education teachers in training. The students of these programmes are mostly recruited from practical fields: butchery, carpentry, hairdressing, and so on. The majority do not have university training (mostly because their discipline is rarely taught at the university level), follow part-time courses, and do not have teaching workloads. Tardif and Descheneaux, in their article, attempt to describe the overarching trends of individuals' socio-professional paths. Drawing on Bourdieusian theoretical tools, the authors highlight the choices and strategies of these social actors, as well as the interests and constraints that explain their choices and strategies.

Whitley takes another look at how Aboriginal students can be supported to be successful. She first situates her research within contemporary Indigenous frameworks then proposes a bioecological model (Bronfenbrenner) as a lens for generating interactions supportive of academic success. Whitley's research is distinctive in seeking out the perspectives of Aboriginal youth as well as those of their teachers, this in northwestern Ontario. Recommendations emerging from the research are not surprising: focus on student strengths, construct a meaningful curriculum, help students connect their education to future careers, and support teachers. However, the research highlighted that even more than cultural relevancy, students were interested in an education that could provide choice and speak to their interests, including in Aboriginal language. Teachers identified the need to move beyond an "add and stir" approach so as to more directly tap into their students' interests and needs.

Walker centers her work (coming out of the American context but clearly of relevance to many contexts worldwide) on factors influencing academic

underachievement of boys on a high school campus. Through this inquiry, Walker unveils a hitherto underexplored, but very important, dimension of this phenomenon. Specifically, she illuminates a silent, but powerful, form of resistance that the boys in her study developed in response to a curriculum that remains largely unconnected from and unresponsive to their needs and aspirations. Strikingly, they constructed their "Beta Boy" identities by deciding to disengage from their academic work, but performing well on standardized exams. Interestingly, they viewed their current academic workload not challenging enough to merit hard work. Walker's study raises fundamental questions regarding the relevance of curriculum to students' lives and her work helps to understand students' complex response to this issue.

Hamden's article provides a window on the potential of culturally-relevant practice (within a changing global knowledge economy) in university classrooms in Saudi Arabia. She points to concerns about the prevalence of non-Saudi instructors in private universities, therefore interviewed seven male and female higher education instructors to look at how they structured their approaches to teaching and learning for the Saudi classroom. Hamden proposes CRP (culturally-relevant practice) as a model to guide instructors in addressing challenges of using constructivist approaches in a Saudi context and to create bridges between teachers' assumptions and beliefs and the needs and expectations of their Saudi students. The study sheds light on the usefulness of the CRP approach and provides insight into its applicability to a Saudi context.

TSW, AA & MAE

Nous sommes heureux et fiers de présenter cette édition du MJE / RSÉM, qui constitue le premier numéro rédigé de manière collaborative par notre toute nouvelle équipe éditoriale interuniversitaire. De plus, nous nous réjouissons à l'avance de l'influence qu'aura Marc-André Éthier (Université de Montréal) sur le rayonnement de la RSÉM au sein de la Francophonie. Cette édition présente neuf articles, trois notes du terrain et quatre critiques de livres. Quatre des neuf articles sont proposés par des chercheurs francophones provenant du Québec ou de l'extérieur. L'éventail de sujets abordés par les auteurs dans ce numéro est éclectique, un trait distinctif de la revue, et ceux-ci traitent de préoccupations constantes, mais pressantes en éducation et dans la société. Que ce soient les programmes (dans les domaines fondamentaux de l'alphabétisation et du niveau d'activité physique chez les jeunes), l'évaluation ou les questions relatives à l'enseignement et l'apprentissage (chez les jeunes autochtones ou encore en ce qui a trait au rapport des garçons à l'éducation), toutes les problématiques soulevées dans cette édition sont vécues dans divers contextes géographiques, au Canada (incluant la Francophonie) et au niveau international. Les textes s'attaquent à des domaines qui prennent de plus en plus d'importance dans le MJE / RSÉM et démontrent nos intentions d'élargir notre répertoire pour y traiter de l'éducation des autochtones et d'éducation internationale.

Nous sommes également ravis de présenter trois nouvelles «Notes du terrain». Celles-ci portent à onze le nombre de notes publiées depuis la création de cette section en 2013, interpellent des publics variés sur un éventail de sujets et comblent nos attentes à l'égard de cette section. Tout d'abord, Bryant questionne les explications formulées sur la perte de pouvoir, s'interrogeant sur l'étendue de la participation des chercheurs africains aux discussions en lien avec leur domaine. Puis, Carter lance un appel aux enseignants, à ceux qui les forment et à ceux qui développent les programmes, les invitant à mobiliser leurs ressources, former une communauté et revitaliser l'éducation théâtrale et dramatique, au Canada et ailleurs. Quant à Thompson, elle pose des questions fondamentales sur la pratique, considérée comme acquise, de rédiger des notes sur le terrain.

Nous faisons face à une offre foisonnante de lectures, et ce, à tous les jours. Dans ce contexte, les critiques de livres font œuvre utile dans l'ensemble de la communauté universitaire, tout en donnant aux futurs chercheurs l'opportunité de s'initier à la publication académique dans la forme succincte de la critique, un art en soi. Les quatre critiques de livres proposées par des doctorants dans cette édition ne font pas exception à la règle et suggèrent des publications portant sur divers sujets et problématiques, contemporains et historiques. Les auteurs les considèrent comme des lectures ou des pistes de recherche incontournables pour les autres chercheurs : un suivi de la seconde édition d'un ouvrage de référence rédigé par Bonny Norton, un chercheur canadien bien connu, et portant sur l'identité et l'apprentissage des langues (Crump); l'émergence de l'éducation populaire (via la culture de l'imprimé) dans le Haut-Canada (Garcia); une critique et une perspective différente de la façon dont les enfants sont socialisés pour être «civilisés» (Hampton) et la manière dont la discipline, la dévotion et la dissension sont abordées au sein des écoles confessionnelles (juives, islamiques et catholiques) (Tiflati).

Parmi nos articles évalués par les pairs, celui de Stagg Peterson et McClay présente une évaluation pancanadienne de l'enseignement et de l'évaluation de l'écriture, tels que pratiqués dans les écoles intermédiaires au Canada. L'amélioration des compétences en communication à l'écrit demeure une préoccupation importante en éducation et dans les milieux de travail. Les chercheurs ont réalisé des entrevues auprès de 216 enseignants dans 22 classes (entre 1 et 3 choisies au hasard par province ou territoire). Cette recherche, financée par le CRSH, trace un portrait inestimable des pratiques et des croyances enseignantes ainsi que du matériel disponible dans les écoles intermédiaires à travers le Canada. Les technologies numériques constituent un domaine nécessitant une amélioration. Les recherches démontrent de plus en plus que les étudiants écrivent davantage et produisent des textes de plus grande qualité lorsqu'ils utilisent la technologie.

Randall, Robinson et Fletcher ont analysé les programmes en éducation physique offerts dans les provinces maritimes, dans le but d'en évaluer la qualité en comparaison avec ceux offerts ailleurs au Canada et à l'extérieur du pays. Pour ce faire, ils se sont basés sur la politique gouvernementale Jeunes en forme Canada, qui vise à augmenter les faibles taux de participation, et préconise une diversité de contenu et méthodes pédagogiques pour encourager une plus grande participation des jeunes. Les résultats de leur étude révèlent une prédominance d'enseignants «blancs», qui mettent l'accent sur les sports, au détriment d'autres formes d'exercices telles que la gymnastique et la danse. Pour les chercheurs, certaines dimensions-clés de l'offre peuvent être améliorées, que ce soit en allouant davantage de temps à l'enseignement de l'éducation physique pour augmenter le niveau d'activité physique des jeunes ou en encourageant les enseignants et les écoles à aller au-delà des normes minimales.

Deux articles en français s'intéressent aux objets d'apprentissage, l'un en mathématiques et l'autre en sciences, tandis que les deux autres s'intéressent à la formation des enseignants.

Dans leur article, « Les difficultés des élèves du primaire en mathématiques », Rajotte, Giroux et Voyer comparent la portée de deux principales perspectives qui permettent d'interpréter les difficultés d'apprentissage en mathématiques qui se retrouvent dans les écrits savants. La première attribue les difficultés en mathématiques aux caractéristiques intrinsèques à l'élève, tandis que la seconde considère ces difficultés comme étant la résultante de l'interaction entre l'élève et le système didactique. Les résultats de cette recherche appuient une interprétation faite à partir de la seconde perspective.

Une situation d'évaluation donnée permet-elle de juger des compétences scientifiques des élèves ? Cette question complexe revêt une importance cruciale en contexte d'évaluation certificative au secondaire, en raison à la fois des besoins de formation exprimés par les programmes d'études et des contraintes pratiques qui pèsent sur les enseignants. Dionne propose des balises pour créer et juger notamment de la validité et de la fidélité des évaluations en sciences dans son article « Un canevas d'item pour évaluer la compétence d'investigation scientifique en laboratoire », une démarche qui pourrait inspirer des chercheurs qui s'intéressent à l'évaluation des compétences dans d'autres disciplines scolaires.

Alors que Randall et associés évaluent l'enseignement de l'éducation physique, Monfette et Grenier s'intéressent au rôle des enseignants associés. Les enseignants avec un fort sentiment d'efficacité personnel (SEP) tendent à s'engager et à persévérer davantage dans la profession. Or, le SEP se développe dès la formation à l'enseignement, notamment dans les stages de formation en milieu scolaire, mais on ignore comment les enseignants associés contribuent à son développement. Pour mieux connaitre les rôles que les enseignants associés s'attribuent dans ce processus, l'auteur a analysé les propos recueillis lors d'entretiens semi-dirigés. Selon Monfette et Grenier, ces enseignants associés s'attribuent une influence sur quatre sources de développement du SEP, soit l'offre d'occasions d'auto-développement, l'échange d'idées, l'établissement de bonnes relations et la transmission de savoirs.

Enfin, un dernier article en français éclaire la situation peu connue des étudiants en formation à l'enseignement professionnel. Les étudiants inscrits dans ces programmes sont surtout recrutés dans les milieux de pratique : boucherie, menuiserie, coiffure, etc. La plupart d'entre eux n'ont pas une formation universitaire (notamment parce que leur spécialité disciplinaire est rarement enseignée à l'université), suivent des cours à temps partiel et ne détiennent pas de tâche d'enseignement. Tardif et Descheneaux, dans leur article, ont entrepris de décrire les grandes tendances du parcours socioprofessionnel des individus en empruntant notamment à Bourdieu un appareil théorique qui

permet d'éclairer les choix et stratégies de ces acteurs sociaux, ainsi que les intérêts et contraintes qui expliquent ces choix et stratégies.

Whitley pose un regard différent sur la manière dont il est possible de supporter les étudiants autochtones pour faciliter leur réussite. Tout d'abord, elle situe sa recherche au sein des approches conceptuelles autochtones contemporaines, puis suggère le modèle bioécologique de Bronfenbrenner comme moyen de créer des interactions soutenant le succès académique. Effectuées dans le nord-ouest de l'Ontario, les recherches de Whitley se distinguent par leur souci d'obtenir le point de vue des jeunes autochtones et de leurs enseignants. Les recommandations proposées par le chercheur ne sont pas surprenantes : miser sur les forces de l'élève, développer des programmes signifiants, aider les étudiants à comprendre le lien entre l'éducation et leur carrière future et soutenir les enseignants. Cependant, plus qu'une pertinence culturelle, les étudiants recherchent une éducation qui leur offre des choix et répond à leurs intérêts, voire un enseignement prodigué en langue autochtone. Les enseignants ont identifié le besoin de s'éloigner des «recettes» afin de cibler plus rapidement les intérêts et besoins des étudiants.

S'inscrivant dans un contexte américain, mais tout à fait applicables à plusieurs milieux dans le monde, les recherches de Walker ciblent les facteurs influençant la sous-performance scolaire des garçons au secondaire. Par ce projet de recherche, Walker dévoile une facette méconnue, mais particulièrement importante, de ce phénomène. Elle met en lumière une forme de résistance silencieuse, mais puissante, manifestée par les garçons ayant participé à son étude, en réaction à un programme en grande partie déconnecté de et peu adapté à leurs besoins et aspirations. De manière surprenante, ceux-ci ont développé une identité de «Beta Boy», choisissant de se désinvestir de leurs travaux scolaires, mais réussissant les examens normalisés. Fait intéressant, ces jeunes hommes perçoivent la tâche académique actuelle comme trop peu stimulante pour y mettre les efforts. Les recherches de Walker soulèvent des questions fondamentales en ce qui a trait à l'arrimage des programmes à la vie des étudiants et aident à comprendre les réponses complexes de ceux-ci face à cette problématique.

L'article proposé par Hamden offre un éclairage sur le potentiel de pratiques éducationnelles adaptées à la culture – au sein d'une économie du savoir en constant changement – dans les universités d'Arabie Saoudite. S'intéressant aux inquiétudes relatives à la prédominance d'enseignants non-saoudiens dans les universités privées, elle a effectué des entrevues avec sept enseignants masculins et féminins travaillant à l'éducation supérieure. Ce faisant, elle cherchait à comprendre de quelle manière ceux-ci structurent leurs approches d'enseignement et d'apprentissage pour l'environnement académique saoudien. Hamden propose la pédagogie adaptée à la culture comme un modèle pouvant orienter les enseignants lorsque ceux-ci doivent relever le défi d'utiliser les

approches constructivistes dans le contexte de l'Arabie Saoudite ou encore arrimer leurs hypothèses et croyances personnelles aux attentes de leurs étudiants saoudiens. L'étude montre l'utilité de la pédagogie adaptée à la culture et suggère des pistes pour l'appliquer dans le contexte de l'Arabie Saoudite.

TSW, AA et MAE

A NATIONAL STUDY OF TEACHING AND ASSESSING WRITING IN CANADIAN MIDDLE GRADES CLASSROOMS[1,2]

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JILL McCLAY *University of Alberta*

ABSTRACT. This article reports comprehensive findings from a national study of the teaching and assessment of writing in classrooms across ten Canadian provinces and two of three territories. Through interviews with 216 grade 4-8 teachers and observations and interviews in 22 classrooms (1 to 3 classrooms in each province), we gathered information about participating middle-grade teachers' goals, and the practices and resources (including computers and multimedia, parents and community resources) that they use to teach and assess writing. The strengths and challenges that they identify in teaching writing and assessing writing, and the people who have most greatly influenced their writing instruction provide additional information on which we base implications for teacher education and professional development initiatives.

UNE ÉTUDE NATIONALE DE L'ENSEIGNEMENT ET DE L'ÉVALUATION DE L'ÉCRITURE DANS LES CLASSES INTERMÉDIAIRES AU CANADA

RÉSUMÉ. Cet article présente les résultats exhaustifs d'une étude nationale portant sur l'enseignement et l'évaluation de l'écriture dans les classes des dix provinces canadiennes et de deux des trois territoires. Des entrevues auprès de 216 enseignants de 4e année à secondaire 2 ainsi que des observations et des entrevues dans 22 classes (1 à 3 classes dans chacune des provinces) ont été réalisées. Ce faisant, nous avons accumulé des informations auprès des enseignants des écoles intermédiaires participant sur les objectifs, les pratiques et les ressources (incluant les ordinateurs et autres technologies ainsi que les parents et les ressources communautaires) que ceux-ci utilisent pour enseigner et évaluer l'écriture. Les forces et les défis identifiés par les participants en ce qui a trait à leur enseignement et évaluation de l'écriture — et les personnes ayant le plus influencé leur pratique d'enseignement de l'écriture — sont des éléments d'informations supplémentaires sur lesquels nous nous appuyons pour formuler certaines implications pour les initiatives de formation et de développement professionnel des enseignants.

Writing has long been viewed as a core competency for school success, as it is both a means of learning and a way of demonstrating learning. Research through many decades has shown that writing supports and deepens students' learning of concepts across the curriculum (Bangert-Drowns, Hurley, & Wilkinson, 2004). In addition, writing has been an ever-present tool for assessing students' learning (Graham, 2006). Despite the potentially significant role of writing, students do minimal amounts of extended writing in language arts and even less in other subject areas (Applebee & Langer, 2009). Their teachers receive "a token amount of training in the teaching of writing, whether in their pre-service preparation or in professional development workshops" (Alliance for Excellent Education, 2007, p. 3). As a consequence of this inattention to a basic and important aspect of literacy education, many students entering the work world lack the writing proficiency required by their jobs and their employers spend billions of dollars on programs to develop their writing competencies (National Commission on Writing for America's Families, Schools and Colleges, 2004).

In the contemporary global economy and social world, written communication is increasingly important (Brandt, 2005). As the knowledge economy expands, many public and private businesses and organizations are seeking employees with expertise in "transforming complex organizational histories and interests, needs, and constraints into textual form" (Brandt, 2005, p. 176). With the development and popularization of digital forms of publication, young people and adults alike find audiences (known and unknown) and social connection through their online composition.

Given the essential role that writing plays in education, work and social contexts, it is important for researchers, policy-makers and teacher educators to place greater attention on the teaching of writing. In the United States, policy-makers have called for reforms in the teaching of writing to address the need for teachers to devote more time to teaching writing, make greater use of standards to assess writing, and incorporate technology to a greater degree in their writing instruction (National Commission on Writing in American Schools and Colleges, 2003). In addition, researchers have conducted large-scale research studies of writing instructional practices at the high school level (Applebee & Langer, 2009, 2011; Kiuhara, Graham & Hawken, 2009) and elementary level (Cutler & Graham, 2008; Gilbert & Graham, 2010). The majority of teachers surveyed in these studies used evidence-based practices (e.g., modeling), as categorized by the authors in their meta-analysis of writing research, at least several times a year, although more than half did not use these practices on a regular basis. Approximately half of these teachers provided opportunities for students to use computers during writing classes. Applebee and Langer's (2011) survey of exemplary middle and high school English, math, social studies, and science classrooms in five states showed

that, in comparison to results of a similar survey conducted in 1979, test preparation now plays a large role in the amount of time that teachers spend on writing instruction.

In Canada, however, similar surveys of classroom writing instruction have not been conducted. Prior to our current study, the only comprehensive national data on classroom writing practices in Canada came from a study of middle-grade and high school teachers' responses to the teacher questionnaire component of the 2002 School Achievement Indicators Program (SAIP), a national writing test for 13- and 16-year old Canadian students (Hunter, Mayenga & Gambell, 2006). Analysis of the teachers' questionnaire responses showed that teachers rewarded students' effort as well as their achievement when grading student writing. Teachers were more likely to provide feedback on writing after compositions were submitted for grading, than to provide ongoing feedback. In terms of writing instructional approaches, approximately one-third of surveyed teachers presented their students with models of good writing to show what was expected in their writing. Students engaged in collaborative writing in 29% of teachers' classrooms.

Our survey of teachers across Canada's 10 provinces and two of three territories, conducted through interviews with 216 teachers from grades 4 to 8, provides a needed reference point for further research on writing pedagogy and assessment. Canadian classroom contexts have much in common with American contexts, but assumptions about what happens in Canadian classrooms should not be made based on surveys of American classrooms. It is important for Canadian educators, researchers and policy-makers to base teaching, research and policy decisions on current Canadian data.

We have previously published discussions of specific pieces of the survey, such as the role of parents and communities to support classroom writing instruction (McClay, Peterson & Nixon, 2012), assumptions underpinning instructional writing practices using digital technology and multimedia (Peterson & McClay, 2012), issues in teaching writing in rural Canadian classrooms (Peterson, 2011), and ways in which teachers assess and provide feedback to students on their writing (Peterson & McClay, 2010). In addition, two papers have been published reporting on our observations in 1-3 classrooms in each of the 10 provinces; one focusing on teaching practices observed (Peterson, 2013), and the other on teachers' use of digital technology and multimedia (McClay & Peterson, 2013).

In this article, we present the findings from our national study of writing instruction and assessment in Canadian classrooms in their entirety, including findings that have not previously been published. The following research questions framed our study:

1. What are teachers' goals, and what practices and resources, including digital technology and multimedia, do teachers use to teach and assess writing in grades 4-8 classrooms across Canada?
2. What do teachers identify as the strengths and challenges that they face in teaching writing and who has most greatly influenced their writing instruction and assessment?

Following a brief background of policy and curriculum characteristics regarding writing instruction across Canada, we present our research methods and findings. We conclude by summarizing what we have found in answer to the two research questions.

BACKGROUND: CANADIAN CONTEXTS FOR WRITING CURRICULA AND ACHIEVEMENT TESTS

Because education is a provincial / territorial responsibility in Canada, K-12 curricula are developed by departments or ministries of education in each province and territory. The four Atlantic provinces (Newfoundland and Labrador, Nova Scotia, New Brunswick and Prince Edward Island) have a common curriculum developed in 1996. The Northwest Territories and the other six provinces have their own curricula, developed between 1996 and 2009. The Yukon Territory uses the British Columbia curriculum, developed in 2006. All of the writing curricula across Canada recognize the integral role of technology in formal and informal communication, mandating the use of digital technology and multimedia to compose texts.

Large-scale achievement tests are also the responsibility of each province's Ministry / Department of Education. The provincial achievement tests that have an impact on teachers and students participating in our research are written by grade 6 students in eight of the provinces and territories. In British Columbia and New Brunswick the testing occurs in grade 7 and in Saskatchewan, the testing occurs in grades 5 and 8. All the tests include composition, as well as reading passages. Students have time to talk with peers before writing in four provinces and two territories. Students are encouraged to plan, draft, revise, and edit their writing. Students are allotted two hours to write the exams in most provinces, with exceptions in British Columbia (90 minutes), Quebec (three hours), and Manitoba (portfolio assessment carried out over months in the classroom).

There is one large-scale national achievement test, Pan-Canadian Assessment Program (PCAP), which replaced the Student Achievement Indicators Program (SAIP), in 2007. The tests assess 13 and 16 year old students' reading, writing, mathematics and science. One subject is assessed each year or more recently, every three years. Writing was last assessed as a SAIP test in 2002. At that time, approximately 60% of 16-year olds reached the grade level expectations or beyond and approximately 40% of 13-year olds reached this level.

RESEARCH METHODS

The research proceeded in a two-phase structure: in Phase 1, we conducted telephone interviews with 216 middle grades teachers across the country, and in Phase 2, we observed and interviewed 21 of the initial 216 participants and visited their classrooms.

Phase 1: Telephone interviews: Wanting to provide a broader picture than is possible with observational research, but still capture the particularities of each teacher's classroom and practices, we used conversational interviews (averaging 35-40 minutes in length) with 216 grades 4-8 teachers (162 female and 54 male) across the country. These interviews were conducted by four research assistants and one of the researchers. Almost half of participating teachers (48%) had 15 or more years of teaching experience. Fourteen percent had less than 5 years of experience, 38% had 6-14 years teaching experience. (See Table 1 for breakdown of teachers' grade levels.)

TABLE 1. *Numbers of participating teachers at each grade level (*N = *216)*

Grade Level	Number of Participating Teachers
Grade 4	38
Grade 5	26
Grade 6	27
Grade 7	14
Grade 8	30
Grades 4-6	40
Grades 7-8	40
Grades 1-8	1

We randomly selected four school districts — two rural and two urban wherever possible — in each province and then randomly selected three to six schools within each district, arriving at a total of 152 schools. Sixty percent of participating teachers taught in urban or suburban schools and 40% taught in rural schools. We selected the four school districts based on their location in the province, attempting to have one school from the northern part of the province, two from the central part of the province (one more easterly and another more westerly) and one from the southern part of the province. We

interviewed between 20 and 23 teachers from each province, with the exception of Quebec, where we interviewed 17 teachers, the small province of Prince Edward Island, where we interviewed 14 teachers, and the two territories, where we interviewed six from the Northwest Territories and two teachers from the Yukon Territory. Our sample is smaller in Quebec because there are only nine English school districts in the province and the Anglophone population is approximately 600,000 within an overall Quebec population of just under 8 million. Our sample size was smaller in Prince Edward Island and the two territories because of their low overall population numbers (less than 150,000 in PEI, and less than 50,000 people in each of the two territories) (Statistics Canada, 2012). In addition, our sample was influenced by the number of teachers that agreed to participate.

After gaining ethics approval from a randomly-selected school district, we contacted the principals of the randomly-selected schools and requested the names of grades 4-8 teachers who were teaching writing. We then telephoned the teachers at school, one-by-one, to invite their participation, seeking a range of grade levels and a balance of female and male teachers. The principals did not know which teachers we contacted from the lists that they gave us. During the recruitment call we arranged a convenient time to call the teachers who agreed to participate in the interviews.

Interview questions are found in Appendix A. The interviews were recorded with teachers' consent. The recorded interviews were transcribed and then imported into Excel 2007. We wrote macros in the Excel program that allowed us to apply multiple codes to each of the responses. Each teacher's response to each question was coded separately. We did not collapse responses across a number of questions. We developed a preliminary code book for the categories of responses for each of the questions using inductive analysis (Cresswell, 1998; Glaser, 1998) of 13 transcripts. We conducted four inter-rater reliability exercises with an additional 5 transcripts each time. Improving each time, the accuracy rates went from 74%, to 76%, to 83% and finally to 89% inter-rater agreement. The coders discussed discrepant interpretations of the data in order to come to common interpretations of the 28 transcripts chosen for the reliability exercises.

Phase 2: Classroom visits: To contextualize and deepen our interview data, the two researchers visited 21 classrooms from the sample of 216 teachers who had taken part in the telephone interviews. Our selection of Phase II teachers was based on their location, as we attempted to include at least one teacher per province and a mix of rural and urban teachers. There were one to three classroom visits in each of the 10 provinces: three in each of Newfoundland and Labrador, New Brunswick, Ontario, and Manitoba, two in Alberta, Saskatchewan and British Columbia, and one each in Prince Edward Island, Nova Scotia and Quebec. The recruitment process for Phase 2 was hampered in

Prince Edward Island and Quebec because fewer teachers took part in Phase 1. We also found that many Phase I participants had moved on to consultant or administrative positions and were no longer teaching writing. Fifteen teachers were female and six were male. Twelve teachers taught in urban schools and nine taught in rural schools. Eleven teachers taught intermediate grades (7-8), and 10 teachers taught grades 4-6. In terms of teaching experience, two teachers had taught for less than 5 years at the time of the classroom visits, eight teachers had taught for 6-10 years, five for 11-20 years and six for more than 20 years.

Data sources for the visits to classrooms of 21 of the 216 participating teachers included field notes of observations in each teacher's classroom during two to four writing class periods, artifacts (lesson plans and student materials used in the learning activities) and audio-recorded 20-minute interviews with the teachers to gain a deeper understanding of the practices and perspectives that they had talked about in the telephone interviews. With the goal of contextualizing teachers' telephone interview responses, our analysis involved identifying concrete classroom examples of the interview findings.

TEACHING AND ASSESSING WRITING IN PARTICIPATING MIDDLE-GRADES CLASSROOMS

Goals for students

As shown in Table 2, across the grades, greater numbers of participating teachers said that the most important goals in their writing instruction (as identified in responses to interview question 2) were for students to enjoy writing (62%) and be able to communicate effectively through writing (43.1%). A grade 4 Saskatchewan teacher expressed a typical response that focused on affective qualities: "I want students not to be scared to take chances; be creative and feel comfortable."

As Table 2 shows, almost half of participating teachers across the grades thought it was important to develop students' competence in using various genres for a range of purposes and a variety of audiences. Underscoring the need for students to recognize the purpose of written texts, a male grade 4 teacher from Quebec said, "I want students to see the usefulness in the writing of different forms. For instance, we do letter writing, poetry, movie script writing, and radio plays. I want students to have a chance to write all different kinds of texts."

When talking about the goal of using literary elements and attending to details, grades 4-6 teachers identified narrative literary elements and grades 7-8 teachers identified elements of essays. For example, a grade 5 Newfoundland teacher said, "I want students to be able to draw their readers in; to get their attention so that they want to read the rest of the story", whereas a grade 7

Prince Edward Island teacher wanted her students to "be able to defend an argument; to create a good paragraph or a good essay where they get their point across and prove it." At upper and lower grade levels, approximately 20% of teachers identified development of convention skills and the ability to use literary elements as important goals for their writing instruction.

TABLE 2. *Teachers' goals for students' growth as writers (%)*

Goals	Grades 4-6 N=132	Grades 7-8 N=84
Affective engagement and personal development	60.6	64.3
Effective communication of ideas	46.2	38.1
Write for a variety of purposes and audiences	43.2	46.4
Put effort into planning, drafting, revising and editing	27.3	27.4
Use literary elements and attend to details	22.7	14.3
Use writing conventions correctly	19.7	20.2
Succeed in provincial tests	10.6	13.1
Use digital technology and multi-media to compose	2.3	2.4

NOTE. Percentages do not add to 100 because teachers identified numerous goals.

Teaching practices

As shown in Table 3, responses to question 4 of the interview indicated that almost all teachers teach mini-lessons on various elements of writing, such as effective leads and organizing ideas within paragraphs. Providing time for feedback and revisions to the writing was a practice carried out in 88% of teachers' classrooms in a typical week. Teachers in grades 4 to 6 (50.8%) were more likely than grades 7 and 8 teachers (20.4%) to provide opportunities for students to publish their writing and read it aloud to peers in Author's Chair (Graves & Hansen, 1983).

Thirty-three percent of grades 4-6 teachers and 27.4% of grades 7-8 teachers described typical writing classes using the term *writers' workshop* and less than 25% of teachers said that they provided prompts with topics on which all students were to write.

TABLE 3. *Teaching practices (%)*

Teaching Practice	Grades 4-6 N=132	Grades 7-8 N=84
Mini-lessons	97.8	91.2
Write and revise using teacher and peer feedback	90.2	85.7
Author's share/publish writing	50.8	27.4
Writers' workshop	33.3	27.4
Writing prompts	18.2	22.6

Observations of teachers participating in Phase 2 provided specific examples of how teachers carried out writers' workshop in their classrooms. These teachers provided students with varying amounts of choice in determining the topic, purpose, audience and genre of their writing. Four teachers encouraged students to generate ideas in writers' notebooks (Fletcher, 1996) and did not assign topics at all. Other teachers provided a selection of artifacts and topics to help students generate ideas for their writing. In a grade 7 class, for example, students chose one photograph from a large stack and used the teacher's suggestions (e.g., thinking about the character's age, family background and history, as well as the conflict the person may be facing and what he or she might be thinking) to compose a story or poem of any genre or form. Teachers observed in Phase 2 also used current world and community events and content area topics as starting points for writing. Some of the examples showed community-school connections. In one rural Newfoundland school, students contributed to a poetry book and to a cookbook that were sold to community members to raise funds for improving the school playground. The book included favorite family recipes and poetry written by the children from each family. In a rural grade 7/8 Manitoba class, students interviewed senior citizens in the community and then used the interview responses to write biographies to give to the interviewees. The three participating grades 7 and 8 teachers in New Brunswick provided time for students to draft and revise speeches for school-wide, school district and provincial competitions.

Student talk. Participating teachers' responses to question 8 of the interview showed that students were encouraged to talk about their writing with peers in 91.7% of grades 4-6 teachers' classrooms and 98.8% of grades 7-8 teachers' classrooms. Much of the talk was formally scheduled for assigned writing where students were encouraged to brainstorm ideas for their writing. Teachers also

gave students the choice to engage in peer conferences. Many teachers felt that the independent writing time should be quiet, as a grade 7 Northwest Territories teacher explained:

> For the major writing assignments the expectation is to write quietly and share later. I encourage all my students to be prepared to share what they write with the class. They also have the opportunity to discuss their writing in peer editing sessions.

Resources for teaching

Classroom materials. To implement their writing programs, 90.0% of grades 4-6 teachers and 85.7% of grades 7-8 teachers levels indicated that they used published materials (see Table 3 for a breakdown of the various materials). The *Six Plus One Traits* (Spandel, 2005) was the most popular. When asked about the merits and drawbacks of the published materials, approximately 70% of teachers at all grade levels identified positive contributions of the materials. Within this group, teachers with less experience appreciated the structure provided by the materials. The majority of teachers within this group agreed with a grade 5 Alberta teacher: "I wouldn't say that they change my instruction. They just give me new ideas." Teachers talked about the exemplars, rubrics and recommendations for literature selections that they found helpful in the various resources they used.

The 30% of teachers who identified drawbacks found that the student materials were often beyond their students' comprehension levels and were not interesting to students. The predominant drawback of published programs, however, was their prescriptive nature. As a grade 5 Prince Edward Island teacher, explained, "I do not like working with lock-step programs where you have to [teach] in a certain order."

In addition, approximately one-third of all teachers used materials found on the internet and created their own materials. Phase 2 observations also showed that teachers used internet texts for mini-lessons. A grade 7/8 Manitoba teacher created a PowerPoint of photographs illustrating a story she had written about a tiny abandoned house on a popularly-used highway and a grade 7 Nova Scotia teacher used slam poetry videos from YouTube as sample speeches for students to assess using the scoring criteria for their assigned speeches.

Children's and young adult literature, professional development materials, educational journals, curriculum guides, and school district resources also supported participating teachers' writing instruction.

Computers and multimedia. Slightly more than 76% of grades 7-8 teachers and 78% of grades 4-6 teachers said that they use computers to teach writing on a regular basis. Eighteen percent of grades 7-8 teachers and 13.6 percent of grades 4-6 teachers require word processed final copies. Whether word-processed submissions are required or not, in 15.9% of grades 4-6 teachers' classrooms

and 36.6% of grades 7-8 teachers' classrooms, students hand in final written assignments that have been word processed. Teachers told us that lack of access often prevented students from writing all drafts on computers. A grade 5 teacher from New Brunswick identified the access issue in her school:

> We have a computer lab and I try to sign them up once a week to get in. And we don't have time to type them all, but we usually type probably one a month. I would say, we get in and get one finished.

TABLE 4. *Resources used to teach writing (%)*

Resources (either directly used by students are serving as the sources for creating student materials)	Grades 4-6 N=132	Grades 7-8 N=84
Published teaching resources	90.9	85.7
Internet resources	32.6	35.7
Teacher-made materials	34.1	27.4
Children's and young adult literature	32.6	25.0
Materials from workshops and other professional development opportunities	26.5	21.4
Educational journals	18.2	21.4
Curriculum guides	25.8	15.5
School district resources	19.7	22.6
Workbooks, exercise books	12.1	14.3
Multi-media: movies music, TV, screenplays	4.5	10.7
Materials from graduate courses, additional qualifications courses	3.8	2.3

NOTE. Percentages do not add to 100 because teachers identified numerous resources.

Teachers who provided opportunities for students to use computers only for the good copy explained that access was not the only factor precluding the use of computers to compose drafts as well as good copies. A British Columbia grade 8 teacher explained that "students want to use computers for neatness, but are not able to use spell check or grammar check features. They can't tell

when errors are or are not being picked up by the computer. When using tools like PowerPoint, frequently the content suffers while students master the use of the tool." However, a few teachers, such as a grade 7/8 Ontario teacher felt that "If students draft on the computer, they can recognize spelling errors faster because it's more text-like."

Students used digital technology to create websites and webcasts, to communicate via email, and to participate in blogs in just over 10% of participating teachers' classrooms. Teachers participating in Phase 2 gave examples of podcasts and videos of speeches and Claymation cartoon movies that their students had created and uploaded to the school website.

Parents and community resources. Mindful that parental involvement in schooling is an important underpinning of success in school literacy (Gill & Schlossman, 2003), we asked about parental and community support of the teachers' writing programs as part of the issue of resources available (interview questions 1 and 7). As shown in Table 5, 81.8% of participating grades 4-6 teachers and 76.1% of grades 7-8 teachers said that parents of their students supported their children's writing. Teachers discussed parental involvement both in general and specific terms: in general terms as support for schoolwork and the school (e.g., making sure students completed their assignments) and in specific terms as related to teachers' writing programs (e.g., providing response for a draft of writing in progress). Approximately half of all participating teachers indicated that community resources—generally author visits, writing competitions, and young author conferences—figured in their teaching of writing.

TABLE 5. *Parent and community resources (%)*

	Grades 4-6 *N*=132	Grades 7-8 *N*=84
Parents help children at home with their writing	81.8	76.1
Teacher draws upon community resources to teach writing	54.5	53.5

Class time for writing

As shown in Table 6 approximately 61% of participating teachers across the grades responded to interview question 3 by saying that students spent 2-4 hours per week writing or involved in writers' workshop in language arts classes. This is close to the one-hour per day recommended by the National Commission on Writing (2003). The next largest group of teachers (22% of grades 4-6 teachers and 29.7% of grades 7-8 teachers) provided one hour or less per week for writing. Only 10% of participating grades 4-6 teachers and

none of the grades 7-8 teachers scheduled at least an hour daily. A few teachers (8% of grades 7-8 teachers and 4.9% of grades 4-6 teachers) said that the amount of time varied and did not give hourly estimates.

TABLE 6. *Time allocated to writing (%)*

	Grades 4-6 teachers *N*=132	Grades 7-8 teachers *N*=84
1 hour or less/week	22.0	29.7
2-4 hours/week	61.7	60.8
At least an hour daily	10.0	0.0
Varies	4.9	8.0

Writing assignments

In their responses to interview question 6, participating teachers said that they assigned creative writing (e.g., poetry, stories, plays) most frequently in language arts, and they assigned research reports / essays most frequently in the content areas (see Table 7). This trend occurred across the grades. In a comparison by grades, greater percentages of grades 4-6 teachers assigned creative and personal writing (e.g., journal, diary, friendly letters), and asked students to respond to texts (e.g., through aesthetic response, book reviews or answering questions about the text) and write to a picture prompt or story starter in language arts classes. Greater percentages of grades 7-8 teachers assigned research reports / essays, persuasive writing, sentences or paragraphs, and formal business writing (e.g., business letters, resumes, cover letters, applications). These grade level trends were fairly consistent across the content areas, as well.

Assessing and providing feedback on student writing

Participants indicated in their responses to interview questions 10 and 11 that they relied heavily on the provincial performance standards and rubrics in their writing assessment and when providing feedback to students on their writing. As shown in Table 8, grades 4-6 teachers (74.8%) were more likely to use provincial scoring guides and rubrics to provide feedback and to determine grades than were grades 7-8 teachers (49.4%). Our Phase 2 observations showed that the scoring guides / rubrics tended to be based on six traits of writing (Spandel, 2005): content / ideas, organization, voice, word choice, sentence fluency, conventions. Teachers across the grades were more likely to provide verbal feedback than written feedback. Self-assessment and portfolio

assessment were not frequently used forms of assessment (less than 20% of teachers identified these assessment practices across the grades). Peer feedback, however, was used in 97.8% of grades 4-6 teachers' classrooms and 88.1% of grades 7-8 teachers' classrooms. Teachers were divided as to how helpful peer feedback was to improving students' writing. A grade 4 teacher in Quebec described the merits of peer feedback:

> I think it has to do with audience and when the students are writing something for their audience of their peers and they know their peers are going to read it and be critiquing it, it may make them step up a level in their writing because they know that they can do better.

Eight of the 10 teachers who identified limitations to the value of peer feedback taught grades 4-6. They talked about peers not having the writing experience and competence to provide effective feedback.

TABLE 7. *Types of writing assigned (%)*

Type of Writing Assigned	Language Arts		Content Areas	
	Grades 4-6 N=132	Grades 7-8 N=84	Grades 4-6 N=132	Grades 7-8 N=84
Creative	93.9	84.5	19.7	9.5
Personal	83.3	61.9	31.8	17.9
Response to Text	54.5	52.3	31.8	25.0
Research Reports/Essays	46.2	54.8	55.3	28.6
Persuasive	32.5	47.6	5.3	8.3
Sentences/Paragraphs	27.3	36.9	9.8	8.3
Formal Business Writing	16.7	26.2	5.3	7.1
Writing to a Prompt	18.9	7.1	2.3	4.8

NOTE. Percentages do not add to 100 because teachers identified numerous assignments.

TABLE 8. *Teachers' feedback and assessment practices (%)*

Feedback and Assessment Practices	Grades 4-6 N=132	Grades 7-8 N=84
Peer feedback	97.8	88.1
Teachers' verbal feedback	86.4	82.1
Rubrics/scoring guides	74.8	49.4
Teachers' written feedback	65.2	66.7
Portfolios	16.7	13.1
Students' self-assessment	14.4	8.3

NOTE. Percentages do not add to 100 because teachers identified numerous feedback and assessment practices.

TEACHERS' IDENTIFIED STRENGTHS AND AREAS FOR IMPROVEMENT IN THEIR TEACHING

As Table 9 indicates, the grades 4-6 teachers' responses to interview questions 12 and 13 were more likely than grades 7-8 teachers' responses to identify teaching practices, such as modeling, thinking aloud, providing examples, providing feedback, teaching genres / forms, and using literature to teach writing, as their strengths. Combined, these specific practices were cited as strengths by 78.8% of grades 4-6 teachers and 58.2% of grades 7-8 teachers.

Teachers provided many examples of how they were successful at motivating students and supporting them to carry out all stages of the writing process. Teachers' own enthusiasm for writing was also considered a teaching strength, as expressed by a Nova Scotia grade 6 teacher: "I think it is my acceptance of children writing what they enjoy to write, and my love for writing. I really enjoy the written word. I think my enthusiasm for it rubs off on the students."

Although more than one-third of participating teachers said that they provided sufficient time for students to write and receive feedback from their teachers, 65.9% of grades 4-6 teachers and 58.3% of grades 7-8 teachers were also concerned about the need to provide more time for students to write and to meet with their teacher to talk about their writing. Approximately 10% of teachers talked about wanting to find more time for one-on-one conferencing with students.

TABLE 9. *Teachers' identification of their writing instruction strengths and needs (%)*

	Teaching Strengths		Desired Changes	
	Gr. 4-6 N=132	Gr. 7-8 N=84	Gr. 4-6 N=132	Gr. 7-8 N=84
Instilling a love of writing	43.2	36.9	3.0	11.9
Providing time to write & get feedback	38.0	34.5	65.9	58.3
Modeling/thinking aloud with examples	26.5	19.0	7.6	2.4
Providing feedback	12.9	10.7	10.6	10.7
Providing choice	10.6	8.3	1.5	0.0
Teaching genres/forms	8.3	3.6	8.3	10.7
Using literature to teach writing	7.6	0.0	0.8	0.0
Using specific criteria/performance standards	6.8	7.1	3.0	2.4
Using writers' workshop	6.1	9.5	6.1	4.8
Using technology to teach writing	6.0	1.2	13.6	14.2
Teaching writing conventions	1.5	3.6	9.1	10.7

NOTE. Percentages do not add to 100 because teachers identified numerous strengths and challenges.

In regard to specific teaching practices, participating teachers primarily wanted to become better at providing feedback to students and finding meaningful ways to teach a variety of genres. A grade 4 Northwest Territories teacher, for example, said, "I found that one year I was really big on poetry and another year I was really big on narrative. Last year, I spent a lot of time on non-fiction. It's nice if you can touch on everything, but in one year, I find I can't really do all the genres justice." Very few participating teachers identified their use of technology as a teaching strength. Approximately 10% noted that this is an area needing improvement.

Influences and professional preparation for teaching writing

Colleagues were identified most frequently as having influenced the writing instruction of participating teachers (see Table 10) in their responses to interview question 14. A grade 5 teacher from Newfoundland and Labrador explained: "A teacher in my school was really into readers / writers workshop. Often I would go in to see how she was running her classroom. I'd take notes of charts she would have on the walls, and that really influenced me." Authors of resources for teaching writing, such as Nancie Atwell, Lucy McCormick Calkins, and Ruth Culham, and of children's / young adult literature were also highly influential.

TABLE 10. People who have influenced teachers' writing instruction (percentage of teachers)

Influential People	Grades 4-6 teachers N=132	Grades 7-8 teachers N=84
Colleagues	26.5	28.6
Authors of resources for teaching writing	26.5	13.6
Courses, university professors/instructors	22.7	22.6
School/district/provincial in-service or consultant	21.2	20.2
Teacher who taught participating teacher	16.7	15.5

NOTE. Percentages do not add to 100 because teachers identified numerous influential people.

Initial teacher education courses and in-service opportunities, such as workshops, conferences and work with consultants, were also highly influential. Participating teachers identified university professors / instructors who instilled a desire to write, engaging students in reading and writing, and providing feedback on their writing, and they indicated that these university people had helped to improve their teaching practices in composition instruction. The role of teachers in fostering a love of writing was highlighted by approximately 16% of participating teachers, who identified a former teacher as being influential to who they were as writing teachers.

The majority of teachers reported that they do some writing outside of school, though 34% of grades 4-6 and 27% of grades 7-8 teachers indicated that they do not. Some writing was professional (written by 25.5% of grades 4-6 teachers and 34.5% of grades 7-8 teachers) and other writing was personal, taking the form of journals, diaries and creative writing such as narratives (written by 26%

of teachers in both grade groups). A further 16% of grades 4-6 teachers and 11.9% of grades 7-8 teachers identified correspondence (usually email and other electronic forms) as the type of writing that they engaged in outside school.

DISCUSSION

Teachers' goals, practices and resources for teaching and assessing writing

Like the teachers of 13- and 16-year old students participating in Canada's 2002 SAIP (Hunter, Mayenga, & Gambell, 2006), participating teachers in this research were mindful of the importance of affective goals, which the National Commission on Writing (2003) identified as important to students' writing development. Their goals are reflected in research on motivation and writing showing that positive self-image as writers is highly correlated with writing achievement (Boscolo & Gelati, 2007).

To accomplish these goals, participating teachers selected and modified resources, (commercial and internet resources, as well as children's and young adult literature) to meet students' needs. Participating teachers' teaching practices included direct instruction involving the use of modeling and exemplars, as did middle-grade and high school teachers whose SAIP questionnaire responses were analyzed by Hunter, Mayenga and Gambell (2006). Such instruction is among the research-based best practices identified by Graham and Perin (2007).

In many respects, their writing instruction was consistent with a process approach / writers' workshop approach to teaching writing, as teachers provided time for student interaction; gave students choices in their writing; focused on personal writing, such as journals, response to literature, and personal narrative; and required multiple drafts (Graves, 2004; Pritchard & Honeycutt, 2006; Ray, 2001). Teachers also linked the reading of literature with writing tasks. This practice is based on research showing that "reading and writing are dependent upon common cognitive substrata of abilities (e.g., visual, phonological, and semantic systems or short- and long-term memory), and anything that improves these abilities may have implications for both reading and writing development" (Shanahan, 2006. p. 174).

Committed to the goals advocated by the National Commission on Writing (2003), 66% of participating teachers devoted at least 2-4 hours per week on writing or writers' workshop. Close to 30% of grades 7-8 teachers allocated less than one hour per week, however. In this respect, teaching practices were not consistent with best practices associated with a process approach to teaching writing, as students need time to carry out the thinking processes associated with composing: planning, goal setting, drafting, ongoing revision, and editing, drawing on their knowledge of the topic and of audience expectations. One to two hours per week are not sufficient to allow students to craft quality compositions and, in the process, develop as writers (Graves, 2004; Ray,

2001). According to Graves (2004), "Children need to write a minimum of three days out of five. Four or five days are ideal" (p. 91).

A notable difference between the results of our cross-Canada survey and that of Hunter, Mayenga and Gambell (2006) lies in teachers' perceptions of the role of feedback in teaching writing. Teachers in the previous study tended to provide feedback on students' final compositions. Middle-grade teachers in this study, however, were highly conscious of the importance of providing peer and teacher feedback during the writing process and of providing clear criteria for assessment. A primary goal in their feedback and assessment practices was enhancing students' motivation and self-esteem as writers. In these ways teachers followed what researchers recognize as effective practice (Nicol & Macfarlane-Dick, 2006).

Although teachers whose SAIP questionnaire responses were analyzed tended to assign independent writing over collaborative writing, teachers participating in our study painted a picture of their classrooms as places in which young writers talked to each other and to the teacher about their writing. Our observations confirmed an emphasis on productive, supportive talk. Given that oral language development and writing development are linked, and that social interaction contributes to students' writing and overall learning (Fisher, Myhill, Jones, & Larkin, 2010; Vygotsky, 1978), these practices are essential to supporting students' writing development. Through talking with peers and their teacher, students gain new perspectives and content for their writing, as well as a sense of social expectations, understandings, values, and perspectives that guide their topic choice and decisions about ways of communicating their ideas (Dyson, 2002).

Although participating teachers assigned few multi-media projects, they used computers more widely than was evident in previous research (Cutler & Graham, 2008; Laframboise & Klesius, 1993). Computers played a minor role in students' writing processes, however, as they were used primarily for the "good copy" of students' writing.

Teachers appreciated parental support for school work and achievement. Their views of parental ability to contribute more specific response or involvement with children's writing, however, varied according to their perception of the parental and community commitment to literacy and the English-language proficiency of the parents. Although few teachers spoke about actual positive involvement of parents or communities in their writing programs, those teachers who did offered exciting and rich examples of parental involvement as responders and audiences for their children's writing.

Strengths, challenges and influences on teachers' writing instruction and assessment

More than half of participating teachers said that they did some professional and / or personal writing outside of school. Many said that their enthusiasm for writing and abilities to motivate students to write, as well as their use of particular teaching strategies, were their strengths. These strengths are important to effective writing instruction, as teachers should "understand good writing and develop as writers themselves" (National Commission on Writing, 2003, p. 5).

In terms of challenges, as has been the case for teachers participating in previous research, lack of access to digital technology was a barrier to teachers' extensive use of technology to teach writing (An & Reigeluth, 2011). Teachers' views on the development of writing abilities were also a factor in their use of technology to teach writing, as many teachers appeared to assume that composing with pen and paper is a natural precursor to composing using computers in middle grades. Given that these assumptions have not been borne out by research (Goldberg, Russell & Cook, 2007), as composing on computers has been shown to result in improved writing quality and quantity, this is an area for future professional development initiatives. An additional challenge was the lack of time for providing one-on-one feedback to students. The importance of feedback on students' writing development has been well-documented in previous research (Black, Harrison, Lee, Marshall, & Wiliam, 2003; Graham, Harris, & Hebert, 2011; Nicol & MacFarlane-Dick, 2006; Peterson & McClay, 2010) and is another area to target for professional development.

Given that more than 25% of participating teachers identified colleagues as being most influential to their professional learning, it is clear that professional development initiatives should incorporate collaborative learning opportunities among teachers within schools and school districts. Local and provincial in-service consultants, facilitators of professional development sessions and professional resources have been as influential as university courses and instructors, indicating that a range of professional learning opportunities should be initiated to support teachers' writing instruction and assessment.

Contributions of this research

In conclusion, this study provides a Canadian perspective on the teaching and assessment of writing that has been heretofore absent in the literature. We are aware that teachers who agree to participate in research are not "typical" teachers and their self-reported data may not reflect actual practices. We went to great lengths to gather more in-depth information with interviews rather than surveys and with some classroom visits; however, we recognize limits on having full understanding of the teaching and learning contexts of participants. Indeed, even though the sample size of 216 teachers is relatively

large for interview research, it is important to be cautious when generalizing the results across the country. We also recognize that this research is time-sensitive (the end of the data collection period was in the 2011-2012 school year), as teachers' practices are changing, particularly with respect to the use of new technologies to teach writing. Despite these limitations, we believe that this study contributes useful and much-needed information about teaching and assessment practices in Canadian middle-school classrooms that can be used as a starting point for policy-making, teacher education and curriculum development in the field of writing.

NOTES

1. In every discussion and in every observation, we saw participating teachers' pride in their work, their appreciation of their students, and their commitment to providing the very best education possible for all the young people in their charge. We believe that the teaching of writing is tremendously complex, and we want to express our appreciation to the many teachers who allowed us to observe and talk with them about their teaching.
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APPENDIX A: TEACHER INTERVIEW QUESTIONS (TELEPHONE INTERVIEWS)

1. Talk about the community surrounding your school. Would you consider the school to be in an urban or rural community? How do you draw upon the people and resources in the community to teach writing?
2. What are your goals for your students as writers?
3. How much time do you schedule for teaching writing?
4. What happens in writing class in a typical week in your classroom?
5. What resources do you use when you teach writing? What do you see as the advantages / disadvantages of the program(s)?
6. What kinds of writing do you ask students to do in language arts? in other subjects?
7. What kinds of support do parents of your students give to their children in their writing?
8. Do you structure your writing classes so students talk to each other? How much talking do students do in your writing classes?
9. Do you use multimedia and computers in teaching writing? If so, how? Talk about some examples of ways your students use computers and multimedia at home. What percentage hand in printed-out work rather than hand-written work?
10. How do you give feedback to your students on their writing? How important do you feel this feedback is in helping students with their writing? What do you use to assess?
11. Do students give feedback to each other on their writing? How important do you feel this feedback is in helping students with their writing?
12. What do you feel are the strengths of your writing instruction?
13. What would you like to change about your writing instruction?
14. Who, or what, has influenced your writing instruction most?
15. Are you a writer, yourself, outside of school?

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A DESCRIPTIVE PROFILE OF PHYSICAL EDUCATION TEACHERS AND PROGRAMS IN ATLANTIC CANADA

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ABSTRACT. The purpose of this research was to investigate the extent to which quality physical education is currently being taught in Atlantic Canada. We used survey methods to generate descriptive data indicating: (a) the backgrounds of those who teach physical education and (b) what is being taught in physical education. Our findings suggest physical education is taught by a group of mostly-white teachers with varying qualifications, interests, and experiences in teaching the subject. Further, sport experiences tend to dominate the subject matter that students engage with, at the expense of dance and gymnastics. Although some physical education programs could arguably be classified as being of a sound quality according to the national subject association, we contend that more needs to be done to present the subject as a diverse enterprise, both in terms of who teaches and what is taught in physical education.

PROFIL DESCRIPTIF DES ENSEIGNANTS ET PROGRAMMES EN ÉDUCATION PHYSIQUE DANS LES PROVINCES MARITIMES AU CANADA

RÉSUMÉ. L'objectif de ce projet de recherche était d'explorer la qualité de l'enseignement prodigué en éducation physique dans les provinces maritimes au Canada. Pour ce faire, nous avons utilisé une méthodologie de sondage pour générer des données descriptives nous informant sur: (a) le profil des enseignants en éducation physique et (b) ce qui est enseigné en éducation physique. Nos résultats indiquent que l'éducation physique est enseignée par un groupe majoritairement formé de Blancs possédant une variété de qualifications, d'intérêts et d'expériences dans l'enseignement de la matière. De plus, le temps consacré par les élèves aux sports durant les cours prédomine, au détriment de la danse et de la gymnastique. Selon l'association nationale de l'enseignement en éducation physique, certains programmes en éducation physique peuvent sans doute être classés comme étant de qualité,. Cependant, nous soutenons que davantage peut être fait pour offrir une expérience en éducation physique diversifiée, à la fois en ce qui a trait au profil du corps enseignant, qu'à l'offre de contenu.

Since 2005, the annual Active Healthy Kids Canada (AHKC) report card has provided evidence-informed assessments of physical activity and physical education opportunities afforded to children and youth in Canada. A striking feature of the reports has been the overwhelming and consistently

negative evaluations of child and youth activity levels (in terms of moderate-to-vigorous physical activity). Assessments related to the quality of school-based physical education have been somewhat more positive, though they too have highlighted a less than ideal scenario. For example, in response to a slightly improved evaluation of physical education in 2012 (from a C− to a C), the AHKC (2012) report stated:

> This grade reflects a slight improvement in the quantity and quality of PE; however, generally speaking, less than half of elementary and middle schools in Canada report that their students are getting at least 150 minutes of PE per week as recommended by Physical and Health Education Canada [PHE Canada]. (p. 37)

In addition to addressing broad issues that span the country, the report cards have also provided important provincial and regional information that highlights contextual differences related to physical activity and physical education opportunities and experiences. For example, the 2012 report card indicated that of the five provinces whose children and youth achieved below the national average of steps taken daily (11,607 steps), the four lowest were in Atlantic Canada. A similar pattern is evident with respect to school-based physical education, which the AHKC report evaluates primarily according to instructional time. All four Atlantic provinces have physical education instructional time guidelines / requirements calling for 75-100 minutes per week for lower elementary school students (grades K-3), roughly equivalent to 5-7% of total school instructional time (AHKC, 2011). These instructional time guidelines are the lowest in the entire country. In comparison, the four Western provinces and three territories call for approximately 150 minutes per week, which is roughly equivalent to 10% of total school instructional time (AHKC, 2011). If physical education is a vehicle that can provide children and youth with the skills, knowledge, and attitudes to lead healthy lifestyles, these trends (low number of daily steps taken and low PE time) are certainly cause for alarm. This is perhaps emphasized even more when the general health of Atlantic Canadians is compared to the rest of the country. According to the Heart and Stroke Foundation (2010) and Statistics Canada (2013a), rates for overweight / obesity, diabetes, cancer, stroke, and heart attacks within the four Atlantic provinces are well above the national average. Given these observations, we were interested in finding out what is occurring in physical education in schools in the Atlantic provinces.

Notwithstanding the potential of daily physical education to have a positive impact upon children and youth, it must be clearly stated and understood that the goals of school physical education should be seen as being far broader than providing a means to address the obesity "epidemic" or inactivity crisis, or curing the health ills of children and youth in Canada. We do, however, believe that physical education can contribute to students' adoption of a healthy lifestyle, which can, in turn, impact upon their physical, social, and

emotional health well beyond graduation. As such, the potential positive impact that physical education can have on students' future wellbeing is at least partially dependent upon a high level of quality existing in the physical education programs that are in place.

According to PHE Canada (2013), a quality physical education program is "well-planned, taught by qualified and enthusiastic professionals, and offers a variety of learning opportunities to all students on a daily basis throughout the entire school year" (para. 1). To this we would also add that a quality program provides students with opportunities to explore subject matter in some degree of depth, in a positive and supportive environment, and in ways that enhance students' feelings of self-esteem. Despite the general agreement of the potential benefits of quality physical education programming, based on the findings of AHKC and other health agencies (e.g., Heart and Stroke Foundation, 2010; Statistics Canada, 2013a), we were concerned about the extent to which quality physical education programs were being provided to students in Atlantic Canada. At present, little research has examined physical education programs in the Atlantic region. Given the prevalence of obesity and inactivity levels in this part of the country and the recognition that quality physical education programming can, at least, be used as a tool to educate children and youth about how to lead a healthy lifestyle, the purpose of our research was to understand the landscape of physical education in schools in Atlantic Canada.

RELEVANT RESEARCH

Although little research has been specifically conducted on the state and status of physical education in Atlantic Canadian schools, several pertinent examples do exist that have informed our thinking about current challenges facing teachers in the region. For example, after noting a 60% reduction in the number of physical education specialist teachers from 1992-1996 in Anglophone Schools in New Brunswick, Tremblay, Pella, and Taylor (1996) administered a survey to principals and all grade 1-3 teachers seeking information on physical education instructional time, content taught, and perceived barriers to program implementation. Teachers reported providing, on average, just under 60 minutes of physical education per week while principals believed teachers were delivering upwards of 75 minutes per week (Tremblay et al.). The study also found that the majority of the time was spent playing games and participating in fitness-related activities with less than 20% of the time devoted to teaching fundamental skills. Both teachers and principals reported insufficient training, lack of professional development possibilities, and limited to no access to expertise as barriers to implementing quality physical education. Although a valuable contribution to the literature, Tremblay et al.'s study was limited to Anglophone New Brunswick and focused on responses gathered from elementary principals and generalist teachers of grades 1-3

only. As such, we have little understanding of the experiences and situations of teachers beyond grade 3. In addition, we acknowledge that New Brunswick has experienced many shifts in policy, curriculum documents, and practice since 1996; this may impact upon the relevance of these findings in today's educational climate.

In other parts of Canada, additional examples provide insight into the quality and quantity of physical education and serve as useful comparative cases. For example, Mandigo et al. (2004) surveyed a random selection of principals and teachers in Alberta. Of the 480 teacher questionnaires that were returned, approximately half of the participants classified themselves as physical education specialists. The majority of specialists further identified themselves as secondary teachers whereas the majority of non-specialists identified themselves as elementary teachers. A positive relationship was found between specialists teaching physical education and time devoted to physical education instruction. Specialist teachers also reported higher mean scores for feeling prepared to teach physical education, enjoyment with respect to teaching physical education, and confidence teaching physical education.

In Manitoba, Janzen et al. (2003) studied four elementary schools, finding that teachers in all four schools supported physical education, with teachers noting the positive effect participating in physical education classes had on their students' in-class performance. Also, having a designated physical education specialist resulted in lessons that focused on learning basic movement skills and social and emotional development in a safe, inclusive, and equitable environment. Although classroom teachers were genuinely concerned about the quality of physical education classes they were delivering, they reported a lack of knowledge and time to prepare as two challenges to delivering quality lessons.

Outside of Canada, Hardman and Marshall (2000a, 2000b) and Marshall and Hardman (2000) have reported the results of an international survey of the state and status of physical education collected from 126 countries and autonomous provinces / states. Their data noted a trend toward more physical education time allocated (in policy, yet not necessarily adhered to) in the lower grades with decreased amounts of time allocated in the higher grades (Hardman & Marshall, 2000a; Marshall & Hardman, 2000). Globally, it was common to have specialists at the secondary level and generalists at the elementary level. Canadian respondents indicated they were facing more severe funding cuts than those occurring in most other nations. Furthermore, 87% of Canadian respondents reported inadequate facilities and equipment; this was almost double the percentage reported globally (Hardman & Marshall, 2000b; Marshall & Hardman, 2000). With respect to the curriculum, the researchers noted that many countries, including Canada, were attempting to improve their physical education programs by focusing on movement and

health for all students as opposed to catering to elite level athletes (Hardman & Marshall, 2000b; Marshall & Hardman, 2000).

Despite the general sense of the state of physical education that these studies provide, contextual differences in time and place render their ability to inform what is going on "here and now" in Atlantic Canada weak at best. The paucity of research related to the physical education programs that are delivered in Atlantic Canada means that little, if anything, is known about those responsible for teaching physical education and the daily challenges they face in order to provide a quality physical education experience for all students. Understanding these issues is important if the students of Atlantic Canada are to be provided with the tools to enable them to lead healthy active lifestyles throughout their childhood, adolescence, and beyond. As such, this research attempts to address this dearth of knowledge and to highlight findings that influence the quality of physical education programs in our region. The overall question guiding this research was: To what extent are teachers in Atlantic Canada teaching quality physical education programs? We sought to find out: (1) Who is teaching physical education in Atlantic Canada?; (2) What is being taught?

METHODS

Study design

The primary purpose of this research was to collect descriptive data about the people who are teaching physical education in Atlantic Canada and the programs they are delivering to students. The research proposal was reviewed by all three of our institutions' research ethics boards and found to be in compliance with the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*. In an effort to generate a clear description of the state and status of physical education in the region, we attempted to gather as much data from as many physical education teachers as possible. To do this, a cross-sectional survey design was employed (Creswell, 2009).

Survey design

An on-line survey was derived from an established survey developed by Mandigo et al. (2004). The purpose of the survey was to collect information that would allow us to broadly infer: (i) who is responsible for teaching physical education in schools in Atlantic Canada, (ii) the qualifications and experiences of teachers of physical education in Atlantic Canada, and (iii) the nature of physical education programs in Atlantic Canada. The survey contained three sections that asked participants to provide information about: (i) the school in which they were employed (e.g., student population, type of school [elementary, middle, secondary], location of school [rural, urban], and physical education timetable), (ii) their personal and professional background (e.g., age, gender,

degrees attained, years of teaching experience), and (iii) the physical education program they taught to students (e.g., facilities, activities taught, barriers and facilitators to program delivery). The question format varied, comprising open-ended and Likert-type items (Johnson & Christensen, 2012).

Following Jackson's (1988) suggestions to maintain validity when utilizing a questionnaire-type survey, a number of practices were followed. The survey was reviewed and piloted (Johnson & Christensen, 2012; Merriam & Simpson, 2000) with three different groups of individuals. At each stage of the review and pilot process, participants were informed of the survey's purposes and asked to keep this information in mind as they reviewed and / or completed the survey. First, the initial draft survey was sent to all four provincial physical education teachers' association presidents and the representative responsible for physical education in First Nations schools in Atlantic Canada. Each individual carefully reviewed and provided feedback on the survey in general (e.g., relevance of questions, usefulness of collected data, missing questions) as well as on the wording of questions (e.g., clarity of questions, potential to garner intended information). From the initial feedback obtained from these representatives, six questions were modified to enhance clarity. Second, 14 pre-service physical education teachers pilot-tested the modified survey and were asked to consider the questions posed to the provincial representatives. As a result, approximately five additional questions were modified for clarity. Third, the modified survey was pilot-tested by a group of 18 in-service physical education teachers (who were also graduate students). All 18 of these physical education teachers agreed the survey questions were clear.

Data analysis

Because the purpose of our study was to provide a descriptive overview of the state and status of physical education in schools in Atlantic Canada, we relied primarily on descriptive statistics to analyze survey data. Specifically, basic descriptive statistics were calculated (e.g., frequencies, means, and standard deviations). Responses to open-ended questions consisted mainly of short answers or comments and, where appropriate, similar responses were tallied or the responses were grouped / categorized by common theme. These data were coded and categorized according to methods outlined by Creswell (2005) and Miles and Huberman (1994).

Participants

According to the presidents of the four provincial physical education teachers' associations in Atlantic Canada, approximately 1000 teachers are responsible for teaching physical education in the four Atlantic provinces (i.e., New Brunswick ≈ 325,[1] Newfoundland and Labrador ≈ 200, Nova Scotia ≈ 425,[2] Prince Edward Island ≈ 75). Each provincial physical education association maintains both a website and a provincial listserv of members. Via their own

listservs, the presidents of each association sent an email inviting each recipient to participate in this research. Attached to the email was an invitation and informed consent letter to participate in the research, as well as a link to the on-line survey. Approximately three weeks after the initial invitation was sent, a follow-up reminder was sent. Three weeks after the follow-up reminder, one final reminder was sent again.

RESULTS

Physical education teachers

Personal and professional demographics. In total, 206 teachers (102 males; 80 females; the remaining elected not to answer) logged into the survey and agreed to participate, representing approximately one fifth of the population of physical education teachers in Atlantic Canada who belong to their respective provincial associations. Of these, 79 (42% of participants) were from Nova Scotia, 73 (39%) were from New Brunswick, 20 (11%) were from Newfoundland and Labrador, and 15 (8%) were from Prince Edward Island. The 79 participants from Nova Scotia represented approximately 18.6% of the physical education teachers belonging to their provincial association, the 73 from New Brunswick represented 22.5% of their provincial association membership, the 20 from Newfoundland and Labrador represented 10% of theirs, and the 15 from Prince Edward Island represented 20% of theirs. As shown in Table 1,[3] 96% of the participants self-identified as White, 3% as Aboriginal, 1% each as Black,[4] Filipino, and "other," with 1% preferring not to answer.[5] Also shown in Table 1 for comparative purposes are the ethnicity / visible minorities of the general population of Atlantic Canada.

TABLE 1. *Ethnicity / visible minorities of Canadians, Atlantic Canadians, and teachers*

Group	White	Visible Minority	Aboriginal	Black
Canada	80.9%	16.2%	3.8%	2.5%
New Brunswick	97.2%	1.9%	2.5%	0.6%
Newfoundland and Labrador	95.2%	1.1%	4.7%	0.2%
Nova Scotia	94.0%	4.2%	2.7%	4.2%
Prince Edward Island	97.7%	1.4%	1.3%	0.5%
Teachers	96.0%	2.3%	2.9%	1.2%

With respect to the participants' age, 28% were between 25-34 years of age, slightly over one third (34%) reported being between 35-44 years of age, and slightly under one third (31%) were between the ages of 45-54. Five percent of the participants were between 55-64 years, with 1% indicating they were between the ages of 18-24, and another 1% preferred not to answer.

The majority of participants (95%) indicated they worked in English provincial public schools, 3% worked in band-controlled schools, 2% worked in French provincial public schools, and 1% worked in private schools. Most participants (61%) worked in rural schools, with just over one third (37%) working in urban areas, and 2% working on-reserve. Just under half (48%) of the participants indicated they taught at the elementary level (grades kindergarten-5/6), 14% taught at the middle / junior high level (grades 5-9), and 18% indicated they taught at the high school level (grades 9/10-12).[6] Twenty-one percent of the participants taught in consolidated schools (e.g., kindergarten-12, kindergarten-9, or 7-12).

Qualifications. The majority of the participants (>90%) reported they had earned at least one undergraduate university degree. Of these, 61% reported having both a Bachelor of Education (BEd) degree *and* an undergraduate degree in Physical Education, Human Kinetics, Kinesiology, or Sport Sciences, obtained either consecutively or concurrently. Twenty-seven percent reported having acquired only a BEd (without a prior degree in an area related to physical education or kinesiology), with the remaining 12% indicating "other." Many of those who indicated "other" completed a single undergraduate physical education-related degree (e.g., Physical Education, Human Kinetics, Kinesiology, Sports Science, Outdoor Education) without completing a BEd, while some also graduated from non-degree granting Teachers' College programs, completing, for example, a diploma or certificate program.

A little less than one third (26%) of the participants had completed a graduate degree. The most common graduate degree completed was a Master of Education (MEd; 19% of total participants), followed by a Master of Physical Education (MPE; 5%), and a Master of Arts (MA; 1%) or a Master of Science (MSc; 1%). Ten percent of the total participants were in the process of completing a graduate degree while 58% reported having completed no graduate education.

Teaching experience. The majority of the participants were relatively new to teaching physical education, with 35% having 0-5 years of physical education teaching experience; of this group 6% of the participants stated they had been teaching physical education for less than one year with 29% stating they had been teaching physical education for 1-5 years. Just over one fifth (21%) of the participants had 6-10 years of experience teaching physical education, 14% had acquired between 11-15 years of physical education teaching experience, and 11% had between 16-20 years experience. Twenty percent indicated they had been teaching physical education for more than 20 years.

Responsibility for teaching physical education. The majority of the participants (63%) indicated that, at their school, only physical education specialists were responsible for teaching physical education. In one third of the schools (33%), participants stated physical education teaching duties were shared by classroom generalists and physical education specialists. Classroom generalist teachers were responsible for teaching all physical education classes in 4% of schools. While this statistic might, on the surface, come as a welcome surprise given the likelihood of elementary generalists teaching physical education across Canada, we treated the finding with caution as we could not determine whether all classroom generalists who teach physical education in Atlantic Canada received the invitation to complete the survey.

The gender make-up of the classes taught were primarily mixed (both females and males; 99%), with 5% of participants indicating they taught some female-only classes and 4% indicating they taught some male-only classes (the sum of the percentages is greater than 100% because some participants taught both single and mixed gender classes). Although the majority of the participants considered themselves physical education specialists, 52% indicated they taught other subjects outside of physical education.

Physical education programs

Physical education class length. The participants' school schedules varied; most schools (53%) functioned on a 5-day (Monday to Friday) cycle, with 22% of participants indicating their school functioned on a 6-day cycle. Less than 6% of schools had cycles of 4 or fewer days and 20% had cycles of 7 or more days. Within these varied school cycles, the majority of students (62%) were receiving physical education between 3-5 times within their regular school cycle. Approximately 20% received more than 5 periods within their cycle and 18% received 1 or 2 periods within their cycle. When considered on a weekly basis (rather than school cycle basis), fewer than half (44%) of the participants' students received physical education instruction at least 3 days each week. The amount of time within each class period varied from 20 minutes or fewer to greater than 80 minutes (see Table 2). As is shown in Table 2, the most common length of an individual physical education class was 21-30 minutes (38%).

Daily physical activity policies. Eighteen percent of the participants indicated that their schools had a Daily Physical Activity (DPA) policy. When invited to provide additional information about their schools' DPA policies, some participants shared that they were uncertain about the existence of such a policy (e.g., "We might [have a DPA policy], but I am unaware of this."), others shared that space limitations prevented DPA from being a possibility (e.g., "due to a lack of gym space because we have multiple classes sharing the gym it is hard to adhere to the DPA policy."), and others shared that their schools simply did not institute the policy as expected (e.g., "the policy is board wide but is not adhered to and not policed").

TABLE 2. *Length of a typical physical education class (in minutes)*

Length of Class	Percentage	Count
0-20	1%	1
21-30	38%	57
31-40	15%	23
41-50	11%	17
51-60	28%	42
61-70	3%	5
71-80	4%	6
>80	1%	1
Total	100%	152

Facilities. Participants were asked how often they accessed alternative facilities (i.e., those other than the school gymnasium or school site athletic fields) for physical education classes. Reponses indicated that teachers made regular or occasional use of playgrounds (58%), parks (42%), and arenas (39%), and rarely, if ever, used climbing facilities, community centres, off-site fitness facilities, curling facilities, tennis courts, and swimming pools. Facilities that were not listed on the survey but were recognized as being occasionally used by participants included local walking trails, bowling alleys, golf facilities, ski facilities (both cross country and downhill), and billiard halls. Participants' written responses indicated that cost was often a limiting factor in accessing these sorts of alternative facilities.

Physical education content. Physical education content can be arranged and grouped in various ways. In an attempt to begin to understand what type of content was being taught and the amount of time physical education teachers were spending teaching various content, the movement domains that were used in the survey were those that are characteristic of curricula in Atlantic Canada. Accordingly, they were categorized as follows:

- Active Living / Fitness / Individual & Dual Activities (e.g., cycling, yoga, weight training, etc.);

- Dance (e.g., partner, contemporary, creative, etc.);
- Sport Experience / Games / Court & Field Activities (e.g., territory games, basketball, badminton, etc.);
- Gymnastics (e.g., educational gymnastics, pyramid building, stuntnastics, etc.), and;
- Outdoor Activities / Alternative Environments / Leadership (e.g., camping, orienteering, skiing, etc.).

Eighty-five percent of participants indicated they spent up to a third of their program time teaching active living skills (see Figure 1). Seven percent of the participants indicated they never taught dance and 56% indicated they spent no more than 10% of their time teaching dance. Sport experience represented the content area that participants seemed to be willing to spend the most time teaching, with 77% spending more than a third of their time teaching content related to sport / game experiences. Eighty-four percent of participants indicated they spent less than one fifth of their time teaching gymnastics-related content. Of these participants, 18% indicated they never taught gymnastics content and 54% indicated they spent no more than 10% of their time teaching gymnastics. Seventy-three percent of participants indicated they spent up to a third of their teaching time on outdoor activities with the majority of these (83%) indicating they spent up to one third of their program time in this area.

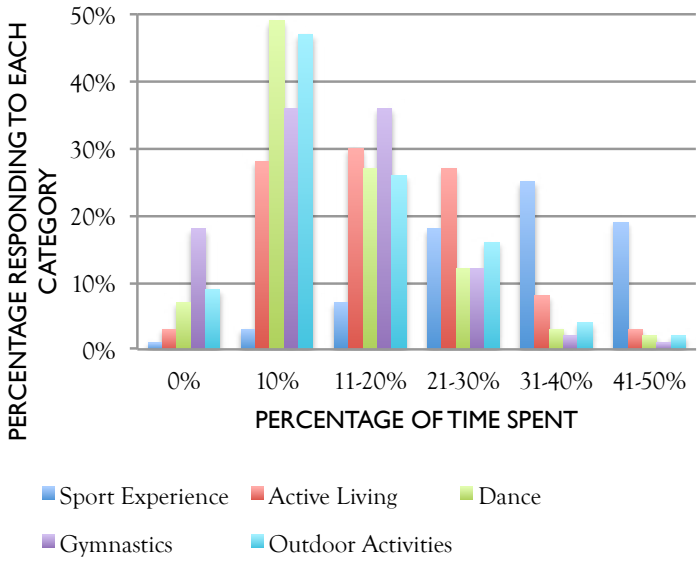

FIGURE 1. *Percentage responding to each category vs. percentage of instructional time spent teaching each movement domain*

In an attempt to gain a better understanding of what type of content was being taught within each of the movement domains discussed above, the participants were asked to indicate the "specific movement activities" they most often taught in each of the five categories (Active Living, Dance, Sport Experience, Gymnastics, Outdoor Activities). Of the 124 written responses provided for active living, the word "fitness" appeared 59 times, both independently and when describing certain fitness activities such as fitness testing, fitness classes, fun fitness circuits, and fitness units. In all but two of the remaining 65 responses where the term fitness was not specifically used, participants listed activities that are often used to improve or address fitness, such as running / jogging, weight training, yoga, plyometrics,[7] strength and endurance training, and Zumba.[8] "Nil" and listing several sports (basketball, volleyball, badminton, etc.) were the two remaining responses.

With respect to dance, of the 116 written responses provided, creative dance was mentioned most often (32 times), followed by line and folk dance (mentioned 17 times each). Several participants indicated they taught hip-hop (8), square dance (7), and Zumba (6). Five participants specifically mentioned the use of technology-mediated dances, for example using the *Wii* or *Dance Dance Revolution*. Other answers were more general. For example, social, contemporary, traditional, and novelty dances were mentioned a few times without specific examples. Examples of other responses included in this category were partner movement, self-directed, variety, pow-wow, freestyle, and belly dance.

In the sport experience category, the overwhelming majority of the 124 written responses identified traditional team sports and games (e.g., basketball, volleyball, soccer, hockey, badminton, track and field, team handball, and tennis). One participant indicated that these activities were taught as "Athletic Calendar Sports," that is, with a particular sport being taught in conjunction with the season in which that sport is typically played. Nine participants provided responses related to games classifications such as invasion games, territory games, and court and field activities without providing examples of games specific to each category. Some examples of other responses included cooperative games that integrate specific sport skills, dodge ball games, table tennis, lead-up games, tchoukball[9], non-traditional sports, and cooperation / eye hand coordination activities.

For the fourth category, gymnastics, participants provided 111 written responses. A few participants responded that they specifically taught "educational gymnastics" while others listed different content. The most common responses included rolling / tumbling, balances / stunts, pyramid building, creating sequences, rotations, and jumping and landing. A few participants indicated they did bench or vault work.

In response to the specific movement activities most often taught in the outdoor activities category, participants provided 118 written responses. The two

most common responses were snowshoeing (43 responses) and orienteering (42 responses). Several people (23) indicated that hiking was a part of their outdoor program and 17 indicated they taught cross country skiing to their students. Six participants indicated they took their students winter camping. Other outdoor activities mentioned included skating, canoeing, curling, and sliding, while some participants used a "looser" interpretation of outdoor activities, identifying seemingly anything that could be undertaken outdoors, such as archery, frisbee, golf, playground games, tennis, swimming, and winter carnival activities.

Preparation to teach physical education. Participants were asked to share their level of preparedness, enjoyment, and confidence in teaching physical education (see Table 3). On a scale of 1-5 where 1 is low and 5 is high, participants showed a high level of preparedness ($M = 4.23$, $SD = .68$), enjoyment ($M = 4.58$, $SD = .63$), and confidence ($M = 4.48$, $SD = .72$) for teaching physical education. Indeed, this might be expected when considering that the majority of participants had completed BEd, BPE, or BPE/BEd degrees.

TABLE 3. *Mean and standard deviation for teachers' levels of preparedness, enjoyment, and confidence*

Item	*N*	M	*SD*
Preparedness to teach physical education	180	4.23	0.68
Enjoyment teaching physical education	180	4.58	0.63
Confidence teaching physical education	180	4.48	0.72

NOTE. Measured on a Likert scale (1 = low, 5 = high).

However, when asked to consider their levels of preparedness, enjoyment, and confidence to teach the different movement domains within physical education, their responses revealed sometimes markedly different perceptions (see Table 4). For example, with respect to feelings of preparedness to teach in each of the movement domains, participants indicated they felt least prepared to teach dance and gymnastics. More specifically, 37% of participants reported that their level of preparedness to teach dance was low or minimal ($M = 2.94$, $SD = 1.13$) while 31% felt a similar level of preparedness to teach gymnastics ($M = 3.08$, $SD = 1.21$). Alternatively, participants indicated a much higher level of preparedness to teach sport experience and active living. For example, 91% of participants reported their level of preparedness to teach sport experience as very good or high ($M = 4.41$, $SD = 0.74$) and 69% felt that way about ac-

tive living (M = 3.93, *SD* = .88). Similar results were found when asked about their level of enjoyment and level of confidence in teaching each movement domain. Although the numbers changed slightly, the comparative results did not, with participants indicating they least enjoyed and felt less confident teaching dance and gymnastics, and enjoyed and felt more confident teaching sport experience and active living.

TABLE 4. *Mean and standard deviation for teachers' level of preparedness by movement domain*

Item	*N*	M	*SD*
Preparedness to Teach Active Living	155	3.93	0.88
Preparedness to Teach Dance	155	2.94	1.13
Preparedness to Teach Sport Experience	155	4.41	0.74
Preparedness to Teach Gymnastics	155	3.08	1.21
Preparedness to Teach Outdoor Activities	155	3.68	0.98

NOTE. Measured on a Likert scale (1 = low, 5 = high)

Assessment and evaluation of physical education outcomes. Outcomes for physical education are often written in four different domains: psychomotor, cognitive, affective, and fitness-related. Participants were asked the approximate relative value they attributed to each domain (with respect to assessment and evaluation). The majority of participants indicated they attributed up to 30% of their students' grade to fitness-related (78% of participants) and cognitive (81% of participants) outcomes. Psychomotor outcomes comprised up to 30% of students' grade for 58% of the participants while affective outcomes were worth up to 30% of students' grades for 45% of the participants. Whereas few participants were willing to assign up to 60% of a student's grade to fitness-related outcomes and cognitive outcomes (6% and 8% respectively), 29% of participants indicated that motor outcomes comprised up to 60% of students' grades, with 40% of the participants also indicating that affective outcomes were worth up to 60% of students' grades.

DISCUSSION

The data gathered from this research present a number of issues necessitating further discussion. Indeed, with a clearer understanding of who is responsible for

teaching physical education in Atlantic Canada and the nature of the physical education programs they are teaching, one is certainly more able (and for us more dutifully bound), to engage in meaningful dialogue about the directions we are taking and perhaps those that we *should* be taking. The purpose of our study was to consider the extent to which quality physical education programs are being taught in Atlantic Canada. To do this, we discuss our findings in two main sections, addressing respectively: (1) Who is teaching physical education in Atlantic Canada?, and (2) What is being taught? Upon consideration of the results, issues related to who is teaching physical education in Atlantic Canada most obviously require closer attention be paid to the implications of the "whiteness" of the field, the levels of pre-service and in-service university education, and teachers' preparedness, enjoyment, and confidence to teach within various movement domains. Issues and implications related to Atlantic Canadian physical education programs requiring further discussion include games / sport-focused curriculum and DPA / physical education programs.

Who is teaching physical education in Atlantic Canada?

(The absence of) ethnicity and visible minorities. Data collected about teachers' ethnicity or status as a visible minority might seem to be especially conspicuous to those from other areas of Canada, particularly those who live in major urban centres. Across the country, 16.2% of people are from a visible minority group, 3.8% identify as Aboriginal, 2.5% identify as Black, and 80.9% identity as White (Statistics Canada, 2013b, 2013c). However, the population of the Atlantic provinces is clearly not as ethnically diverse as other parts of the country. For example, Newfoundland and Labrador has a visible minority population of 1.1%, Prince Edward Island has an Aboriginal population of 1.3%, and New Brunswick has a Black population of 0.6% (Statistics Canada, 2006b, 2006c). Collectively then, the percentage of teacher participants who identified as part of a visible minority group, Aboriginal, or Black roughly reflects the actual population of the Atlantic Canadian region. Moreover, the percentage of physical education teachers who belong to a visible minority group exceeds the population in three Atlantic provinces (yet falls below that of Nova Scotia), the percentage of teachers who are Aboriginal exceeds the population in three Atlantic provinces (falling below only that of Newfoundland and Labrador), and the percentage of teachers who are Black exceeds the population in three Atlantic provinces (falling only below that of Nova Scotia).

Lest one be entirely satisfied with this state of affairs, it is important to further qualify the general population's background as it compares to that of Atlantic Canada's physical education teachers. Statistics Canada's (2013b, 2013c) most recent census data is from 2006. There is a clear trend across Canada for increased proportional populations of both visible minorities and Aboriginal people (Friesen, 2010). In fact, by 2031, Statistics Canada predicts that one third of all Canadians will belong to a visible minority. From this,

one might appropriately infer two things. First, with time (including the time period from 2006-2013), the percentage of visible minorities and Aboriginal groups has grown (and will continue to do so). Second, given that the visible minority and Aboriginal populations will grow most notably in the youngest demographics, schools (now do and will continue to) have greater percentages of these groups than the general (and older) population.

Given that we would wholeheartedly support the notion that having a teaching profession representative of the student population is ideal, we suggest that some sort of immediate initiative to attract members of visible minority populations into the physical education teaching profession is of paramount importance. On this point, we are not alone. As described by Melnychuk, Robinson, Lu, Chorney, and Randall (2011), we are very much aware of the struggles beginning physical education teachers encounter as they teach students unlike themselves. We are further aware of the need for teachers of Aboriginal students to develop a white race consciousness, whereby colour blind discourses are necessarily replaced by colour conscious ones (Halas, 2006; Halas, McCrae, & Carpenter, 2013; Robinson, Lunney Borden, & Robinson, 2013). Additionally, teachers of Black students must endeavor to offer culturally relevant instruction (Flory & McCaughtry, 2011; McCaughtry, Barnard, Martin, Shen, & Kulinna, 2006). While educating pre-service and in-service teachers to do this is one strategy, attracting Aboriginal and Black teachers to the profession is another. Atlantic universities might then consider the introduction of programs meant to attract both Aboriginal and Black students. Currently, St. Francis Xavier University has an African Nova Scotian cohort of pre-service teachers and Memorial University of Newfoundland, the University of New Brunswick, and Mount St. Vincent University have Aboriginal Community-Based Teacher Education programs for Aboriginal students. Programs like these ought to be considered at multiple universities in all four Atlantic provinces, perhaps with particular focus to attracting people to teach physical education.

Level of physical education teacher education. Physical Education Teacher Education (PETE) generally refers to pre-service physical education teacher education. In addition, many teachers also engage themselves in in-service teacher education programs. These might include post-graduate teaching certificates or advanced graduate degrees such as a MEd, MPE, MA, or MSc.

The participants in this research indicated a considerable degree of difference in their undergraduate PETE programs. Perhaps most notably, 12% of the participants did not have a BEd degree. Furthermore, while 61% of the teachers held a BEd *and* a separate degree related to physical education, human kinetics, or kinesiology, some seemingly had little-to-no physical education training. For example, one participant explained that her / his undergraduate education consisted of a Bachelor of Theology (BTh) followed by a BEd while another explained that her / his undergraduate education consisted of a Bachelor of

Adult Education (BAEd). Additionally, some of the participants had never completed a university degree in any discipline (but rather attended a now-nonexistent college program). When patterns across Canada and around the rest of the world suggest that elementary physical education classes tend to be taught by classroom generalists rather than specialists (Hardman & Marshall, 2000a), these abnormalities are more easily explained. As we noted earlier, our data may under-represent those generalist teachers who are responsible for teaching physical education in Atlantic Canada because they may not be members of their provincial physical education teaching association. As such, the difference in the extent *and quality* of PETE for teachers in the four provinces may be even more pronounced if generalist teachers' backgrounds and qualification are considered. With evidence suggesting that most generalists recall poor or negative experiences of their own school-based physical education programs and PETE experiences are significant predictors of the quality of physical education programs generalists deliver to students (Morgan & Hansen, 2008), specifically directing research efforts toward elementary generalists who teach physical education in the Atlantic region is one area where future research is warranted.

Without national standards for physical education teacher certification and with ever-changing provincial requirements, it is near impossible to label (and require) a minimum standard for physical education teachers' training programs — whether for specialists or generalists. Granted, today each province has guidelines for teacher certification (though not necessarily for physical education teacher certification); however, many physical education teachers who completed their teacher education programs in the past have been spared as certification changes have been "grandfathered in." Without the possibility of national standards (and the shifting provincial requirements for certification), one feasible option is for the four Atlantic provinces (i.e., their provincial ministries and their universities' PETE programs) to attend to the Canadian Council of University Physical Education and Kinesiology Administrators' (CCUPEKA) Accreditation Council accreditation standards. CCUPEKA-accredited physical education programs meet a number of important standards related to program structure (with respect to breadth and depth of program). Furthermore, these accredited institutions include a number of required core content courses, core activities, core pedagogy courses, and minimum number of weeks of practice teaching. Currently, within Atlantic Canada, only three universities offer CCUPEKA-accredited programs (CCUPEKA, 2013). These three universities are St. Francis Xavier University in Nova Scotia, Université de Moncton in New Brunswick, and Memorial University of Newfoundland in Newfoundland and Labrador. Requiring physical education teachers to complete their pre-service education at CCUPEKA-accredited institutions (or institutions with equivalent requirements), though difficult to institute, would ensure a common (and standardized) level of preparedness. We do realize,

however, that this may impact upon academic freedom and the abilities of pre-service teacher educators to contour programs to shifting emphases and contextual requirements based on the needs of the K-12 student populations they serve and so we offer this as an idea for consideration rather than as a proposed solution.

There is limited research data related to the post-graduate education of teachers in Canada. Notwithstanding this limitation, Smaller, Clark, Hart, Livingstone, and Noormohamed (2000) administered a Canadian Teachers' Federation survey with the goal of gaining an understanding of Canadian teachers' informal and formal learning opportunities. Smaller et al.'s research revealed that 27% of teachers were, at the time, actively enrolled in university courses. Also, 2006 Census of Canada results indicated that 10.6% of Canadian elementary teachers had a master's degree (or doctoral degree) while 16.0% of Canadian secondary teachers similarly had this level of post-graduate education (Statistics Canada, 2013d). Given that 26% of the participant teachers held a graduate degree, Atlantic Canada is in a position to boast in this regard. However, while we might celebrate the number of Atlantic Canadian teachers with graduate degrees, it is not possible to suggest that this advanced education has an impact on teaching and learning. That is to say that although these figures are promising, future research might investigate physical education teachers' teaching, and their students' learning, after the completion of a graduate degree. Indeed, based on the prevalence of "traditional" multi-activity programs that are evident from the data we analyzed, we were somewhat surprised at the absence of open-ended responses that made reference to innovative programs based on, for example, models-based practice (Metzler, 2011).

Preparedness, enjoyment, and confidence. Mandigo et al.'s (2004) descriptive profile of Alberta's physical education teachers compared specialists' and generalists' preparedness, enjoyment, and confidence related to teaching physical education. Compared to this previous literature, Atlantic Canadian physical education teachers self-reported being more confident teaching physical education than both Alberta specialists and generalists (i.e., $M = 4.48$ compared to $M = 3.61$ for Alberta specialists and $M = 2.28$ for Alberta generalists). In addition to seeking this information, we also sought to extend this data by determining physical education teachers' preparedness, enjoyment, and confidence related to teaching within the five previously identified movement domains. Although the participants shared that they were largely confident and prepared physical education teachers who enjoyed teaching, they had very different perspectives when the different movement domains were compared. Feeling most prepared and confident to teach sport experience (and least prepared and confident to teach dance, gymnastics, and outdoor activities), these teachers evidently fit the profile of those who have traditionally pursued such a career — namely those with positive childhood and youth experiences within sports and sport-

dominated physical education programs. This idea is not new; Lawson's (1983) initial identification of the occupational socialization of new recruits continues to be recognizable and applicable today. More specifically, the "institutional combination of the teacher-coach" (Lawson, 1988, p. 274) contributes greatly to the continued dominance of sports within physical education.

This continued attention to sport-related areas in PETE needs to be addressed. To us, three options for addressing this are possible. First, those engaged in the recruitment and admission of physical education pre-service teachers to Atlantic Canadian universities might purposely target select populations of potential students into their teacher education programs, in particular those with a history of experience and / or expertise in dance, gymnastics, and / or outdoor activities. Curtner-Smith (1999) has alluded to this same point, suggesting that one way to combat the reality that current PETE recruitment processes attract those who revere the present system is to recruit and select pre-service teachers whose life histories are more compatible with present curricular goals and pedagogies. The second possibility would be to focus upon dance, gymnastics, and outdoor activities (perhaps, in some respects, at the expense of sport experience) within physical education teacher education programs. Such a focus would necessarily include the inclusion of activities / skills courses as well as pedagogy-related courses focusing on these movement domains. While this research did not investigate teachers' perspectives related to their teacher training programs and these movement domains, others have found their training in dance and gymnastics to be inferior to their training in games, sports, and active lifestyle (Morgan & Hansen, 2008). Third is to tackle the teacher-coach conflict head on. During the hiring process, priority and full consideration must be given to the educational background and teaching ability of the candidate, and her/his ability to deliver a balanced physical education program, rather than upon the candidate's prior athletic experiences or coaching ability. We would suggest that hiring coaches first mainly occurs for sports that dominate secondary schools' varsity programs (e.g., football, soccer, basketball, volleyball). Noting that teachers often teach content they are most familiar and comfortable with, when teachers are hired because of their experience and expertise coaching these sorts of traditional sports within athletics programs, it further contributes to the dominance of traditional sports within physical education programs.

What is being taught in Atlantic Canadian physical education?

Games / Sport-focused curriculum. Closely related to these physical education teachers' preparedness, enjoyment, and confidence teaching various movement domains within physical education is the amount of instructional time afforded to these same domains in their programs. That is, while the participating teachers shared the highest levels of preparedness, enjoyment, and confidence for teaching sport experience and active living, these two domains also took

up a greater percentage of instructional time. Conversely, the two movement domains for which teachers reported feeling the lowest levels of preparedness, enjoyment, and confidence (i.e., dance and gymnastics) also took up the lowest percentage of instructional time. This relationship supports claims by Curtner-Smith (1999) and Lawson (1983) that physical education teachers teach those activities they feel most prepared to teach, those they enjoy teaching the most, and those they feel most confident teaching (irrespective of the balance mandated by provincial curriculum documents). It may also suggest that teachers are unlikely to disrupt their practice by delving into content areas or pedagogical practices that they are uncomfortable with or that are innovative.

It is also worth reiterating here that 35% of the participants had 0-5 years of teaching experience and, collectively, 56% of the participants had no more than 10 years of teaching experience. That is, to some it may be curious that relatively young neophyte teachers, who might be considered to be especially innovative, would not be more inclined to abandon questionable practices in favour of more progressive models-based practices. Alternatively, some might also find this observation to make perfect sense, attributing it to occupational socialization (Lawson, 1983;1988) and the nature of beginning teachers' concerns with other classroom issues, related to, for example, discipline and control of students (Cherubini, 2009). While we cannot make either claim here, we recognize this is a phenomenon worthy of further inquiry.

In addition to teachers' continued focus on sport experience, it was also revealed that many teachers continued to teach traditional "staple" activities within this movement domain. Teachers' continued focus on these traditional sports seemingly ignores the physical recreation activities of high school graduates. That is, although these teachers' physical education programs focus on sport experience (and predominately upon traditional sports within sport experience), none of the top ten popular choices of physical recreation activities for high school graduates can be categorized as traditional team sports (Canadian Fitness and Lifestyle Research Institute, 1998). We would therefore suggest that physical education programs, particularly at the secondary level, might better serve students by offering more balanced approaches to offering content (as required by provincial ministries and explicitly outlined in curriculum documents). Such a balance might enable physical education programs to focus more upon those activities most popular to, and taken up most often by, high school graduates (e.g., social dance, home exercise, bicycling, swimming, jogging, weight training, and skating). Though there is obviously still a tremendous focus upon sports within these teachers' physical education programs, we view the fact that 85% of participants indicated they spent up to a third of their program time teaching active living skills as a positive step in the right direction in this regard.

Given that our suggestion might be also viewed as a call for teachers to teach what they are actually supposed to teach, it is not lost upon us that some sort

of accountability measure might also address this issue. If physical education teachers are required to offer movement domain-balanced programs, school administrators might take it upon themselves to ensure that their physical education teachers are indeed teaching the mandated curriculum. While we can appreciate that such a task may seem like an extraordinary one, or one that positions school administrators as micro managers, we also know that such oversight of school happenings by school administrators is actually a duty detailed in all four Atlantic provinces' educational legislation.

DPA / Physical education programs. Three Canadian provinces currently have government-mandated DPA policies requiring all students to engage in 20 or 30 minutes of daily physical activity (British Columbia, Alberta, Ontario). Though none of the four Atlantic provinces currently have such a mandated DPA policy, some individual schools or school jurisdictions have instituted similar policies. That is, 18% of the physical education teachers indicated that their school had a DPA policy; some of these shared that their schools did not institute it as it was planned or required.

It is noteworthy that while the Atlantic provinces have the least amount of instructional time in physical education and some of the lowest indicators of health and wellness, they also do not have government-mandated DPA. It one sense, it would seem that if there were any region in Canada that ought to have DPA programs, it would be the Atlantic region. However, we are very much aware of DPA's limitations, including the heterogeneity of interventions, reluctant implementation by teachers, and the "quick fix" nature of DPA programs informed by obesity discourses (Hickson, Robinson, Berg, & Hall, 2012; Ramanathan, Allison, Faulkner, & Dwyer, 2008; Robinson & Melnychuk, 2008; Sykes, 2011). Indeed, some of these limitations were highlighted by our own research participants. It is for this reason that we would support the adoption of DPA policies in Atlantic provinces as initiatives that are a "last resort." That is, while we can appreciate that DPA has the potential to get students more physically active (and, again, that is not an altogether straightforward result), the role of physical education is not to serve as a type of weight loss clinic; it is an important site for students' physical, cognitive, and affective growth and development and so our obvious preference would be for students to become more "physically literate."

It is disconcerting and embarrassing that Atlantic Canada has the lowest standards related to instructional time in physical education. Our students are the least active in the country. Certainly, they deserve better than to have the least amount of time for physical education instructional time. Though the provincial ministries could address this inequity by way of mandating higher minimum instructional time guidelines (e.g., 150 minutes per week), school jurisdictions, school administrators, or teachers also play a role. That is, the guidelines that exist are minimum standards; there is nothing stopping school

jurisdictions, school administrators, or teachers from offering more instructional time for physical education. However, given that the present scenario has not resulted in many schools offering more than what is suggested (and has, in fact, resulted in many offering less than what is suggested) and that teachers are in many cases powerless to effect this sort of change (i.e., teachers are most often given their schedules), the provinces have the greatest opportunity to make this sort of change possible. Therefore, we would hope that this research highlights the need for Atlantic Canadian education ministries to take some action in this regard. It is no understatement to suggest that it is these ministries who have the greatest power, and responsibility, to effect such a change. Moreover, mandating such minimum instructional time guidelines is, to us, a minimum expectation. Our continued hope would be for the implementation of daily physical education.

Strengths and limitations

The on-line nature of the survey was one of the strengths of this research. Participants were able to complete the survey at a time and place that was convenient to them. Also, the on-line nature of the survey ensured teachers did not feel pressured to complete the survey. At the same time, this may have attracted a certain type of teacher to complete the survey. Thus it is possible that the participants who completed this survey are not representative of all Atlantic Canada physical education teachers.

As with all survey research, the research is limited by the type of questions asked and how the participants interpreted the questions. Although the survey was pilot-tested three times, it is possible that a participant could have misunderstood a question and answered it incorrectly. Also, provincial listservs were used to identify participants. It is possible that the listservs included people who were not teaching physical education and/or excluded some people who were teaching physical education.

CONCLUSION

Our research addresses a gap noted in a recent annual AHKC (2012) report card which noted, "classroom-level surveillance data are needed on the content of PE classes (e.g., frequency and duration of physical activity)" (p. 37). Our findings suggest physical education is taught by a group of mostly white teachers with varying qualifications, interests, and experiences in teaching the subject. Further, sport experiences tend to dominate the subject matter that students engage with, at the expense of domains such as dance and gymnastics. Although many physical education programs could arguably be classified as being of a sound quality according to the national subject association, it is our contention that more needs to be done to present the subject as a diverse enterprise, both in terms of who teaches and what is taught in physical education.

In a recent editorial to a special issue of the *Sport, Education and Society* journal, O'Sullivan (2013) commented that, "we have seen a shift from what might be traditionally viewed as a 'multi-activity' approach to physical education to the design of national and local curriculum that reflect one or more instructional and/or curricular models" (p. 1). O'Sullivan's observed shift towards this models-based practice within physical education has not been revealed by our own data. That is, the continued overwhelming emphasis upon traditional games play, the limited length of units of instruction, the limited weekly physical education instructional time, and the near complete-absence of references to alternative curriculum models suggest that programs being offered to students in Atlantic Canada have not changed much in this regard and, rather, resemble the programs Lawson (1988) described decades ago. Notwithstanding this observation, we are entirely aware that our research processes did not actually include a systematic effort to elicit information about models-based practice (i.e., no questions made explicit mention of various instructional models). Moreover, it would have been possible for teachers to actually utilize instructional models while also failing students with respect to some of these same issues. Nonetheless, we harbour a concern because previous research has found that such programs have been cited as lacking meaning for students, having little if any impact on students' intentions to engage in an active lifestyle, and, at worst, serve as sites for humiliation or abuse for students who do not embody "athletic" identities (Ennis, 1996). Additionally, the continuation of multi-activity, sport-based programs is demonstrative of Kirk's (2010) "more of the same" scenario. To this end, Kirk has suggested that while this may be sustainable in the short term, without radical reform, the long-term future of physical education is at risk of extinction. Moreover, students risk missing out on a potentially crucial part of their education when their programs are not addressing their needs. Further studies that address contextually specific issues and concerns may begin to identify further areas toward which change efforts may be focused.

The research has important implications for pedagogues working in physical education as it can provide direction for program / course modification at both the school and university level; it can provide valuable information for policy makers, educational administrators, and curriculum designers; and it has prompted further research questions aimed at continuing to try to improve the quality of physical education experienced by students within Canada.

NOTES

1. Excluding New Brunswick's Francophone teachers.
2. Excluding Nova Scotia's Francophone teachers.
3. The categories listed in Table 1 are those used by Statistics Canada. Each category is a separate/independent entity. That is, visible minority does not include Aboriginal or Black.

4. These terms were chosen so as to replicate the terminology used by Statistics Canada. The authors recognize that "African Canadian" or "African American" is often used instead of "Black."
5. These total greater than 100% because participants were able to indicate more than one ethnic or visible minority group.
6. The distinctions between elementary, middle level, and high school differ amongst the provinces, hence the overlapping of grades in the data.
7. Plyometrics are exercises designed to improve dynamic strength and power.
8. Zumba is a type of fitness class (similar to aerobics) based largely on dance elements and music from Latin America.
9. Tchoukball is an invasion game where teams attempt to score points by shooting a ball at a trampoline like frame in such a way that it rebounds off the frame and back into the field of play before defending players are able to catch the ball.

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LES DIFFICULTÉS DES ÉLÈVES DU PRIMAIRE EN MATHÉMATIQUES, QUELLE PERSPECTIVE D'INTERPRÉTATION PRIVILÉGIER ?

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RÉSUMÉ. Cette recherche vise un approfondissement des connaissances concernant les difficultés d'apprentissage en mathématiques. Selon la littérature, deux perspectives permettent d'interpréter ces difficultés. La première perspective attribue les difficultés en mathématiques aux caractéristiques intrinsèques à l'élève, tandis que la seconde considère ces difficultés comme étant la résultante de l'interaction entre l'élève et le système didactique. L'objectif de cette recherche était d'éprouver la portée de ces perspectives. Pour ce faire, nous avons comparé les calculs relationnels des élèves à risque (N = 106) et des élèves tout-venant (N = 416). Nous avons aussi dégagé l'influence relative aux caractéristiques des problèmes et à l'appartenance à un milieu scolaire. Les résultats obtenus démontrent que les difficultés d'apprentissage en mathématiques devraient être interprétées en fonction de la seconde perspective.

PRIMARY SCHOOL STUDENTS' DIFFICULTIES IN MATHEMATICS: WHICH INTERPRETATION TO PRIORITIZE?

ABSTRACT. This research aims to deepen knowledge about learning difficulties in mathematics. According to the literature, two perspectives for interpreting these difficulties exist. The first assigns mathematical difficulties as intrinsic to the student. The second considers these difficulties as the result of the interaction between the student and the educational system. The objective of this research has been to test the significance of these perspectives. In order to achieve this, we compared the relational calculi of students at risk (N = 106) and the relational calculi of regular students (N = 416). We have also identified the influence related to the problems' characteristics and the classroom belonging. The results show that mathematical learning difficulties should be interpreted according to the second perspective.

Depuis la réforme du système de l'éducation en 2000, l'intégration et la réussite des élèves ayant des difficultés d'apprentissage sont devenues des enjeux majeurs du ministère de l'Éducation (Squalli, Venet et Lessard, 2006).

Cette préoccupation constitue l'orientation fondamentale de la *Politique en adaptation scolaire* (Ministère de l'Éducation du Québec [MÉQ], 1999). Dans la perspective de la prévention des difficultés scolaires, une des disciplines à privilégier est celle des mathématiques. À cet effet, DeBlois (2009) soutient que les connaissances en mathématiques sont constamment mobilisées, tant dans les tâches quotidiennes que dans les activités professionnelles que réalise un individu.

Dans le domaine des mathématiques, plusieurs écrits scientifiques révèlent deux perspectives distinctes sur la problématique des élèves présentant des difficultés d'apprentissage. La première perspective est essentiellement centrée sur l'identification et la description de dysfonctionnements propres à l'élève, tandis que la seconde perspective s'intéresse plutôt au fonctionnement du système didactique et aux phénomènes particuliers qui caractérisent les relations entre la production de l'élève, la situation effective d'enseignement et la spécificité du savoir à apprendre (Giroux, 2010 ; Roiné, 2009). Martin et Mary (2010) corroborent ces propos en précisant que ces différentes perspectives adoptent des positions antagonistes quant à l'explication des particularités de l'enseignement des mathématiques qui est dispensé aux élèves en difficulté.

> Ces deux perspectives reposent sur des fondements théoriques et méthodologiques particuliers, ainsi qu'elles sont alimentées et supportées par différents foyers (surtout universitaires) de recherche. De plus, elles influencent l'enseignement des mathématiques à un certain groupe d'élèves et par extension, elles influencent également l'apprentissage de cette discipline par ce même groupe d'élèves. (p. 230)

À cet effet, les travaux scientifiques adoptant un cadre explicatif se rapportant aux domaines de la psychologie développementale, de la neuropsychologie, ainsi que des sciences cognitives sont rattachés à la première perspective (Giroux, 2010 ; Goupil, 2007 ; Martin et Mary, 2010). Les tenants de cette perspective attribuent les difficultés d'apprentissage directement à l'élève. En fait, celles-ci paraissent intrinsèquement liées aux caractéristiques fonctionnelles et structurales de l'apprenant (Lemoyne et Lessard, 2003). En adoptant ce point de vue, l'élève est perçu comme étant un sujet pour lequel les caractéristiques personnelles peuvent être mesurées par le biais d'instruments d'évaluation standardisés. Toujours selon cette perspective, le rôle de l'enseignant consiste à aider l'élève à pallier ses difficultés par le biais d'interventions remédiatives visant à modifier ses processus cognitifs. Dans ce contexte, l'élève est placé dans la position de celui qui a besoin d'aide. Par ailleurs, certaines études montrent que les modalités d'aide mises en place ne stimulent pas toujours l'engagement mathématique et cognitif de l'élève (Martin et Mary, 2010). À ce sujet, Roiné (2009) mentionne que les difficultés en mathématiques, interprétées à l'intérieur de cette perspective, reposent sur « l'hypothèse des spécificités ». Selon cette hypothèse, les interventions des enseignants doivent

être effectuées en correspondance avec la classification des catégories d'élèves telle que mise de l'avant à l'intérieur du système scolaire.

Par ailleurs, Lemoyne et Lessard (2003) précisent qu'au courant des dernières décennies, les recherches sur les difficultés d'apprentissage ayant adopté un cadre explicatif propre aux sciences cognitives ont obtenu peu de résultats empiriques. Selon ces auteurs, ce constat a conduit à une remise en question du caractère immuable des caractéristiques cognitives de l'apprenant et à l'investigation du fonctionnement de l'institution scolaire. Conséquemment, une seconde perspective explicative des difficultés d'apprentissage a émergé. Cette seconde perspective repose essentiellement sur des fondements relatifs à la didactique des mathématiques. Au sein de cette perspective, les difficultés d'apprentissage sont interprétées comme étant la résultante de l'interaction de l'élève avec le système scolaire auquel il participe. Dans ce contexte, l'apprenant est considéré comme étant un élève (donc un sujet du système didactique) pour lequel certaines de ses difficultés découlent du contrat didactique qui le lie au système didactique (Perrin-Glorian, 1993). Ainsi, selon Roiné (2009), les difficultés d'apprentissage sont, dans cette perspective, interprétées sous l'angle de « l'hypothèse du contrat ».

Cette perspective considère l'enseignement du point de vue de la mise en place des conditions favorables à l'apprentissage par le biais d'interventions didactiques qui prennent en compte à la fois les connaissances mathématiques de l'élève et la spécificité du savoir (Martin et Mary, 2010). Quant à l'élève, il est modélisé comme un sujet actif qui interagit dans le cadre d'un milieu didactique que son enseignant a conçu selon les dimensions cognitives du sujet et les caractéristiques du savoir à apprendre (Mary, Squalli et Schmidt, 2008).

Afin de décrire la perspective adoptée par les différentes disciplines qui étudient les difficultés d'apprentissage en mathématiques, Giroux (2010) a proposé un schéma permettant d'organiser ces disciplines en fonction de leur finalité ou de leur posture épistémologique. Ce schéma, tel que représenté par figure #1, permet de traduire les finalités de ces disciplines en situant celles-ci sur un axe transversal. Sur cet axe, un déplacement vers la gauche symbolise un intérêt croissant pour l'étude du fonctionnement cognitif. Ce déplacement implique une centration sur les caractéristiques des individus. Par ailleurs, Giroux (2010) mentionne qu'un déplacement vers la droite représente un intérêt croissant pour l'étude du fonctionnement du savoir en situation d'enseignement ou d'apprentissage. Ce mouvement engage une centration sur les phénomènes interactifs qui sont nécessaires à la transmission et à l'acquisition des savoirs.

À la lumière des propos de Giroux (2010), il est possible de percevoir que les tenants de la première perspective, qui comprend particulièrement les recherches issues de la psychologie développementale, de la neuropsychologie et des sciences cognitives, se situent à la gauche de l'axe. L'attribution de cette

position est justifiée par le cadre explicatif des difficultés d'apprentissage en mathématiques, caractérisé par une centration sur les caractéristiques des individus, qui est adopté par les chercheurs œuvrant dans ces disciplines. En revanche, les tenants de la seconde perspective se localisent plus spécifiquement sur la droite de l'axe dans le sens où ceux-ci effectuent une centration sur l'interaction de l'élève à l'intérieur d'un système didactique donné.

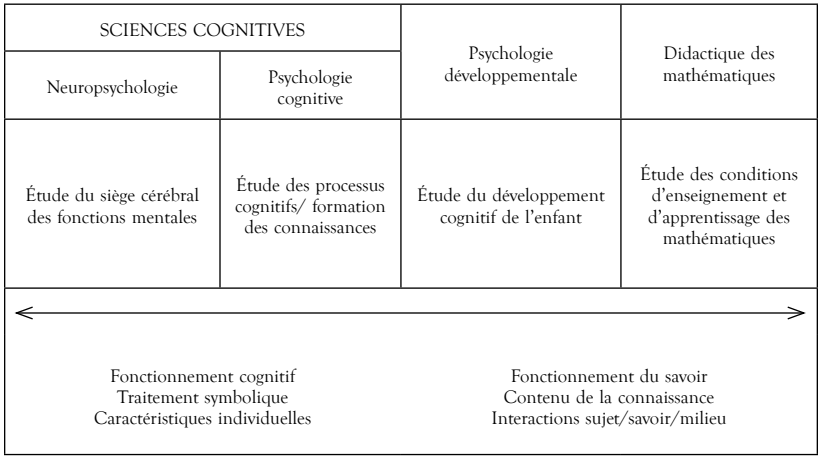


FIGURE 1. *Organisation des disciplines qui étudient les difficultés en mathématiques selon Giroux (2010)*

POSITION MINISTÉRIELLE À L'ÉGARD DE L'ENSEIGNEMENT DES MATHÉMATIQUES AUX ÉLÈVES EN DIFFICULTÉ

L'évolution des législations et des politiques propres à l'adaptation scolaire tend à positionner l'orientation du ministère de l'Éducation dans la première perspective sur les difficultés des élèves en mathématiques. Cette position se dégage de la *Politique de l'adaptation scolaire* (MÉQ, 1999) qui vise à recadrer les grandes orientations de la réforme de l'éducation à l'égard des besoins particuliers et des caractéristiques propres aux EHDAA. Cette politique comprend une injonction ministérielle à l'égard des enseignants afin qu'ils adaptent leur enseignement aux caractéristiques et aux besoins des élèves (MÉQ, 1999, 2000a, 2000b; Ministère de l'Éducation, du Loisir et du Sport [MELS], 2006).

Par ailleurs, il est pertinent d'interroger les fondements de l'injonction ministérielle relative à l'adaptation de l'enseignement aux caractéristiques spécifiques aux élèves. À cet effet, Giroux (2013) mentionne que la perspective adoptée par le MELS ne se fonde pas sur une prise en compte de la dimension didactique de l'enseignement et de l'apprentissage. En fait, l'orientation ministérielle tend à instaurer des pratiques enseignantes constamment à la recherche de moyens pour « combler le déficit » dont souffrirait l'élève en difficulté au détriment de

la prise en compte de la spécificité relative au contenu d'enseignement et des conditions didactiques qui favorisent son apprentissage. De plus, même si depuis les années 1980, les cadres explicatifs relatifs à la didactique des mathématiques sont de plus en plus utilisés (Lemoyne et Lessard, 2003), ces injonctions ministérielles, par leur posture explicative des difficultés d'apprentissage, négligent en quelque sorte les résultats de la didactique des mathématiques.

Objectifs de recherche

L'ensemble de ces considérations nous amène à questionner les modalités d'interprétation des difficultés des élèves du primaire en mathématiques. À l'intérieur de ce projet de recherche, nous proposons d'éprouver la validité de chacune des deux principales perspectives explicatives des difficultés d'apprentissage. Pour ce faire, nous vérifierons si les caractéristiques intrinsèques à l'élève, telles qu'opérationnalisées par l'étiquette « d'élève à risque », représentent un cadre explicatif valide des difficultés d'apprentissage en mathématiques. Cette démarche visera à éprouver « l'hypothèse des spécificités ». De plus, afin d'éprouver la seconde perspective interprétative, nous évaluerons l'influence des caractéristiques des énoncés et de l'appartenance à un milieu scolaire donné (effet-classe) sur le rendement à résoudre des problèmes mathématiques. Cette démarche permettra d'éprouver « l'hypothèse du contrat ». Puisqu'au courant des dernières décennies, les recherches ayant adopté un cadre lié aux sciences cognitives ont obtenu peu de résultats empiriques, nous anticipons que « l'hypothèse du contrat » constituera la posture la plus appropriée afin d'interpréter les difficultés d'apprentissage en mathématiques.

MÉTHODOLOGIE

Échantillon

L'échantillon que nous avons constitué a permis d'effectuer notre expérimentation auprès de 522 élèves de sixième année du primaire. Au total, 106 élèves à risque, ainsi que 416 élèves sans diagnostic identifié ont participé au projet d'études. Tel que mentionné par Saint-Laurent, Giasson, Simard, Dionne et Royer (1995), les élèves à risque correspondent aux enfants qui démontrent certaines difficultés d'apprentissage ou qui manifestent certains comportements susceptibles de les empêcher d'atteindre les objectifs d'apprentissages poursuivis par l'école. Cette catégorie exclut les élèves ayant des troubles graves du comportement, un handicap physique, ainsi qu'un trouble envahissant du développement puisque des cotes ministérielles spécifiques sont attribuées à ces types d'élèves (Fédération des syndicats de l'enseignement [CSQ], 2013).

L'identification des élèves a été effectuée le jour de l'expérimentation par les enseignants titulaires des classes de sixième année. L'ensemble des participants provenait de 28 écoles différentes de la région de Québec.

Variables à l'étude

Plusieurs variables ont été utilisées à l'intérieur de ce protocole d'étude. En premier lieu, nous avons considéré l'attribution ou non de l'étiquette « d'élèves à risque » afin de vérifier si les caractéristiques individuelles influaient sur l'efficacité des procédures de résolution de problèmes mises en œuvre. L'efficacité des procédures effectuées par les élèves à risque a été comparée à celles des élèves tout-venant. En second lieu, afin d'évaluer l'influence d'un effet-classe, nous avons considéré la classe d'appartenance de chacun des élèves. En dernier lieu, nous avons inséré le niveau socioéconomique des élèves en tant que variable contrôle. Cette considération découle des propos de l'Organisation de Coopération et de Développement Économiques (OCDE) (2004) qui mentionnait que le niveau socioéconomique des élèves est susceptible d'influencer leur rendement à résoudre des problèmes mathématiques.

Les difficultés en mathématiques

Afin de documenter les difficultés en mathématiques des élèves à risque, nous avons étudié le calcul relationnel mis en œuvre lors de la résolution de problèmes mathématiques. Plus spécifiquement, nous avons analysé le calcul relationnel élaboré à l'intérieur de neuf problèmes distincts, abordant la notion de proportionnalité. Les énoncés de problèmes appartenaient à la classe « quatrième proportionnelle », telle qu'élaborée par Vergnauld (1990) dans sa théorie des champs conceptuels, théorie cognitiviste aussi utilisée en didactique pour le cadre offert à l'apprentissage. Les problèmes variaient en fonction du type d'information présenté, soit : des problèmes présentant exclusivement les données essentielles à la résolution du problème, des problèmes abordant des éléments d'information situationnels, des énoncés abordant des éléments d'information superflus. De plus, nos énoncés de problèmes sur les proportions comprenaient trois types de rapports numériques distincts, soit : rapport scalaire entier, rapport fonction entier, ainsi qu'aucun rapport entier. Les caractéristiques des neuf problèmes que nous avons utilisés dans notre étude sont présentées à l'intérieur du Tableau 1. Une présentation exhaustive de ces problèmes est effectuée au sein de l'Annexe 1.

TABLEAU 1. *Présentation de la structure des neuf énoncés de problèmes*

	Données essentielles	Éléments situationnels	Éléments superflus
Rapport scalaire entier	Problème #5	Problème #2	Problème #6
Rapport fonction entier	Problème #4	Problème #1	Problème #7
Aucun rapport entier	Problème #9	Problème #8	Problème #3

À titre explicatif, les problèmes impliquant des données d'information essentielles correspondent à des énoncés de problèmes pour lesquels seules les données numériques, les relations entre les données numériques, ainsi que la question à répondre étaient mises de l'avant. Les problèmes impliquant des éléments d'information situationnels impliquant la mise en place des données essentielles à la résolution du problème, ainsi que des informations verbales permettant de contextualiser le problème mathématique. Ensuite, les problèmes impliquant de l'information superflue présentaient des éléments de détails qui étaient inutiles à la résolution du problème. Selon Voyer (2006), ces variables sont susceptibles d'influer sur le rendement des élèves.

D'autre part, les problèmes de type *rapport scalaire entier* impliquant une situation où l'on donnait le couple (x_1,y_1) et que l'on cherchait le «y» correspondant à un «x» donné, le *rapport scalaire entier* signifie que le rapport entre le «x_1» et le «x» est entier et que celui entre x_1 et y_1 est fractionnaire. Pour les problèmes de type *rapport fonction entier*, c'était seulement le rapport entre «x_1» et «y_1» qui était entier. En dernier lieu, dans le cas des problèmes *aucun rapport entier*, aucun rapport numérique n'était entier. À cet effet, René de Cotret (2006) mentionne que le type de rapport numérique influence le niveau de difficulté des différents énoncés de problèmes mathématiques.

Analyse des procédures

De manière à analyser les différentes procédures de résolution de problèmes sur les proportions, telles que mises en œuvre par les élèves tout-venant et les élèves à risque, nous nous sommes référés à la typologie de Ricco (1982) concernant les calculs relationnels pouvant être mis en œuvre dans le cadre de la résolution de cette catégorie de problèmes. La typologie de cette auteure est élaborée en quatre niveaux distincts. Les niveaux 0 à 2 impliquent l'absence d'un raisonnement proportionnel, tandis que le niveau 3 implique la mise en œuvre d'un raisonnement proportionnel. De plus, afin de nous assurer de recenser l'ensemble des procédures pouvant être mises en œuvre dans le cadre de la résolution des énoncés de problèmes que nous avons utilisés au sein de notre protocole de recherche, nous avons élaboré des catégories de procédures émergentes qui auraient pu échapper à Ricco (1982). Cela se justifie par le fait que nous avons considéré des variables didactiques distinctes de celles utilisées par cette auteure. La typologie des procédures de résolution de problèmes que nous avons considérée est présentée au sein de la Figure 2.

Analyses statistiques

Afin de répondre à nos objectifs de recherche, nous avons mis en œuvre quatre tests statistiques distincts. En premier lieu, afin de comparer l'efficacité des procédures de résolution de problèmes des élèves à risque par rapport à celles mises en place par les autres élèves, nous avons effectué des analyses de *khi-carré* pour chacun des neuf problèmes. Ensuite, afin de comparer le niveau

de difficulté impliqué par la structure des énoncés de problèmes nous avons effectué des tests *T* pairés pour chacune des dyades de problèmes. En dernier lieu, afin d'évaluer l'effet-classe, nous avons effectué une analyse de variance (ANOVA), ainsi qu'une analyse de covariance (ANCOVA). Ces analyses visaient à dégager s'il y a une différence au niveau du rendement en résolution de problèmes entre les différentes classes de sixième année, et ce, en contrôlant le niveau socioéconomique de celles-ci.

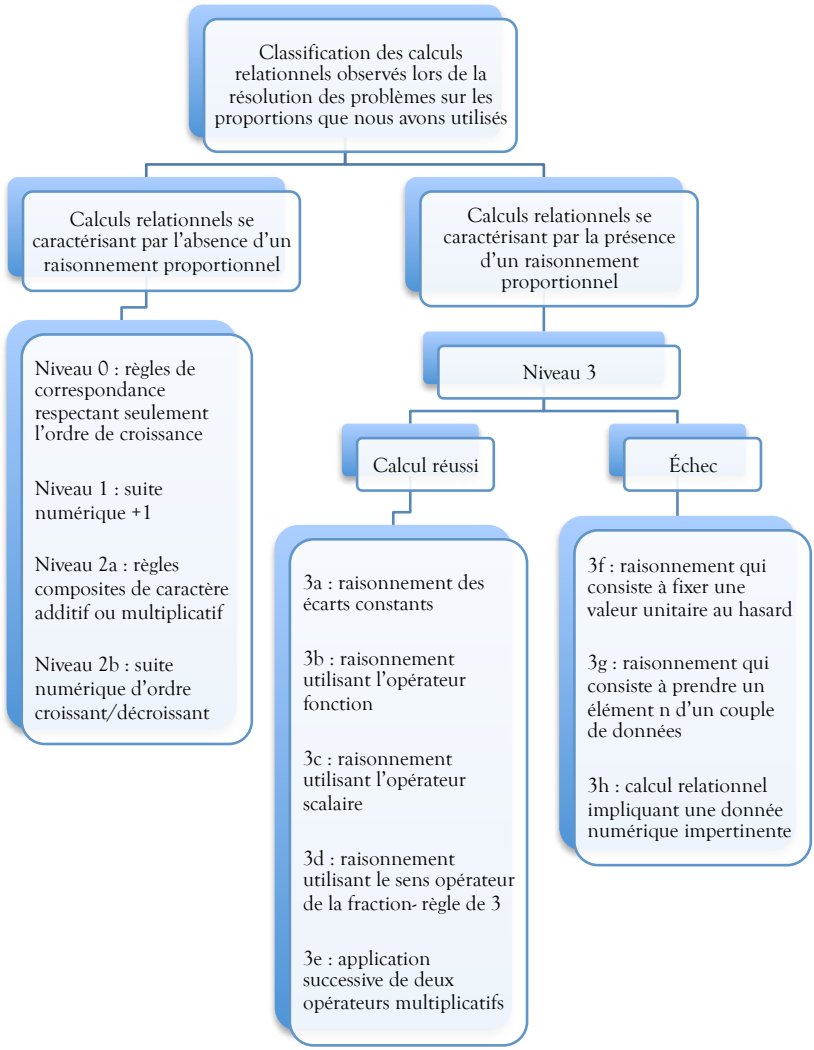


FIGURE 2. *Typologie des procédures observées dans la résolution des problèmes que nous avons utilisés au sein de notre protocole de recherche*

RÉSULTATS

Comparaison du calcul relationnel des élèves à risque et des élèves tout-venant

Dans le but de répondre à notre première visée de recherche qui consiste à éprouver « l'hypothèse des spécificités » en comparant le calcul relationnel des élèves à risque et des élèves tout-venant, nous avons effectué un test du *khi-carré* pour chacun des énoncés de problèmes que nous avons abordés. Afin de répondre aux conditions d'application de ce test paramétrique, nous avons regroupé les procédures des élèves en trois catégories distinctes, soit : les calculs relationnels erronés, les calculs relationnels réussis, ainsi que les procédures inclassées. Les résultats des tests du *khi-carré* sont présentés à l'intérieur du Tableau 2 (voir Annexe 1).

En correspondance avec les recommandations de Salkind (2007), qui soutient que la réalisation de plusieurs tests statistiques facilite la probabilité de trouver un événement rare et engendre des erreurs d'interprétations chez le chercheur, nous avons appliqué la correction de Bonferroni. Conséquemment, lorsque nous effectuons plusieurs tests distincts, nous divisons le seuil de signification accepté par le nombre de tests effectués. Par ailleurs, nous ne considérons pas cette correction lors de la réalisation de tests visant à vérifier des prérequis, telles des analyses de Levene permettant de vérifier le respect des conditions d'application de l'ANOVA.

À la lumière des données obtenues, nous percevons que le calcul relationnel mis en place par les élèves à risque et des élèves tout-venant est homogène pour la majorité des énoncés de problèmes sur les proportions. Par ailleurs, des différences significatives au niveau des procédures de résolution de problèmes ont été observées pour les problèmes #2 (*khi-carré* = 20,998, *ddl* = 2 ; $p < 0{,}001$) et #4 (*khi-carré* = 15,517, *ddl* = 2 ; $p < 0{,}001$).

Comparaison des niveaux de difficulté des problèmes

Afin d'atteindre la seconde visée du projet de recherche, qui consiste à éprouver « l'hypothèse du contrat », nous avons comparé les différents niveaux de difficulté imputables à chacun de nos problèmes mathématiques. Pour ce faire, une avons réalisé une analyse de variance multivariée (MANOVA). Cette analyse visait à dégager si les différents énoncés de problèmes que nous avons utilisés impliquaient des niveaux de difficulté divergents. Puisque nous avons utilisé 9 énoncés de problèmes mathématiques distincts à l'intérieur de notre protocole de recherche, nous avons intégré 9 items au sein de notre MANOVA. Les résultats de cette analyse sont présentés au sein du Tableau 3 (voir Annexe 1).

Tel que démontré à l'intérieur du Tableau 3 nous pouvons dégager des différences significatives au niveau de la difficulté associée à chacun des pro-

blèmes que nous avons impliqués à l'intérieur de notre protocole de recherche ($F(8,513) = 770,647$; $p < 0,001$; *Wilk's* $\lambda = 0,069$). Afin de faire suite à ces données de recherche, nous avons décidé de vérifier à quels endroits se situaient ces divergences concernant les différents niveaux de difficulté associés à chacun de nos problèmes mathématiques. Pour ce faire, nous avons effectué un test T pairé pour les différentes combinaisons de dyades de problèmes qu'il nous était possible de mettre en place. Au total, nous avons effectué 36 tests T pairé distincts, puisqu'il y avait 36 combinaisons de problèmes possibles. De ce fait, afin de respecter le critère de l'alpha cumulatif (*inflation of the alpha*), nous avons effectué la correction de Bonferroni en divisant notre seuil de signification par 36 pour chacun de ces tests. Conséquemment, notre seuil de signification pour chacun des tests T pairé fut fixé à $p \leq 0,001$ (0,05/36). Les statistiques descriptives relatives à chacun des problèmes de mathématiques sont présentées à l'intérieur du Tableau 4, tandis que les résultats des tests T pairés sont mis de l'avant dans le Tableau 5.

TABLEAU 4. *Statistiques descriptives concernant les différents problèmes mathématiques*

Problèmes	Moyenne	*N*	Écart Type	Erreur standard moyenne
Énoncé 1	4,0843	522	1,64176	0,07186
Énoncé 2	3,4215	522	1,86866	0,08179
Énoncé 3	2,4751	522	1,82759	0,07999
Énoncé 4	4,3103	522	1,42215	0,06225
Énoncé 5	2,9598	522	1,95543	0,08559
Énoncé 6	3,1590	522	1,96016	0,08579
Énoncé 7	3,4272	522	1,90752	0,08349
Énoncé 8	2,7567	522	1,68663	0,07382
Énoncé 9	2,7222	522	1,94883	0,08530

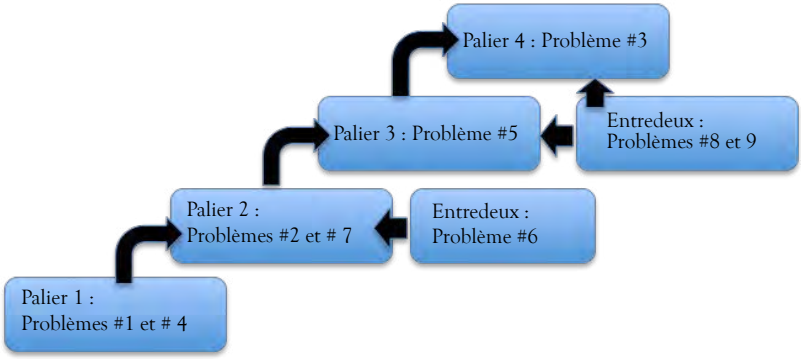
À la lumière des données obtenues, nous observons une différence statistiquement significative au niveau de la majorité des combinaisons des dyades de problèmes. En fait, nous percevons que 26 dyades sur 36 impliquent des niveaux de difficulté divergents. Seules les dyades suivantes ne permettent pas de dégager une différence concernant la difficulté des problèmes : les problèmes 1 et 4 ($T(521) = 2,666$; $p > 0,001$), la dyade de problèmes 2 et 6 ($T(521) = 2,706$; $p > 0,001$), la paire de problèmes 2 et 7 ($T(521)=0,058$; $p > 0,001$), les problèmes 3 et 8 ($T(521) = 3,116$; $p > 0,001$), les problèmes 3 et 9 ($T(521) = 2,58$; $p > 0,001$), les problèmes 5 et 6 ($T(521) = 2,09$; $p > 0,001$), les problèmes 5 et 8 ($T(521) = 2,045$; $p > 0,001$), les problèmes 5 et 9 ($T(521) = 2,311$; $p > 0,001$), les problèmes 6 et 7 ($T(521) = 2,705$; $p > 0,001$), ainsi que la dyade de problèmes 8 et 9 ($T(521) = 0,374$; $p > 0,001$). Ces résultats démontrent que des différences statistiquement significatives sont perceptibles au niveau de la difficulté impliquée par chacun des problèmes présentés au sein

de notre protocole de recherche. De plus, concernant le niveau de difficulté des problèmes, tel que représenté dans la figure 3, il est possible de dégager un ordonnancement en 4 paliers.

TABLEAU 5. *Résultats des tests* T *pairés concernant les différentes combinaisons de dyades diénoncés de problèmes mathématiques*

Dyades de problèmes présentées	Différences appariées			*t*	Sig. (bilatérale)
	Moyenne	Écart type	Erreur standard moyenne		
Problèmes 1 et 2	0,66284	2,10048	0,09194	7,210	0,000
Problèmes 1 et 3	1,60920	2,11850	0,09272	17,355	0,000
Problèmes 1 et 4	-0,22605	1,93727	0,08479	-2,666	0,008
Problèmes 1 et 5	1,12452	2,38715	0,10448	10,763	0,000
Problèmes 1 et 6	0,92529	2,26128	0,09897	9,349	0,000
Problèmes 1 et 7	0,65709	2,14163	0,09374	7,010	0,000
Problèmes 1 et 8	1,32759	2,01481	0,08819	15,054	0,000
Problèmes 1 et 9	1,36207	2,12587	0,09305	14,639	0,000
Problèmes 2 et 3	0,94636	2,23070	0,09763	9,693	0,000
Problèmes 2 et 4	-0,88889	1,97565	0,08647	-10,280	0,000
Problèmes 2 et 5	0,46169	2,30818	0,10103	4,570	0,000
Problèmes 2 et 6	0,26245	2,21626	0,09700	2,706	0,007
Problèmes 2 et 7	-0,00575	2,28110	0,09984	-0,058	0,954
Problèmes 2 et 8	0,66475	2,01260	0,08809	7,546	0,000
Problèmes 2 et 9	0,69923	2,26455	0,09912	7,055	0,000
Problèmes 3 et 4	-1,83525	1,98354	0,08682	-21,139	0,000
Problèmes 3 et 5	-0,48467	2,33573	0,10223	-4,741	0,000
Problèmes 3 et 6	-0,68391	2,24200	0,09813	-6,969	0,000
Problèmes 3 et 7	-0,95211	2,33795	0,10233	-9,304	0,000
Problèmes 3 et 8	-0,28161	2,06497	0,09038	-3,116	0,002
Problèmes 3 et 9	-0,24713	2,18840	0,09578	-2,580	0,010
Problèmes 4 et 5	1,35057	2,08589	0,09130	14,793	0,000
Problèmes 4 et 6	1,15134	2,05913	0,09013	12,775	0,000
Problèmes 4 et 7	0,88314	1,95824	0,08571	10,304	0,000
Problèmes 4 et 8	1,55364	1,93215	0,08457	18,372	0,000
Problèmes 4 et 9	1,58812	2,14827	0,09403	16,890	0,000
Problèmes 5 et 6	-0,19923	2,17792	0,09533	-2,090	0,037
Problèmes 5 et 7	-0,46743	2,38274	0,10429	-4,482	0,000
Problèmes 5 et 8	0,20307	2,26823	0,09928	2,045	0,041
Problèmes 5 et 9	0,23755	2,34809	0,10277	2,311	0,021
Problèmes 6 et 7	0,26820	2,26568	0,09917	2,705	0,007
Problèmes 6 et 8	-0,40230	2,10178	0,09199	-4,373	0,000
Problèmes 6 et 9	-0,43678	2,30846	0,10104	-4,323	0,000
Problèmes 7 et 8	-0,67050	2,14240	0,09377	-7,150	0,000
Problèmes 7 et 9	-0,70498	2,44265	0,10691	-6,594	0,000
Problèmes 8 et 9	-0,03448	2,10446	0,09211	-0,374	0,708

NOTES. 1. Application de la correction de Bonferroni : Test *T* pairé significatif au seuil de $p \leq 0{,}001$; 2. La valeur du degré de liberté pour chaque dyade de problèmes présentée est 521.



NOTES.

Problème #1 : Rapport fonction entier	+	Éléments d'information situationnels ;
Problème #2 : Rapport scalaire entier	+	Éléments d'information situationnels ;
Problème #3 : Aucun rapport entier	+	Éléments d'information superflus ;
Problème #4 : Rapport fonction entier	+	Données essentielles ;
Problème #5 : Rapport scalaire entier	+	Données essentielles ;
Problème #6 : Rapport scalaire entier	+	Éléments d'information superflus ;
Problème #7 : Rapport fonction entier	+	Éléments d'information superflus ;
Problème #8 : Aucun rapport entier	+	Éléments d'information situationnels ;
Problème #9 : Aucun rapport entier	+	Données essentielles

FIGURE 3. *Classification des énoncés de problèmes en fonction de leur niveau de difficulté*

Cet ordonnancement permet de traduire que le niveau de difficulté des problèmes s'explique en partie par les variables didactiques impliquées dans les problèmes. Une MANOVA complémentaire a permis de corroborer ce constat ($F(5,517)= 1190,796$; $p < 0,001$; *Wilk's* $\lambda = 0,080$). L'ordonnancement des variables didactiques selon leur niveau de complexité est présenté au sein du Tableau 6. À cet effet, il est possible de dégager que la présence d'un rapport numérique de type *aucun rapport entier*, ainsi la présence d'éléments d'informations superflus engendrent les plus faibles niveaux de réussite. À l'opposé, les énoncés qui impliquent un rapport numérique fonction entier ou des éléments d'informations situationnels, qui visent à contextualiser le problème, constituent les énoncés pour lesquels les élèves obtiennent le rendement le plus élevé.

Évaluation de l'effet-classe

En troisième lieu, afin d'éprouver « l'hypothèse du contrat », nous avons vérifié si un effet-classe permettait d'expliquer le rendement des élèves à résoudre des problèmes sur les proportions. Pour ce faire, nous avons effectué une analyse de variance (ANOVA). De plus, afin de respecter les conditions d'application des ANOVA, nous avons observé si nous respections l'homogénéité des données en effectuant un test de Levene. Les résultats de ce test d'évaluation de l'homogénéité des données sont présentés au sein des Tableau 7, tandis que les résultats de l'ANOVA sont mis de l'avant à l'intérieur du Tableau 8.

TABLEAU 6. *Ordonnancement des variables didactiques selon leur niveau de complexité*

Niveau de difficulté	Types de rapports numériques et éléments d'information impliqués au sein des énoncés
Classement des variables didactiques selon un ordre croissant du niveau de difficulté impliqué (Moins réussi ↑ / Mieux réussi ↓)	Aucun rapport entier
	Éléments d'information superflus
	Données essentielles
	Rapport scalaire entier
	Éléments d'information situationnels
	Rapport fonction entier

TABLEAU 7. *Résultats du test de Levene concernant le rendement en résolution de problèmes tel quíobtenu par les différentes classes participant à la recherché*

Variable dépendante	Statistique de Levene	df1	df2	Sig.
Résultat Rés. Problèmes	1,085	25	496	0,356

TABLEAU 8. *Résultats de l'ANOVA concernant le rendement en résolution de problèmes tel quíobtenu par les différentes classes participant à liétude*

	Somme des carrés	ddl	Moyenne des carrés	*F*	Sig.	Taille de l'effet
Inter-groupes	8276,108	25	331,044	3,999	0,000	0,168
Intra-groupes	41056,737	496	82,776			
Total	49332,845	521				

À la lumière des données obtenues, il est possible de dégager qu'un effet-classe influence le rendement des élèves en résolution de problèmes sur les proportions ($F = 3{,}999$; $p \leq 0{,}001$). À cet effet, selon Cohen (1988), la portion

de la variance en résolution de problèmes expliquée par l'effet-classe est de grande taille (η^2 = 0,168). Cela signifie que l'influence de l'effet-classe est de grande envergure.

D'autre part, afin de nous assurer que ces divergences, au niveau du rendement obtenu par les élèves provenant des différentes classes que nous avons impliquées au sein de notre échantillon, nous avons effectué une analyse de covariance (ANCOVA). Cette analyse visait à contrôler le niveau socio-économique, tel qu'opérationnalisé à partir des indices de défavorisation du MELS, soit : le seuil de faible revenu (SFR) et l'indice de milieu socio-économique (IMSE). Les résultats de cette ANCOVA sont présentés au sein du Tableau 9.

TABLEAU 9. *Résultats de l'ANCOVA concernant le rendement en résolution de problèmes tel quíobtenu par les différentes classes participant à l'étude*

	Somme des carrés	ddl	Moyenne des carrés	*F*	Sig.	Taille de l'effet
Classe	5487,554	23	238,589	2,882	0,000	0,118
Erreur	41056,737	496	82,776			
Total	497957,000	522				
Total corrigé	49332,845	521				

À la lumière des données obtenues, il est possible de dégager que le niveau socioéconomique des élèves influence leur rendement en résolution de problèmes sur les proportions. En effet, lorsque le niveau socioéconomique est contrôlé, nous observons que l'effet-classe influe toujours sur le rendement à résoudre des problèmes des élèves de sixième année (F = 2,882 ; $p \leq 0{,}001$). Par ailleurs, force est de constater que la taille de l'effet de l'appartenance à un milieu scolaire sur le rendement en résolution de problèmes est diminuée lorsque cette variable est contrôlée (η^2 = 0,118). Ces résultats sont importants pour la recherche en éducation parce qu'ils mettent en évidence l'impact des interactions didactiques, qui diffèrent selon les classes, sur la performance des élèves. .

INTERPRÉTATION DES DONNÉES

À la lumière des données obtenues, il est impossible de rejeter définitivement l'une ou l'autre des perspectives interprétatives des difficultés des élèves en mathématiques. Par ailleurs, nous pensons que les résultats obtenus dans ce projet de recherche tendent à démontrer que « l'hypothèse du contrat » constitue la perspective interprétative la plus appropriée concernant l'explication des difficultés en mathématiques des élèves du primaire. D'une part, ce constat est dégagé du fait que les caractéristiques des élèves, opérationnalisées par

l'identification aux étiquettes d'élèves à risque, influencent peu l'efficacité du calcul relationnel mis en œuvre à l'intérieur des problèmes sur les proportions. À l'intérieur de seulement deux problèmes sur neuf, les élèves tout-venant ont utilisé des procédures plus efficaces que les élèves à risque. Ce constat permet de déprécier la validité de « l'hypothèse des spécificités », puisqu'en démontrant que les procédures utilisées par les deux groupes d'élèves ne sont pas différentes, la pertinence d'adapter l'intervention de l'enseignant aux caractéristiques de l'élève à risque est dépréciée.

D'autre part, nous avons démontré que la structure des problèmes, ainsi que l'effet-classe donné influent fortement sur le rendement de l'élève. Ces résultats appuient « l'hypothèse du contrat » en soutenant que diverses considérations didactiques influencent le calcul relationnel des élèves de sixième année. Conséquemment, il est proposé d'interpréter les difficultés en résolution de problèmes sur les proportions des élèves en fonction de l'interaction de celui-ci à l'intérieur du système scolaire auquel il participe, ainsi qu'en lien avec la spécificité du contenu mathématique à enseigner. Nos résultats contredisent les fondements des injonctions ministérielles qui recommandent aux pédagogues d'intervenir en fonction des caractéristiques psychologiques de l'élève.

De nouvelles recherches en didactique des mathématiques seraient nécessaires afin de mieux comprendre comment s'opère l'enseignement du raisonnement proportionnel auprès des élèves à risque. À ce sujet, par le biais de la mise en œuvre de devis de recherche qualitatif, nous proposons d'explorer les différents phénomènes didactiques susceptibles de se produire à l'intérieur d'une classe favorisant l'inclusion scolaire. De plus, dans le cadre d'un article ultérieur, nous tenterons d'expliquer de quelle manière les variables didactiques des problèmes influencent la mise en œuvre d'un calcul relationnel spécifique.

LIMITES

Différentes limites sont attribuables au devis de recherche que nous avons utilisé. En premier lieu, il est important de mentionner qu'il nous est impossible de généraliser nos résultats concernant l'interprétation des difficultés d'apprentissage à l'ensemble des contenus à l'intérieur desquels s'exerce la résolution de problèmes en mathématiques. Cela se justifie par le fait que nous avons exclusivement étudié le calcul relationnel des élèves dans le cadre de la résolution d'énoncés restreints à la classe de problème « 4^{e} proportionnelle », telle que mise de l'avant par la théorie des champs conceptuels de Vergnauld (1990). Cela signifie que chacun de nos énoncés impliquait nécessairement la mise en œuvre d'un raisonnement proportionnel.

Ensuite, nous devons souligner un biais concernant la validité écologique de notre projet de recherche. En effet, nous avons comparé les calculs relationnels des élèves de sixième année considérés comme étant « à risque » en fonction de ceux mis en œuvre par des élèves tout-venant. Par contre, cette catégorisation

des élèves découlait spécifiquement du dépistage effectué au sein du milieu scolaire. Il est possible que le milieu scolaire n'ait pas bénéficié de suffisamment de temps afin d'identifier tous les élèves à risque. De plus, en correspondance avec la classification des enseignants concernant l'identification des élèves à risque, rien ne permet de distinguer les élèves ayant des difficultés sur le plan des apprentissages par rapport aux élèves à risque sur le plan comportemental. Cela diminue considérablement la portée de nos résultats.

En dernier lieu, il est important de mentionner que nous nous sommes contentés d'éprouver « l'hypothèse des spécificités » et « l'hypothèse du contrat ». À cet effet, nous avons évalué la validité de la perspective interprétative des difficultés en mathématiques relatives aux sciences cognitives, ainsi qu'à la didactique. Par ailleurs, par souci de concision, nous avons éviter de traiter des autres modèles interprétatifs qui expliquent les difficultés des élèves à partir d'une approche systémique ou par le biais d'une vision psychologisante des difficultés des élèves. Dans le cadre de recherches ultérieures, il serait pertinent d'éprouver les modèles explicatifs qui n'appartiennent pas spécifiquement aux disciplines de la didactique, ainsi qu'aux sciences cognitives.

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ANNEXE 1

TABLEAU 2. *Comparaison du calcul relationnel des élèves à risque et des élèves tout-venant*

Problèmes abordés		Procédures observées			Khi-carré		
		Calcul relationnel erroné	Calcul relationnel réussi	Procédure inclassée	Valeur	ddl	Sig.
Énoncé 1	Élèves à risque	5 (23,6%)	78 (73,6%)	3 (2,8%)	2,408	2	0,300
	Élèves tout-venant	82 (19,7%)	329 (79,1%)	5 (1,2%)			
Énoncé 2	Élèves à risque	37 (34,9%)	48 (45,3%)	21 (19,8%)	20,998	2	0,000*
	Élèves tout-venant	99 (27,2%)	282 (67,8%)	35 (8,4%)			
Énoncé 3	Élèves à risque	59 (55,7%)	33 (31,1%)	14 (13,2%)	4,556	2	0,102
	Élèves tout-venant	189 (45,4%)	176 (42,3%)	51 (12,3%)			
Énoncé 4	Élèves à risque	22 (20,8%)	78 (73,6%)	6 (5,7%)	15,517	2	0,000*
	Élèves tout-venant	44 (10,6%)	366 (88,0%)	6 (1,4%)			
Énoncé 5	Élèves à risque	56 (52,8%)	43 (40,6%)	7 (6,6%)	6,050	2	0,049
	Élèves tout-venant	173 (41,6%)	224 (53,8%)	19 (4,6%)			

TABLEAU 2. *Comparaison du calcul relationnel des élèves à risque et des élèves tout-venant (cont.)*

Énoncé 6	Élèves à risque	56 (52,8%)	43 (40,6%)	7 (6,6%)	6,050	2	0,049
	Élèves tout-venant	173 (41,6%)	224 (53,8%)	19 (4,6%)			
Énoncé 7	Élèves à risque	38 (35,8%)	58 (54,7%)	10 (9,4%)	9,565	2	0,008
	Élèves tout-venant	95 (22,8%)	293 (70,4%)	28 (6,7%)			
Énoncé 8	Élèves à risque	59 (55,7%)	38 (35,8%)	9 (8,5%)	5,096	2	0,078
	Élèves tout-venant	188 (45,2%)	200 (48,1%)	28 (6,7%)			
Énoncé 9	Élèves à risque	53 (50,0%)	42 (39,6%)	11 (10,4%)	1,846	2	0,397
	Élèves tout-venant	197 (47,4%)	189 (45,4%)	30 (7,2%)			

NOTE.* Correction de Bonferroni : Puisque nous avons réalisé 9 tests distincts, nous avons établi le seuil de signification des tests du *khi-carré* à $p < 0,006$ (0,05/9).

TABLEAU 3. *Résultats de lianalyse de variance multivariée concernant liexploration des différences relatives à la difficulté impliquée par chacun de nos problèmes mathématiques (MANOVA)*

Effet	Valeur	*F*	Hypo.DF	Error DF	Sig.	Noncent. Paramètre	Puissance observée
Pillai's Trace	0,931	770,647	9,00	513,0	,000	6935,821	1,000
Wilks' Lambda	0,069	770,647	9,00	513,0	,000	6935,821	1,000
Hotelling's Trace	13,520	770,647	9,00	513,0	,000	6935,821	1,000
Roy's Largest Root	13,520	770,647	9,00	513,0	,000	6935,821	1,000

ANNEXE 2. *Énoncés de problèmes utilisés*

1- Le voyage à New York des élèves de sixième année

Lors du voyage à New York, M. Pouliot place les élèves de sixième année dans des petits groupes composés de 7 élèves. Afin de s'assurer que les garçons et les filles puissent discuter ensemble, M. Pouliot dispose 4 filles dans chaque groupe. S'il y a 84 élèves de sixième année qui participent au voyage, combien y a-t-il de filles au total?

2- Les serpents du zoo

Dans le vivarium du zoo, il y a 3 serpents. Le serpent A mesure 48 décimètres de long et celui-ci mange 15 souris chaque mois. Le serpent B mesure 64 décimètres de long et mange 20 souris par mois. Le nombre de souris offert aux serpents dépend de leur longueur. Si le serpent C mesure 16 décimètres de long, combien de souris mangera-t-il chaque mois?

3- La soupe à l'oignon pour 12

La recette d'une soupe à l'oignon pour 18 implique les ingrédients suivants:
8 oignons
6 tasses d'eau
4 cubes de concentré de poulet
24 grammes de beurre
½ tasse de crème
Je sais que j'ai besoin de 28 grammes de beurre afin de préparer de la soupe à l'oignon pour 21 personnes. Par ailleurs, pour la fête de l'Action de grâce, je souhaite préparer de la recette de soupe pour ma famille et mes cousins. J'ai donc besoin de préparer la recette pour douze personnes. Combien de grammes de beurre ai-je besoin afin de cuisiner ma recette?

4 - Le prix des citrouilles

16 citrouilles coûtent 64$. Je veux acheter 18 citrouilles. Quel est le prix de 18 citrouilles?

5- Le mélange de couleurs

Un mélange de couleurs est composé de 14 millilitres de peinture verte et de 8 millilitres de peinture jaune. En utilisant 56 millilitres de peinture verte, combien faut-il de millilitres de peinture jaune pour obtenir ce même mélange?

6 - Les scouts

18 scouts sont allés au camp Trois-Saumons la semaine dernière. Afin de nourrir ces enfants, 21 petits pains, 8 litres de lait, 4 lasagnes et 3 gâteaux au chocolat ont été préparés par le cuisinier. Au total, les enfants scouts ont eu le temps de compléter 12 activités. Cette semaine, 54 scouts visitent le camp. Combien de petits pains le cuisinier doit-il préparer cette semaine?

7- Le camp de vacances

Chaque année, le camp de vacances *Cité Joie* offre d'héberger des élèves ayant eu un bon comportement pour une durée de deux jours. La fin de semaine passée, 18 enfants ont dormi au camp de vacances. Ceux-ci ont bu 72 verres de lait. En fin de semaine, 23 enfants ont bu 92 verres de lait. Combien de verres de lait le directeur du camp doit-il prévoir s'il y aura 21 enfants présents la fin de semaine prochaine?

8 - L'imprimerie

Dans le but de préparer les élèves du Québec à la dictée PGL, une imprimerie doit publier plusieurs dictionnaires. Cette imprimerie a besoin d'exactement 6 minutes afin de publier 8 dictionnaires. S'il reste 15 minutes avant la fin de la journée de travail, combien de dictionnaires est-il possible d'imprimer?

9- Le jus d'orange

En pressant 4 oranges, il est possible d'obtenir 6 verres de jus d'orange. En utilisant 6 oranges, il est possible d'obtenir 9 verres de jus d'orange. Si je presse 10 oranges, combien de verres de jus vais-je obtenir?

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UN CANEVAS D'ITEM POUR ÉVALUER LA COMPÉTENCE D'INVESTIGATION SCIENTIFIQUE EN LABORATOIRE

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RÉSUMÉ. L'évaluation des compétences scientifiques chez les élèves du secondaire (12-16 ans) présente des défis importants, en particulier en ce qui concerne l'instrumentation. Cet article présente des propositions à caractère méthodologique permettant de développer et d'administrer des situations d'évaluation (SE) de la compétence d'investigation scientifique dans un contexte à enjeux critiques comme c'est le cas, par exemple, en évaluation sommative ou certificative. Ces propositions s'appuient sur les postulats de l'approche par compétence, l'approche préconisée dans plusieurs systèmes éducatifs nord-américains et européens.

AN ITEM BLUEPRINT FOR ASSESSING SCIENTIFIC INQUIRY COMPETENCIES IN A LABORATORY SETTING

ABSTRACT. The assessment of secondary students' (12-16 years old) scientific competencies involves significant challenges, in particular instrumentation competencies. This article presents a methodological framework to develop and administer tools that can assess students' scientific investigation competencies in a high-stakes context, such as summative or certificative evaluations. The framework draws on the competency-based approach, which is the recommended approach in many North American and European educational systems.

Depuis une dizaine d'années, les systèmes scolaires sont les témoins de profonds changements, autant en Amérique du Nord qu'en Europe. Plus particulièrement, les décideurs apportent des changements importants à l'éducation fondamentale de masse autant pour les ordres du primaire que du secondaire. En effet, on assiste à la mise en œuvre de multiples décisions administratives et pédagogiques qui visent essentiellement à réguler les systèmes afin, semble-t-il, de les rendre plus efficaces. Le besoin de préparer les jeunes aux nombreux défis du 21e siècle n'est certes pas étranger à cette situation

comme le souligne par exemple le rapport à l'UNESCO de la Commission internationale sur l'éducation pour le vingt-et-unième siècle (Delors, 1999). À titre d'exemple, on peut penser à l'explosion des connaissances ayant court depuis le début du siècle dernier suggérant ainsi de passer d'une pédagogie axée sur l'acquisition de connaissances à une pédagogie axée sur le traitement de ces dernières. Les programmes formulés par compétences en sont d'ailleurs de bons exemples puisqu'ils visent, pour la plupart, à mieux outiller les élèves à faire face aux multiples défis qu'ils auront à surmonter au cours du vingtième et unième siècle. À ce sujet, plusieurs juridictions ou états ont décidé d'aller de l'avant avec cette approche en proposant des programmes d'études qui visent le développement de compétences, et ce, autant en Amérique du Nord (par ex. Québec, Ontario, etc.) qu'en Europe (par ex. Belgique, Suisse, etc.). L'analyse de ces programmes révèle d'ailleurs de grandes disparités dans la définition même du concept de compétence et dans sa façon de l'opérationnaliser. Nous verrons plus loin que cet aspect ajoute à la complexité de l'évaluation des compétences. Plusieurs chercheurs[1] (Dionne, 2005 ; Rey, Carette, Defrance et Kahn, 2003 ; Scallon, 2004) soulèvent des questions concernant les démarches et méthodes à employer afin de développer une instrumentation pertinente pour juger de ces compétences dans des contextes scolaires qui sont souvent jalonnés d'obstacles au regard, entre autres, de la mise en œuvre de ces méthodes et particulièrement dans le contexte de l'évaluation sommative ou certificative.

Ce changement de paradigme, soit le passage d'une pédagogie axée sur la transmission de connaissance à une pédagogie axée sur le traitement de l'information, implique de nombreux changements et réajustements et en particulier au niveau de l'évaluation des apprentissages. Des instruments de collecte de données plus adaptés doivent être développés ou amendés puisque les outils traditionnellement employés par les enseignants (ex. épreuves à correction objective) possèdent des limites, d'autant plus quand les apprentissages mesurés sont variés et complexes (Laurier, Tousignant et Morrissette, 2005). Or, s'il existe de nombreux écrits sur les règles de construction des items (question à choix multiple, vrai ou faux, question à réponse courte, etc.) (voir par exemple Airasian, Engemann et Gallagher 2007 ; Conderman et Koroghlanian, 2002 ; Durand et Chouinard, 2006 ; Haladyna, Downing et Rodriguez, 2002 ; McCowan, 1999 ; McMillan, 2001 ; Scallon, 2004), on en retrouve beaucoup moins concernant les règles de construction de situation d'évaluation qui visent à mesurer des performances représentatives d'un construit (ex. compétence) ou des apprentissages complexes. Ceci s'observe d'autant plus dans le cas où l'évaluation se déroule dans un contexte scolaire à enjeux critiques comme c'est le cas pour des épreuves administrées dans un contexte sommatif ou certificatif. Selon bien des auteurs (Baker, 1997 ; Hogan et Murphy, 2007 ; Scallon, 2004 ; Solano-Flores, Jovanovic et Shavelson, 1994 ; Solano-Flores et Shavelson, 1997 ; Solano-Flores, Shavelson et Schneider, 2001), il existe un besoin réel de mieux documenter le processus permettant de mettre en place

des situations d'évaluation qui mesurent ce genre de construit. Cet article a pour objectif de faire une proposition à caractère méthodologique visant à évaluer une compétence. Le contexte associé à cette proposition est l'éducation scientifique et nous nous sommes intéressés de façon plus particulière à l'investigation scientifique. Cette recherche a été menée au Québec et s'appuie sur les prescriptions ministérielles qui sont en vigueur pour l'ordre du secondaire dans cette juridiction depuis le milieu des années 2000. Nous postulons que les propositions que nous exposons dans cet article sont susceptibles d'intéresser autant les chercheurs que les praticiens qui s'intéressent aux méthodes permettant de mesurer des construits complexes. Bien que nous n'ayons aucune intention de généralisation à d'autres juridictions ou états, nous espérons que les réflexions condensées dans cet article puissent inspirer les intervenants qui oeuvrent dans d'autres juridictions ou états.

Dans cet article, nous tenterons de répondre à la question suivante : comment construire des situations d'évaluation qui permettent d'évaluer une compétence scientifique dans un contexte ordinaire d'enseignement et donc soumis à de nombreuses contraintes ?

Dans un premier temps, nous présenterons la problématique et les aspects contextuels pris en compte dans notre réflexion. Dans un second temps, nous discuterons des aspects théoriques abordés dans ce texte à savoir l'investigation scientifique, le concept de compétence et les contraintes inhérentes à la salle de classe. Enfin, nous présenterons le modèle que nous proposons en le définissant et en indiquant ses principales caractéristiques tout en montrant de quelle façon ce modèle pourrait tenir compte des différentes contraintes mentionnées dans cet article.

PROBLÉMATIQUE ET ÉLÉMENTS DE CONTEXTE

L'évaluation sommative au secondaire : un contexte organisationnel contraignant

Depuis quelques années, le ministère de l'Éducation, du Loisir et du Sport (MELS) demande aux enseignants de science et de technologie de développer et d'évaluer chez leurs élèves des compétences. Cependant, force est de constater qu'il existe peu de modèles qui présentent des exemples concrets sur lesquels les enseignants pourraient s'appuyer dans le cadre de la planification de leurs séquences d'enseignement ou de leurs séquences d'évaluation. Qui plus est, les propositions existantes ne tiennent pas toujours compte des nombreuses contraintes qui viennent complexifier la tâche des enseignants lorsqu'ils ont à réaliser ces opérations de planification. Dans le cadre de nos travaux, notre point de départ a été la prise en compte des multiples contraintes qui prévalent généralement dans les écoles dites ordinaires. En ce qui nous concerne, une école dite ordinaire possède trois caractéristiques : (1) il n'y a aucune opération de sélection des élèves, (2) le ratio étudiants / classe est semblable à ce que

l'on retrouve dans la moyenne des écoles de la province[2] et (3) le financement de l'école se situe dans les paramètres normaux de la moyenne des écoles comparables ailleurs dans la province. Les contraintes que nous allons évoquer peuvent être classées en deux grandes catégories : les contraintes pédagogiques et les contraintes organisationnelles. Le tableau 1 qui suit présente une liste non exhaustive des contraintes dont nous avons tenu compte pour l'élaboration des instruments. La prise en compte de ces dernières est une condition souvent jugée essentielle pour favoriser les changements de pratiques pédagogiques chez les enseignants de science (Solano-Flores, Shavelson et Bachman, 1999 ; Solano-Flores et Shavelson, 1997).

TABLEAU 1. *Liste de contraintes pédagogiques et organisationnelles*

Contraintes pédagogiques	Contraintes organisationnelles
Durée accordée à la situation d'évaluation (SE)	Nombre d'élèves par classe
Gestion des élèves en difficulté ou en grande difficulté	Présence d'un technicien de laboratoire
Menaces à la validité des inférences (ex. risque de tricherie)	Disponibilité du matériel de laboratoire
Menaces à la fidélité des scores	Disponibilité de la classe-laboratoire

Parmi les contraintes pédagogiques, on note : (1) la durée accordée à la SE, (2) la gestion des élèves en difficulté ou en grande difficulté, (3) les menaces à la validité et (4) les menaces à la fidélité. Examinons brièvement chacune de ces dernières. En contexte d'enseignement, la durée consacrée à l'évaluation est limitée. Les enseignants perçoivent parfois négativement la durée consacrée à l'évaluation. Pour plusieurs, ces périodes de temps pourraient être plutôt consacrées aux apprentissages, ce qui représente pour eux une forme de perte de durée d'enseignement. Aussi, nous savons que, plus les élèves sont jeunes, plus leur niveau de motivation sera difficile à soutenir sur des durées de temps importantes. Dans un contexte d'évaluation, la durée prend une très grande importance. À titre d'exemple, les évaluations qui ont lieu à la fin d'une année scolaire ou à la fin d'un cycle se réalisent généralement au mois de juin juste avant les vacances estivales. À ce moment, les enseignants doivent souvent accélérer le rythme d'enseignement afin de s'assurer que les élèves auront appris l'ensemble des éléments prévus au programme d'études. Traditionnellement, dans une approche par objectifs et dans une organisation scolaire annuelle, une période d'évaluation est prévue au mois de juin. On réserve souvent une dizaine de jours qui sont consacrés aux évaluations sommatives qui prennent

le plus souvent la forme d'examens visant à mesurer l'acquisition des apprentissages à l'égard des principaux objectifs du programme d'études.

Le développement de compétences impose des situations d'évaluation qui mettent l'accent sur la performance des élèves à résoudre une tâche ou une situation donnée. Cette performance doit respecter les principes de l'évaluation des apprentissages. Examinons trois menaces qui planent au-dessus de certains de ces principes. Premièrement, ce genre de situations d'évaluation prend généralement un temps considérable à réaliser. Tout en présentant des situations qui permettent de juger du développement d'une compétence, il faut également faire en sorte d'inclure volontairement des contraintes qui vont la limiter dans la durée. Deuxièmement, le contexte d'évaluation sommatif ou certificatif fait en sorte qu'il faut s'assurer que la production d'un élève lui appartient entièrement et n'est pas associée à d'autres élèves. Il s'agit de la même préoccupation que dans le cas d'un contexte de *testage* où il faut s'assurer d'éviter la tricherie. Autrement dit, pour des raisons pédagogiques, mais également juridiques, il faut être en mesure de prouver que le jugement de l'enseignant porte uniquement sur la performance de l'élève. Troisièmement, dans le cas de l'évaluation d'un construit complexe, les menaces à la fidélité prennent différentes formes. Comme nous l'avons déjà mentionné, la durée consacrée à l'évaluation est limitée. D'une part, il n'est pas possible d'administrer de façon réaliste plusieurs SE semblables qui permettraient aux enseignants d'exercer leur jugement en s'appuyant sur des instruments réputés stables. D'autre part, il est aussi très difficile voir impossible en contexte scolaire d'exercer un jugement qui s'appuie sur un processus de notation avec correcteurs multiples. Cela fait en sorte qu'il faut être encore plus prudent pour s'assurer de la validité et de la fidélité des interprétations en lien avec chacune de ces SE.

Les contraintes organisationnelles, quant à elles, sont surtout associées aux ressources nécessaires au travail pédagogique en classe-laboratoire. À titre d'exemple, on peut mentionner la disponibilité : (1) du technicien de laboratoire, (2) du matériel de laboratoire et (3) de la classe-laboratoire. En effet, les écoles sont habituellement équipées adéquatement pour offrir des cours de science et technologie. Nous nous sommes quand même assuré de ne pas recourir à des instruments ou des matériaux qui seraient difficilement accessibles pour certaines écoles. Aussi, les écoles ne sont généralement pas très bien pourvues en locaux permettant de consigner les travaux des élèves. Ce détail est de toute première importance puisque certaines activités évaluatives (ex. création d'une maquette) pourtant fort intéressantes sont difficilement réalisables dans la pratique, faute d'espace. En ce sens, les périodes d'expérimentation devraient être assez courtes afin d'être complétées à l'intérieur d'une plage horaire restreinte (ex. une période de 75 minutes). Enfin, l'organisation scolaire (ex. horaire, disponibilité des classes-laboratoires, etc.) amène fréquemment son lot de défis. Dans un monde idéal, il serait souhaitable que les élèves réalisent la situation

d'évaluation en continu (ex. l'équivalent de 4 périodes de 75 minutes) ce qui limiterait, entre autres, les risques de contamination. Cependant, les contraintes organisationnelles font souvent en sorte de rendre impossible un tel scénario. Un meilleur arrimage entre les aspects pédagogiques et organisationnels serait évidemment souhaitable. Nous avons choisi de considérer cette contrainte en espérant qu'elle se résorbe, éventuellement, par un meilleur arrimage. À ces contraintes viennent s'ajouter les effectifs étudiants qui représentent un enjeu réel pour les praticiens. En effet, le recours, par exemple, aux entrevues individuelles ne serait pas une solution acceptable pour des enseignants qui doivent porter leur attention sur des groupes souvent populeux.

Comme nous venons de le décrire, le contexte pédagogique associé à l'enseignement de la science et de la technologie impose de multiples contraintes. Nous pensons que des propositions méthodologiques qui ne prendraient pas en compte ces dernières ne peuvent qu'entrainer des effets démotivants et une perte d'intérêt chez les enseignants qui ne seraient alors pas tentés de mettre en œuvre ces propositions les jugeant inapplicables en situation réelle.

LE CONSTRUIT MESURÉ : L'INVESTIGATION SCIENTIFIQUE

Quelques définitions

Le *National Research Council* (1996) définit l'investigation scientifique comme :

> une activité qui implique de réaliser des observations, poser des questions, prendre connaissance de livres et d'autres sources de renseignements afin de déterminer ce qui est déjà connu, confronter ce qui est déjà connu aux données expérimentales, utiliser des instruments afin de collecter des données, analyser et interpréter les données, proposer des solutions des explications et des prédictions et enfin communiquer les résultats. (p. 23; trad. auteur)

Cette définition met en lumière une démarche de résolution de problème dans un contexte scientifique en lien avec le courant du *hands-on science*. De leur côté, Lumpe et Oliver (1991) identifient trois dimensions importantes associées à l'investigation scientifique soit la dimension : (1) découverte, (2) structurelle et (3) expérimentale. La première dimension fait référence au fait que l'investigation doit représenter pour l'élève une réelle découverte. En ce sens, l'investigation va bien au-delà de la simple confirmation d'une théorie pouvant avoir été par exemple présentée en classe par l'enseignant. La dimension structurelle, quant à elle, touche à l'encadrement de l'élève dans son processus d'investigation. Dans une approche basée sur le développement « pur » de l'investigation scientifique, l'élève devrait avoir suffisamment de liberté et être en mesure de prendre des décisions significatives à différentes étapes de son processus d'investigation. Enfin, la dimension expérimentale est en lien avec le processus de preuve mis en place afin de donner de la crédibilité aux processus réalisés par l'élève. Les recommandations de ces auteurs ainsi que celles du *National Research Council* nous ont largement inspiré pour l'élaboration de

la structure des outils que nous présentons dans cet article. Il est important de bien définir ce que nous entendons par « investigation scientifique », car, bien que ce soit une activité pratiquement incontournable dans le paysage de l'enseignement des sciences, il n'en demeure pas moins qu'on remarque des acceptions très différentes. Pour certains, l'investigation scientifique se réduit à la maitrise d'habiletés de manipulation dans un contexte de laboratoire (ex. manipuler adéquatement et de façon sécuritaire un bruleur au gaz) alors que, pour d'autres, il s'agit de résoudre de manière originale un problème inédit par le biais d'une démarche empirique. Confronter ces deux exemples aux recommandations que nous venons de présenter révèle le fossé qui sépare les conceptions souvent entretenues face à l'investigation scientifique.

L'investigation scientifique qui consiste à développer et à appliquer des stratégies de résolution de problème en laboratoire est certainement le type d'activité qui possède le plus de caractéristiques communes avec celles de la définition proposée par le *National Research Council*. Il s'agit essentiellement pour l'élève de mettre en œuvre une démarche de résolution de problème dans un contexte de classe laboratoire (ex. s'appuyer sur des données empiriques, établir des évidences basées sur des éléments observables, etc.). Une autre dimension que nous avons retenue consiste à offrir la possibilité aux élèves de faire des choix et de les justifier. Selon Duschl (2003) une façon de promouvoir le développement d'une compétence d'investigation scientifique consiste à sortir de la logique des activités d'investigation clé en main (*kit-based science investigation*) afin que les élèves se voient offrir des situations qui leur permettront de faire des choix et de les justifier ce qui est plus conforme à l'activité scientifique.

La compétence : une tentative de définition

D'aucuns reconnaissent que le concept de « compétence » est polysémique. Plusieurs propositions ont été formulées en éducation au cours des dernières années (Perrenoud, 1997 ; Tardif, 2003) afin de mieux déterminer le périmètre de ce concept. En ce qui nous concerne, nous avons retenu la proposition de Scallon (2004). Ce dernier propose que « la compétence est la possibilité, pour un individu, de mobiliser de manière intériorisée un ensemble intégré de ressources en vue de résoudre une famille de situations-problèmes » (Scallon, 2004, p. 105). À bien des égards, cette définition rejoint celle de Tardif (2006) qui propose, quant à lui, de définir la compétence comme « un savoir-agir complexe prenant appui sur la mobilisation et la combinaison efficace d'une variété de ressources internes et externes à l'intérieur d'une famille de situations » (p. 22). Parmi les points communs, on remarque l'aspect de mobilisation des ressources par le sujet et également le concept de famille de situation qui sera défini plus en profondeur dans la section qui suit.

La définition que propose Scallon (2004) met l'accent sur des éléments qui se retrouvent normalement dans une démarche d'investigation scientifique en laboratoire. L'idée de résoudre des problèmes apparentés (résoudre une famille

de situations-problèmes) en est à notre avis un bon exemple. Dans un contexte d'évaluation, le défi réside donc à définir des familles de situations-problèmes qui ont, de façon intrinsèque, des caractéristiques et des propriétés semblables. Par analogie, on peut comparer les situations d'une même famille à des tests parallèles dans la théorie classique des tests. L'autre idée importante qui se retrouve dans la définition de Scallon est que l'élève doit mobiliser des ressources dont certaines sont intériorisées. Il ne s'agit donc pas pour l'élève de suivre à la lettre les consignes de l'enseignant. L'élève doit donc apprendre et maitriser des apprentissages, il doit également être en mesure de les transférer dans des situations signifiantes et authentiques. Les situations d'évaluation doivent donc permettre de mesurer et d'observer si les élèves sont en mesure de produire de telles actions. Les situations d'évaluation que nous avons construites, et en particulier pour le niveau 1 — que nous définirons subséquemment – prennent donc en considération les aspects que nous venons de présenter à l'égard du concept de compétence.

La notion de « famille de situations »

Le concept de « famille de situations » est au coeur du modèle que nous proposons. Roegiers (2000) définit une famille de situations comme « un ensemble de situations proches l'une de l'autre » (p. 130). Le concept de « famille de situations » est important, car il permet de circonscrire les types de situations qui seront présentées aux élèves. Afin d'assurer la validité des situations d'évaluation, il importe de s'assurer que les élèves ont eu: (1) l'opportunité de développer leurs compétences et (2) l'occasion d'être confrontés à des situations semblables en contexte d'apprentissage. Roegiers propose deux paramètres afin de mieux définir les familles de situations : ce qu'on offre aux élèves et le type de tâche présenté. Ces deux paramètres ne nous apparaissent pas mutuellement exclusifs et ne nous semblent pas efficacement opérationnels afin de bien distinguer la nature d'une famille de situation. Quoi qu'il en soit, le premier paramètre fait surtout référence aux composantes et aux caractéristiques de la situation offerte aux élèves. Les contraintes (ex. le nombre de mots ou de pages accordés afin de répondre à la question posée) soigneusement choisies et enchâssées dans l'énoncé de la situation, en représentent de bons exemples. Le second paramètre, quant à lui, fait surtout référence aux conditions de passation de la situation. Il peut s'agir, par exemple, du matériel mis à la disposition des élèves, du degré de complexité de la tâche, etc.

Liens entre l'investigation scientifique, la compétence et les familles de situations

Nos travaux ont été menés au Québec et, par conséquent, nous nous sommes appuyé sur les prescriptions ministérielles ayant force de loi dans cette juridiction. La figure 1 présente une modélisation de la compétence d'investigation scientifique que les élèves du Québec doivent développer tout au long de leur scolarité. La démarche qui nous intéresse est celle présentée dans la voie de

gauche et qui est composée des étapes suivantes : cerner un problème, choisir un scénario, concrétiser sa démarche, effectuer l'expérience, analyser ses résultats et faire un retour. Les nombreuses boucles de rétroaction montrent la non-linéarité de ce processus et mettent en évidence les allers-retours que les élèves peuvent réaliser. Sans reprendre tout ce qui a été dit dans cette section du texte, on peut voir que cette modélisation est en lien avec la nature de l'investigation scientifique telle que nous l'avons définie précédemment. Il s'agit pour les élèves de mettre en œuvre une démarche visant à trouver une ou des réponses à un problème authentique. Ils doivent donc mettre à profit une démarche cognitive complexe qui fera en sorte qu'ils devront réaliser de façon synergique chacune des étapes de la démarche illustrée à la figure 1. Cette dernière montre une démarche d'investigation scientifique, mais elle peut également illustrer d'autres démarches scientifiques telles que la démarche d'observation. En ce sens, il s'agit d'une démarche générique. Son caractère plus distinct se révèle au moyen des familles de situations. En effet, dans ce contexte, une des familles de situations en lien avec cette modélisation est la démarche d'investigation scientifique. Comme nous le verrons dans une section ultérieure, il est ainsi possible de construire des situations d'évaluation qui se ressemblent et qui prennent appui sur cette modélisation de la compétence d'investigation scientifique.

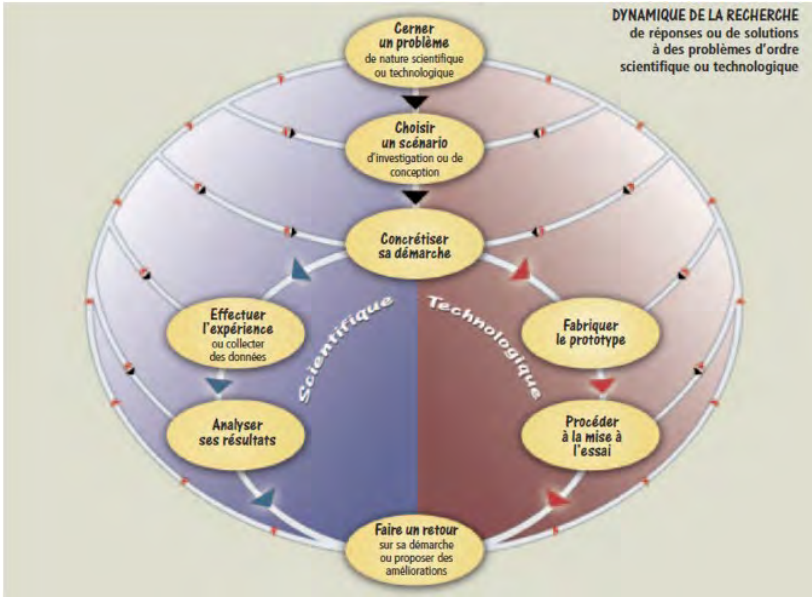

FIGURE 1. *Modélisation de la compétence d'investigation scientifique telle que proposée par le ministère de l'Éducation du Loisir et du Sport (MELS, 2003).*

L'ÉVALUATION DANS UN CONTEXTE À ENJEUX CRITIQUES

Dans un monde idéal, les enseignants auraient à leur disposition une panoplie d'outils d'évaluation afin de mesurer toutes sortes d'apprentissages des plus simples aux plus complexes. Qui plus est, ils connaitraient parfaitement les propriétés et les limites de ces différents instruments. L'enseignant aurait tout son temps afin de recueillir toutes les données dont il a besoin pour appuyer avec conviction son jugement. Il pourrait, par exemple, croiser les résultats de quelques situations d'évaluation avec des entrevues individuelles afin de bien saisir, et avec raffinement, le développement de la compétence qu'il souhaite évaluer chez l'élève. Cette situation idyllique est malheureusement loin de la réalité des enseignants de science et ce, peu importe le système scolaire dans lequel ils œuvrent. Pour ces derniers, simplement considérer de nouvelles façons d'évaluer passe obligatoirement par la prise en compte des nombreuses contraintes auxquelles ils doivent faire face jour après jour. De fait, nous sommes convaincu que la viabilité de nouveaux dispositifs d'évaluation ne peut se réaliser sans la considération de ces contraintes multiples et malheureusement incontournables. Dans la section qui suit, nous présenterons quelques-unes des contraintes que nous avons choisi de considérer pour la mise en place de situations d'évaluation de l'investigation scientifique en laboratoire.

Une activité d'évaluation qui se déroule dans un contexte à enjeux critiques signifie que les conséquences associées aux résultats obtenus par l'élève peuvent être lourdes pour ce dernier. Les évaluations se déroulant dans un contexte sommatif ou certificatif sont souvent associées à ce contexte. En contrepartie, on associe souvent les fonctions formatives ou diagnostiques à un contexte d'évaluation à faibles enjeux. Cette façon de catégoriser est discutable. Le but de cet article n'est pas d'aborder cette question. Dans un contexte pratique, on peut s'imaginer que la méthodologie présentée dans cet article peut s'appliquer à des situations d'évaluation utilisées, par exemple, dans un contexte sommatif pour la confection du bulletin ou pour un bilan formel. Nous avons délibérément choisi de situer nos travaux dans un contexte à enjeux critiques qui est certainement le contexte qui impose le plus de contraintes. En effet, il faut alors prendre en considération les possibilités de contamination (ex. tricherie), la gestion de la communication entre l'enseignant et les élèves (ex. offrir les mêmes consignes à tous) ou la comparabilité des situations (ex. situations ayant une difficulté comparable). Dans un contexte formatif où le but est d'aider chacun des élèves à améliorer ses apprentissages, il devient secondaire de s'assurer de la prise en compte de ces considérations.

Compte tenu du contexte que nous venons de définir, plusieurs principes ont dicté nos choix tout au long du processus d'élaboration de cette méthodologie. D'abord, nous devions nous assurer de la cohérence de l'alignement programme-apprentissage-évaluation. En effet, une des conditions permettant d'assurer la validité du processus d'évaluation est de faire en sorte que les

prescriptions tirées des programmes, les activités pédagogiques et didactiques et finalement les dispositifs d'évaluation soient les plus cohérents possible. Ensuite, nous devions nous assurer de la comparabilité des outils et des informations recueillies. Puisque nous souhaitions proposer aux élèves des SE différentes afin d'éviter le plus possible la contamination, nous devions en même temps nous assurer que les SE développées étaient relativement équivalentes autant en terme de difficulté ou encore en terme de durée de réalisation. Dans un contexte à enjeux critiques, la comparabilité des situations d'évaluation est, en effet, un facteur de validité incontournable.

UNE PROPOSITION POUR DÉVELOPPER UN INSTRUMENT MESURANT UNE COMPÉTENCE

Nous rappelons au lecteur que le but de cet article est de faire état d'une méthodologie permettant de concevoir et d'administrer des situations d'évaluation permettant de juger du développement d'une compétence d'investigation scientifique. Le lecteur intéressé par les résultats de l'expérimentation, et en particulier les scores obtenus par les élèves et les propriétés métriques des SE de cette méthodologie peut se référer, entre autres, aux travaux de Dionne (2010). Dans la présente section, nous présenterons l'architecture des situations d'évaluation, nous ferons également une description de chacune d'elles. Par la suite, nous mettrons l'emphase sur les caractéristiques de ces situations et en particulier sur les niveaux que nous avons développés afin de nous assurer de recueillir des informations pour tous les élèves, peu importe leur niveau de maitrise de la compétence. Enfin, nous indiquerons les modalités associées à la passation et à la correction de ces SE.

Architecture des situations d'évaluation

Une situation d'évaluation de l'investigation scientifique devrait, selon Solano-Flores et Shavelson (1997) contenir trois composantes : « (1) un problème nécessitant un traitement en laboratoire, (2) une feuille réponse où l'élève peut exprimer sa démarche et sa solution et (3) un système d'assignation des scores » (p. 17). À ces composantes, nous jugeons qu'il est pertinent d'ajouter également les conditions qui permettent la mise en œuvre de la situation d'évaluation, par exemple un guide de passation destiné à l'enseignant ou au technicien de laboratoire. Cette condition nous apparait importante afin d'identifier les obstacles à la mise en place de telles situations ainsi que les solutions alternatives permettant de contrer ces obstacles. Cette recommandation est d'autant plus importante quand le mode de passation déroge des formats habituels. Dans le cadre de cet article, nous désignons par dispositif d'évaluation l'ensemble de ces composantes.

Lors de l'élaboration de situations d'évaluation, les auteurs sont souvent confrontés rapidement à un problème important : comment s'assurer que différentes situations d'évaluation seront comparables les unes avec les autres ?

Autrement dit, comment s'assurer de l'équivalence des situations d'évaluation autant au niveau de leurs propriétés métriques (ex. difficulté, discrimination, etc.) qu'au niveau du construit que chacune de ces SE prétend mesurer ? Ce problème est étudié depuis les années 70 principalement dans le cas du développement d'items (Bormuth, 1970). Ce dernier a, en effet, proposé un algorithme complexe visant à produire des items relativement équivalents les uns aux autres. Il s'agissait alors d'un pas dans la bonne direction, mais la complexité de l'algorithme a tôt fait de le rendre plus ou moins applicable auprès des concepteurs d'item. Ces travaux ont inspiré dans les décennies qui ont suivi d'autres chercheurs, ce qui a amené le concept de *item shell* que nous traduisons par canevas d'item. Dans le cadre de nos travaux, nous avons retenu la proposition de Haladyna et Rodriguez (2013), que nous avons adaptée au contexte de l'évaluation de situations d'évaluation plutôt qu'au contexte d'items plus classiques (ex. items à choix multiples), le but étant de nous baser sur une méthode permettant de produire des situations d'évaluation différentes, mais néanmoins équivalentes. La méthode proposée par Haladyna, et que nous avons adaptée, se présente en six étapes :

1. Écrire un énoncé de problème ;
2. Identifier les mot-clés du problème ;
3. Énoncer différentes variations associées aux différents mot-clés ;
4. Indiquer une réponse attendue et acceptable ;
5. Écrire un nouvel énoncé de problème en prenant appui sur les variations associées aux différents mot-clés ;
6. Indiquer une réponse attendue et acceptable pour ce nouveau problème.

Afin d'illustrer la méthode que nous avons retenue, examinons le problème associé à la première situation d'évaluation. Dans les étapes énoncées précédemment, dans le cadre de cet article nous mettrons l'emphase sur le concept de canevas d'item (*item shell*) en discutant principalement des étapes correspondantes à savoir 1, 2, 3 et 5. La situation qui nous servira d'exemple est, quant à elle, inspirée de la proposition de Gott et Welford (1987). Il s'agit de choisir une variable qui peut influencer le rebond d'une balle de tennis et d'imaginer une expérimentation permettant de vérifier l'hypothèse émise au regard de la variable investiguée. L'intérêt d'une telle situation réside dans le fait que les élèves ne doivent pas obligatoirement maitriser des concepts disciplinaires pour arriver quand même à résoudre le problème proposé. L'accent est davantage mis sur le processus de résolution de problème et sur la démarche empirique permettant d'apporter des données qui supportent les hypothèses formulées. Lors de la rédaction des problèmes, nous nous sommes basés sur les travaux d'Astolfi, Darot, Ginsburger-Vogel et Toussaint (1997) qui indiquent qu'un problème ouvert devrait avoir les caractéristiques suivantes : (1) un énoncé court qui n'induit ni méthode ni solution, (2) un domaine conceptuel avec lequel les élèves ont assez de familiarité. Ces caractéristiques nous ont guidé pour l'élaboration des SE. En voici un exemple :

> Les balles jouent un rôle fort important au tennis. Elles doivent être bien conçues afin de résister aux chocs violents de la raquette en plus de bien rebondir. Déterminez une variable qui peut influencer le rebond de la balle et démontrez comment cette variable influence le rebond. (Dionne, 2008, p. 311)

La seconde étape consiste à identifier les mot-clés du problème qui permettront d'assurer une certaine variabilité d'un problème à l'autre tout en s'assurant de la consistance interne de ce dernier. Dans l'exemple qui nous occupe, les mot-clés sont ceux soulignés dans l'énoncé qui suit. Nous avons retenu trois blocs de mot-clés pour chacun des problèmes :

> (1) Les balles jouent un rôle fort important au tennis. Elles doivent être bien conçues afin de résister aux chocs violents de la raquette en plus de bien rebondir. (2) Déterminez une variable qui peut influencer le rebond de la balle et (3) démontrez comment cette variable influence le rebond. (Dionne, 2008, p. 311)

Le premier bloc (1) est la mise en situation à caractère authentique qui permet à l'élève de situer le contexte général dans lequel le problème se situe. Le deuxième bloc (2) représente une consigne à caractère disciplinaire ici associée à la démarche d'investigation scientifique. Dans ce cas-ci, l'élève doit identifier une variable pertinente à étudier compte tenu du problème et de son contexte. On peut également présumer que l'élève va choisir cette variable en formulant une ou plusieurs hypothèse(s) pertinente(s). Enfin, le troisième bloc (3) présente la finalité de la tâche qui consiste à planifier et à construire un dispositif expérimental qui permettra de vérifier de façon empirique l'effet de la variable sur le rebond de la balle de tennis.

À la troisième étape, il s'agit de trouver des variantes aux mot-clés précédemment identifiés. Dans le cas du premier bloc, on peut imaginer n'importe quelle situation authentique où les élèves pourront mettre en place une démarche d'investigation scientifique. L'énoncé qui suit représente une variante du bloc 1 présenté précédemment :

(1) L'été approche et la saison de la pêche va reprendre de plus belle. Afin de te faire un peu d'argent de poche, tu décides de cultiver des lombrics pour les vendre aux pêcheurs. Tu voudrais bien leur offrir les meilleures conditions de vie possible afin d'obtenir de beaux gros lombrics bien en santé qui attireront les poissons !

Il s'agit donc du contexte ou de la mise en situation. Le deuxième bloc fait référence, quant à lui, aux consignes plus disciplinaires associées à la démarche d'investigation scientifique. Dans ce cas-ci, nous retenons :

(2) Parmi toutes les variables qui peuvent influencer l'abondance et la santé des lombrics, choisis-en une.

Et enfin le troisième bloc présente la démarche à réaliser à savoir :

(3) Démontre comment cette variable agit sur les lombrics.

Finalement, l'étape 5 consiste à formuler le nouvel item. La situation générée touche à la biologie. Il s'agit d'une situation originale développée par l'auteur et inspirée du modèle de canevas d'item.

> (1) L'été approche et la saison de la pêche va reprendre de plus belle. Afin de te faire un peu d'argent de poche, tu décides de cultiver des lombrics pour les vendre aux pêcheurs. Tu voudrais bien leur offrir les meilleures conditions de vie possible afin d'obtenir de beaux gros lombrics bien en santé qui attireront les poissons ! (2) Parmi toutes les variables qui peuvent influencer l'abondance et la santé des lombrics, choisis-en une et (3) démontre comment cette variable agit sur les lombrics. (Dionne, 2008, p. 355)

Pour compléter la démarche, il faut proposer des solutions aux problèmes présentés, ce qui correspond aux étapes 4 et 6 de la démarche de Haladyna. Ces aspects dépassent le cadre de cet article et ne seront donc pas abordés.

Démarches attendues de l'élève

Comme nous l'avons observé dans une section précédente, la démarche d'investigation scientifique telle que développée chez les élèves québécois consiste à : (1) cerner un problème, (2) choisir un scénario, (3) concrétiser sa démarche, (4) effectuer l'expérience, (5) analyser ses résultats et (6) faire un retour. Pour les deux exemples précédemment présentés, les élèves devaient obligatoirement réaliser chacune de ces étapes de façon plutôt holistique ou plutôt séquentielle. Dans le cadre de la SE qui abordait la question du rebond d'une balle de tennis, l'élève doit d'abord cerner le problème. Il y a de nombreuses façons d'y arriver : un élève peut décider de reformuler le problème dans ses propres mots ou encore l'illustrer de façon schématique. La seconde étape consiste à choisir un scénario : l'élève doit alors proposer un plan d'investigation montrant, par exemple, ses hypothèses, les données à recueillir, etc. La troisième étape, qui peut être amalgamée à la quatrième, touche à la concrétisation de la démarche : il faut alors que l'élève exécute le scénario qu'il a proposé à l'étape 2. Il s'agit alors pour l'élève de réaliser l'expérience et de recueillir les données. Il peut aussi en profiter pour indiquer les sources d'erreur possible ou les amendements à son scénario initial si c'est le cas. La cinquième étape consiste à analyser les résultats. L'élève doit alors établir les liens pertinents en s'appuyant sur les données recueillies à l'étape 4. Enfin, l'étape 6 consiste à faire un retour : l'élève doit réaliser les inférences adéquates pour répondre à son questionnement initial (étape 1) et, si possible, proposer de nouvelles pistes de recherche en lien avec le problème qui lui était initialement proposé.

La validité de contenu

La confection de situations d'évaluation est une entreprise complexe qui est due, en partie, à la quantité impressionnante de décisions qu'il faut prendre

tout au long du processus de construction du dispositif d'évaluation. Ces décisions sont d'autant plus difficiles à prendre en l'absence de balises, ce qui est encore le cas aujourd'hui. Lorsque l'évaluation se réalise dans un contexte sommatif ou certificatif, il devient primordial de varier les SE afin d'éviter les risques de contamination. Afin de dupliquer le nombre de SE et de les rendre comparables les unes aux autres, il est utile de s'appuyer sur un canevas qui précise les dimensions importantes et les caractéristiques fondamentales de la famille de situations d'évaluation qui est conçue. Autrement dit, il faut un cadre faisant office de « squelette » et qui permet, selon le contexte disciplinaire, de construire des situations d'évaluation équivalentes (Haladyna et Shindoll, 1989 ; Solano-Flores et coll.,1999). En contexte d'évaluation sommative ou certificative, il importe de s'assurer que les SE proposées aux élèves soient comparables au regard, par exemple, de la difficulté ou du temps nécessaire à la réalisation. La validité de contenu est un processus qui doit permettre de discuter de ces aspects. Dans l'expérimentation qui nous sert ici d'exemple, nous avons documenté la validité de contenu en interrogeant des experts composés de didacticiens des sciences, de spécialistes de la mesure et de l'évaluation et de praticiens du milieu scolaire. Des expertises différentes, mais à la fois complémentaires, nous permettaient d'assurer une forme de régulation. Les SE ont été appréciées initialement au moyen d'une grille comportant 8 critères (Dionne, 2008). Au terme du processus, nous avons laissé tomber deux critères qui apportaient moins d'information pour en retenir seulement 6. Les critères retenus apparaissent au tableau 2 qui suit.

TABLEAU 2. *Critères retenus pour discuter de la validité de contenu*

Critères	Exemples de questions pour les experts
1. Authenticité	Est-ce que la SE ressemble à une situation de la vie courante ?
2. Complexité	Est-ce que la SE présente un défi et des contraintes réalistes pour des élèves de cet âge ?
3. Ouverture	Est-ce que les élèves peuvent faire des choix et prendre des décisions autant sur la production que sur le processus cognitif ?
4. Nature du construit	Est-ce que la SE permet de rendre compte de la compétence visée ?
5. Niveau cognitif	Est-ce que la SE impose aux élèves de recourir à toutes les dimensions d'une compétence (habiletés, techniques, savoirs, savoirs-agir, etc.)
6. Consignes	Est-ce que les consignes sont claires sans induire ni la démarche ni la réponse ?

Les niveaux

Le modèle que nous avons développé repose sur des situations d'évaluation qui se déclinent en trois différentes « versions » que nous appellerons ici des niveaux (N). Au total, on comptait trois niveaux (N1, N2, N3) pour chacune des situations d'évaluation. Nous considérons que seul le niveau 1 présente une véritable situation permettant de rendre compte d'une compétence. En effet, c'est la seule version où l'élève doit mobiliser ses ressources afin d'offrir une performance qui sera alors jugée. Le niveau 2 présente une situation qui s'apparente à une tâche permettant de rendre compte d'une compétence sans en avoir toutes les caractéristiques. Il s'agit pour l'élève de suivre les étapes qui lui sont proposées tout en prenant certaines initiatives dictées par l'enseignant. Il s'agit en définitive d'une situation qui permet de rendre compte de la maitrise d'une compétence, mais de façon dirigée. Enfin, le niveau 3 présente une situation qui vise à mesurer la maitrise des habiletés inhérentes à la compétence déployée. Il s'agit alors pour l'élève de suivre pas à pas les étapes qui lui sont proposées. Le niveau 3 présente donc des situations d'évaluation qui s'éloignent largement d'une situation mesurant réellement une compétence. Cependant, puisque certains élèves sont souvent en difficulté face à des tâches complexes, il est nécessaire d'avoir des outils qui permettent de se prononcer sur leurs acquis. Cela est d'autant plus important dans le cadre d'une évaluation se réalisant dans un contexte à enjeux critiques. Le tableau 3 qui suit dresse une synthèse des neuf situations d'évaluation proposées.

TABLEAU 3. *Formats des situations d'évaluation selon les niveaux.*

Situations d'évaluation	Niveaux		
	N1	N2	N3
SE1	SE1-1	SE1-2	SE1-3
SE2	SE2-1	SE2-2	SE2-3
SE3	SE3-1	SE3-2	SE3-3

Afin de créer des situations d'évaluation comparables les unes aux autres, il a fallu déterminer avec le maximum de précision en quoi chacun des niveaux se distinguait des autres. Pour ce faire, nous avons identifié les indices pouvant être offerts aux élèves afin de les aider dans la résolution de la SE qui leur était offerte. À partir de l'ensemble de ces indices, nous les avons classés en cinq catégories : (1) les indices méthodologiques, (2) le matériel disponible, (3) la latitude quant aux choix pouvant être exercés par l'élève, (4) les indices conceptuels ou théoriques et (5) les indices métacognitifs. Ce sont ces cinq

catégories d'indices qui nous ont permis de distinguer les trois niveaux (N1, N2, N3). Le premier niveau (N1) présente uniquement l'énoncé de l'une des trois situations d'évaluation précédemment présentées. Il s'agit essentiellement de l'énoncé du problème avec un cahier de réponse vide ne suggérant aucune indication sauf les consignes usuelles (ex. nom de l'élève). Il s'agit du niveau qui respecte le mieux l'esprit de l'approche par compétences où l'élève doit mettre à profit les ressources internes (ex. stratégies, compréhension des concepts, etc.) et externes (ex. matériel de laboratoire). En définitive, aucune aide ne lui est accordée. Le deuxième niveau (N2) présente la même situation qu'au niveau 1, mais elle offre, en plus, des indices afin de guider l'élève dans la résolution de la situation qui lui est présentée. Le dosage des indices est important puisque le niveau 2 doit demeurer une situation mesurant une compétence. À titre d'exemple, il faut que l'élève puisse recourir à ses ressources internes et externes afin de résoudre la situation qui lui est proposée. Les indices ont été concoctés afin d'aiguiller l'élève sans lui suggérer une réponse en particulier. Dans le cas du niveau 3 (N3), on propose alors des indices suffisamment précis qui permettent, en théorie, aux élèves de s'engager dans une démarche qui permettra d'arriver à une solution unique. Dans le cas du niveau 3, la situation proposée ressemblait à une expérimentation de type recette qui est traditionnellement utilisée dans les cours de science (Dionne, 2000). Voyons un exemple illustrant la gradation des indices offerts en ce qui concerne les « indices méthodologiques ». Les indices méthodologiques renvoyaient aux étapes de la résolution de problème qui était proposée aux élèves. Dans le cas du niveau 1, il n'y avait aucun indice sur les étapes de la démarche scientifique (ex. identifier le problème, poser une hypothèse, établir un protocole de manipulation, etc.). Pour le niveau 2, on remettait un cahier à l'élève dans lequel il pouvait trouver les étapes génériques que nous avons présentées au point précédent. Enfin, le niveau 3 contenait un cahier de laboratoire dans lequel on pouvait trouver les étapes de réalisation de la situation d'évaluation ainsi que des questions permettant de guider la réflexion de l'élève. La même logique s'est appliquée pour la gradation des indices pour les autres catégories d'indice.

La passation des SE

Chaque élève s'est vu offrir, au hasard, une des trois SE. Au départ, chaque élève recevait la situation de niveau 1 (ex. SE1-1, SE2-1[3], SE3-1) c'est-à-dire celle qui est le plus susceptible d'évaluer une compétence. Le passage d'un niveau à l'autre (ex. SE1-1 à SE1-2 ou SE1-2 à SE1-3) est fondamentalement une opération basée sur le jugement professionnel des enseignants. Or, nous souhaitions baliser ce jugement afin de mieux encadrer l'administration des différents niveaux. En effet, nous souhaitions ne pas être confronté au fait qu'un enseignant plus expéditif administre le niveau 2 après les 10 premières minutes du premier cours alors qu'un collègue le réalise au terme du troisième cours, ce qui amènerait irrémédiablement des effets négatifs sur la comparabilité des scores. Dans tous les cas, la décision de passer d'un niveau à l'autre

était subordonnée à deux règles que nous avions fournies aux enseignants : (1) administrer le niveau subséquent (ex. passer du niveau 1 au niveau 2 ou du niveau 2 au niveau 3) si l'élève n'arrive pas à progresser adéquatement au terme d'une période de 75 minutes ou (2) administrer le niveau subséquent si l'élève manifeste de toute évidence des difficultés telles que les probabilités de réussite sont jugées faibles au regard du niveau proposé. Bien que ces règles ne garantissent pas la standardisation des modalités de passation, elles représentaient des balises qui nous apparaissaient suffisantes et réalistes compte tenu du contexte de passation. Ceci étant dit, nous sommes conscients qu'il faudrait éventuellement réfléchir à des règles de passation plus rigoureuses qui permettraient de mieux baliser ces opérations de changements de niveaux.

La correction des SE

Afin de rendre compte du travail exécuté par les élèves, nous avons conçu une grille critériée descriptive permettant d'analyser les traces des élèves au regard de 12 critères de notation. Les critères étaient jugés avec une échelle de type Likert en 4 catégories : (0) nettement en deçà des attentes, (1) satisfait minimalement les attentes, (2) satisfait clairement les attentes et (3) dépasse les attentes. Les critères de notation que nous avons retenus sont présentés dans le tableau 4 qui suit.

Les dix premiers critères touchent spécifiquement à l'investigation scientifique. Les deux derniers critères, quant à eux, sont associés à la communication que nous avons considérée comme faisant partie intégrante du processus d'investigation scientifique. Cette grille de notation a été employée pour corriger les trois situations d'évaluation développées. En effet, nous souhaitions avoir un outil qui permettrait aux enseignants de corriger tous les élèves avec les mêmes critères de notation et la même échelle, et ce, peu importe la situation qui était donnée à chacun des élèves. Il faut aussi souligner que cette grille devait également pouvoir être utilisée avec chacun des niveaux (1, 2, 3) d'une même SE.

COMMENTAIRES DES ENSEIGNANTS QUI ONT EXPÉRIMENTÉ LES SITUATIONS D'ÉVALUATION

Bien que l'objectif de cet article soit d'abord et avant tout de présenter une méthodologie pour la création de SE visant à documenter l'investigation scientifique en laboratoire, il nous est apparu pertinent de présenter quelques résultats qualitatifs relatifs aux commentaires des enseignants à la suite de l'expérimentation de ces SE. Lors de cette dernière, nous leur avons remis un journal de bord et nous les avons invités à consigner leurs réflexions et leurs commentaires à chaque cours (généralement une période de 75 minutes). Au total, 22 enseignants participaient à cette recherche et 14 d'entre eux ont remis leur journal de bord. Après avoir pris connaissance de ces commentaires, nous les avons codés de façon descriptive ; les analyses nous ont révélé que tous les commentaires pouvaient être regroupés en deux grandes catégories : (1)

gestion de classe et aspects techniques et (2) nature des situations d'évaluation. Examinons les résultats au regard de chacune de ces catégories.

TABLEAU 4. *Critères de notation des situations d'évaluation*

Critères
1. Reformulation du problème
2. Identification de la variable à examiner
3. Élaboration d'une liste de matériel
4. Formulation d'une hypothèse vérifiable et plausible
5. Formulation et présentation des manipulations
6. Consignation des données expérimentales et des observations
7. Identification des causes d'erreurs
8. Traitement des données expérimentales
9. Maitrise des concepts, des règles et des techniques
10. Application des résultats expérimentaux dans la solution proposée
11. Présentation générale
12. Utilisation des symboles et des termes

(1) Gestion de classe et aspects techniques

La gestion de classe (4/14) et le suivi auprès des élèves (6/14) semblent avoir été difficiles pour plusieurs enseignants. L'un d'entre eux indique :

> Beaucoup de déplacements, difficiles à gérer. Voir à ce que tout se passe bien au niveau de la sécurité. Superviser si les élèves font ce qu'ils ont à faire. S'arranger pour faire taire ceux qui parlent... En général assez bien sauf pour un groupe où ce fut très difficile. Bavardage, ils se lancent des objets, de l'eau, etc. Même en étant trois ce fut presque ingérable!!

Ce résultat est cohérent avec nos idées de départ à savoir que les contraintes à caractère pragmatique ne doivent pas être minimisées puisqu'elles peuvent avoir

un impact certain sur la volonté des enseignants à évaluer des compétences plutôt que des connaissances.

(2) Nature des situations d'évaluation

La majorité des enseignants (8/14) ont trouvé difficile d'assigner une SE de niveau 2 ou une SE de niveau 3 à certains élèves. Pour plusieurs d'entre eux, le simple changement de niveau représentait en soi une forme d'échec et était perçu de façon négative.

> Malgré les explications des trois niveaux, les élèves voient beaucoup le passage d'un niveau à l'autre comme un échec???

Ce résultat n'est pas très étonnant puisque la majorité des enseignants (9/14) ont mentionné que les SE étaient très différentes de celles présentées de façon ordinaire en classe cette année-là.

> Les élèves ont réalisé plusieurs situations d'apprentissage, mais aucune d'elles ne ressemblait à celles proposées dans cette recherche. Les situations que j'ai fait faire aux élèves sont en quelque sorte « les classiques ». On donne un maximum d'informations et l'élève a juste à aller chercher les réponses et répondre aux questions.

Sept enseignants ont aussi indiqué que l'intégrité intellectuelle (effet de contamination) était problématique. Ils mentionnaient que cela n'était pas nécessairement une difficulté compte tenu du caractère formatif associé à la passation, mais qu'ils étaient perplexes dans un contexte sommatif.

> Mes trois élèves qui avaient de la difficulté ont miraculeusement tout compris (je crois qu'il y a eu des fuites entre les périodes). D'autres étudiants ont changé leur façon de faire surtout pour les balles de tennis. J'en ai un qui a eu l'idée de mouiller sa balle et tous les autres ont fait la même chose.

Environ le tiers (5/14) des enseignants ont mentionné que les SE avaient été considérées « intéressantes » par les élèves.

> J'ai fait un sondage dans mes trois groupes afin de déterminer leurs projets préférés et les moins bien aimés. Sur neuf projets (de janvier à juin), votre SE s'est classée en cinquième position! Pas si mal, hein?

CONCLUSION

Cet article visait à répondre aux deux questions qui suivent : (1) comment construire des situations d'évaluation qui permettent de juger du développement d'une compétence scientifique dans un contexte ordinaire d'enseignement et donc soumis à de nombreuses contraintes ? et (2) quelles sont les difficultés à prévoir lorsqu'on élabore une méthodologie visant à évaluer une compétence d'investigation scientifique ? Le modèle que nous avons présenté nous apparait une proposition intéressante et pertinente pour l'évaluation de la compétence d'investigation scientifique. Il est à souhaiter que d'autres propositions de ce genre soient présentées afin d'offrir différents choix aux praticiens.

L'élaboration de situations d'évaluation est une entreprise complexe et d'autant plus quand le contexte de passation est à enjeux critiques. Il faut alors non seulement proposer des situations d'évaluation valides, mais il faut également offrir un contexte de réalisation qui prenne en compte les nombreuses contraintes auxquelles les enseignants sont confrontés. La prise en compte de ces contraintes est également une dimension importante associée à la validité du processus d'évaluation.

Le modèle que nous avons présenté a été expérimenté uniquement au regard de la compétence d'investigation scientifique en laboratoire. Il serait intéressant de mettre à l'épreuve le modèle avec d'autres types de compétences qui s'opérationnalisent dans d'autres contextes d'enseignement comme l'analyse d'objets techniques ou la résolution de problèmes dans un contexte scientifique. Il serait aussi pertinent de voir jusque dans quelle mesure le modèle est généralisable à d'autres disciplines comme les langues ou les mathématiques. Aussi, nous n'avons pas abordé de façon spécifique la question des propriétés métriques des échelles utilisées pour la notation. Il serait pertinent de vérifier sur quel genre d'échelle se situent les données. Une étude qui s'intéresserait à cet aspect pourrait grandement nous éclairer sur la validité théorique de situations d'évaluation de ce genre. Enfin, une perspective de recherche intéressante serait d'informatiser le processus d'administration du prototype de SE que nous avons développé et présenté dans cet article. Il y a tout lieu de croire que l'automatisation de certaines actions, par exemple le processus de passation d'un niveau à un autre, pourrait contribuer à rendre la gestion de ce genre d'épreuve plus aisée pour les enseignants. Aussi, cela permettrait probablement de suivre plus facilement le cheminement cognitif de l'élève au travers des différents niveaux qui lui sont proposés.

NOTES

1. Le masculin est utilisé dans ce texte dans le seul but d'en alléger la lecture.
2. Au Québec, le ratio élèves / classe au secondaire se situe autour de 30.
3. SE2-1 signifie situation d'évaluation 2 (la balle de tennis) et niveau 1 (situation de compétence).

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IDENTIFICATION DES RÔLES QUE S'ATTRIBUENT LES ENSEIGNANTS ASSOCIÉS JUMELÉS À DES STAGIAIRES EN ENSEIGNEMENT DE L'ÉDUCATION PHYSIQUE QUI ONT DÉVELOPPÉ LEUR SENTIMENT D'EFFICACITÉ PERSONNELLE À LA SUITE D'UN STAGE

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RÉSUMÉ. Le stage est un moment déterminant dans le développement du sentiment d'efficacité personnelle (SEP) des stagiaires et l'enseignant associé (EA) peut y jouer un rôle important. Cet article présente l'identification des rôles que s'attribuent sept EA qui ont accueilli des stagiaires dont le SEP s'est développé ou maintenu à la suite du stage. L'analyse des propos recueillis lors d'entretiens semi-dirigés permet de constater que les EA considèrent quatre dimensions primordiales soit : offrir des occasions d'autodéveloppement, échanger des idées, établir de bonnes relations avec les stagiaires et transmettre leur savoir. Les EA semblent avoir utilisés les expériences actives de maîtrise, les expériences vicariantes et la persuasion verbale comme méthodes d'accompagnement auprès de leurs stagiaires.

IDENTIFICATION OF COOPERATING TEACHERS' SELF-ATTRIBUTED ROLES WHEN PAIRED WITH STUDENT-TEACHERS WHO ARE DEVELOPING SELF-EFFICACY FOLLOWING ON A PHYSICAL EDUCATION INTERNSHIP

ABSTRACT. The internship is a defining moment in the development of the student-teacher's self-efficacy, and the cooperating teacher can play an important role in that development. This article identifies the roles that seven cooperating teachers who accompanied student-teachers developing or maintaining their self-efficacy during internship experiences gave themselves. The analysis of the comments gathered during semi-structured interviews showed that the cooperating teachers considered as essential four dimensions of their roles: provide opportunities for self-development, exchange ideas, establish good relationships with student-teachers and transmit their knowledge. The cooperating teachers seem to have used performance accomplishments, vicarious experiences, and verbal persuasion as methods of supervision with their student-teachers.

Autant dans les programmes de formation en enseignement de l'éducation physique et à la santé (ÉPS) que dans l'ensemble des programmes de formation à l'enseignement, le stage qui est la pierre angulaire de la formation initiale est conçu pour fournir des expériences authentiques et réelles en milieu scolaire

(Bower et Bonnett, 2009 ; Dixon, Jenningsa, Orr et Tummons, 2010). Les étudiants accordent une grande importance et une grande crédibilité à ces stages (Belton, Woods, Dunning et Meegan, 2010) et considèrent que ces moments sont les plus formateurs et le plus significatifs de leur formation initiale, en plus d'être une expérience déterminante dans leur cheminement professionnel (Boudreau, 2009 ; Desbiens, Borges et Spallanzani, 2009 ; Nichols, 2011).

Outre le développement des compétences professionnelles en enseignement (ministère de l'Éducation, 2001), le stage devrait aussi contribuer au développement du SEP des stagiaires. En effet, les enseignants qui ont un fort SEP ont tendance à être plus motivés au travail, à s'engager et à persévérer davantage dans la profession (Eslami et Fatihi, 2008 ; Gurvitch et Metzler, 2009). De plus, les éducateurs physiques ayant un fort SEP ont tendance à développer de meilleures stratégies de résolution de problèmes et de meilleures méthodes d'enseignement ; ils tendent également à mieux gérer leurs émotions, à persévérer malgré les difficultés, ont une attitude plus positive et se sentent plus en contrôle (Martin, Mccaughtry, Kulinna et Corthran, 2008 ; Martin et Kulinna, 2003, 2005). Qui plus est, ces éducateurs physiques planifient des cours plus actifs ; ont plus confiance en leurs habiletés à soutenir la motivation des élèves ; encouragent et questionnent davantage les élèves afin de les engager dans une discussion et aident davantage les élèves en difficultés, contribuant ainsi à l'accroissement des apprentissages de tous les élèves de la classe.

Bandura (1997) explique que les stagiaires qui se présentent en stage avec une expérience restreinte en enseignement s'appuient principalement sur leurs propres croyances d'efficacité face à leur capacité à enseigner. Ainsi, l'expérience acquise durant les stages sera la source d'information la plus significative pour le développement du SEP des stagiaires. D'ailleurs, des recherches confirment que le stage offre une opportunité cruciale pour les stagiaires de développer leur SEP lié aux capacités à enseigner (Androzzi, 2011 ; Carter, 2006) et rapportent une augmentation du SEP directement reliée à l'expérience de stage en milieu scolaire (Ballinger et Bishop, 2011). Plus spécifiquement, le stage en éducation physique permettrait d'établir la confiance des stagiaires en matière de gestion de classe, de planification, d'enseignement, de socialisation avec les collègues et les élèves et d'interventions auprès des élèves présentant des besoins particuliers (Nichols, 2011).

Bien que plusieurs éléments contribuent au développement du SEP lors d'un stage, l'enseignant associé (EA) est reconnu comme étant un acteur essentiel qui a une influence sur la qualité de la formation des futurs enseignants (Gervais et Desrosiers 2005 ; Lai, 2009 ; Portelance, 2010). L'EA a un impact significatif sur les apprentissages et le développement professionnel des stagiaires, sur la réussite d'un stage (Boudreau, 2009 ; Peterson, Valk, Baker, Brugger et Hightower, 2010) ainsi que sur le développement du SEP des stagiaires (Ballinger et Bishop, 2011 ; Bower et Bonnett, 2009).

D'un point de vue théorique, Bandura (2007) explique que le SEP se développe à la suite du traitement cognitif de l'information tirée de quatre sources: 1) les expériences actives de maîtrise, 2) les expériences vicariantes, 3) la persuasion verbale et 4) l'état physiologique et émotionnel. Il semble que l'EA pourrait contribuer au développement du SEP par les trois premières sources de développement avancées par Bandura. Premièrement, l'EA pourrait non seulement permettre aux stagiaires de vivre des expériences concrètes d'enseignement en leur offrant l'opportunité d'enseigner à leurs élèves, mais il pourrait aussi tenter de contrôler l'environnement afin d'offrir aux stagiaires des conditions favorables à leur réussite en s'assurant par exemple que le cours soit bien préparé, que le matériel soit prêt et que les élèves soient disposés à l'enseignement. Deuxièmement, les moments d'observation de l'EA sont, pour les stagiaires, des expériences de modelage qui permettent l'autoévaluation de sa propre performance. Enfin, les rétroactions positives de l'EA peuvent convaincre les stagiaires de leur efficacité en enseignement de l'éducation physique.

Cependant, il semble que peu d'études permettent de comprendre comment l'EA contribue au développement du SEP des stagiaires qu'il accueille. Knoblauch et Woolfolk-Hoy (2008) tentent de relier le SEP des stagiaires à celui de leur EA en affirmant que le SEP des EA permet de prédire celui des stagiaires. En effet, cette étude rapporte que le SEP des EA est positivement lié au développement du SEP de leurs stagiaires. De plus, les stagiaires qui considèrent leur EA comme étant efficace ont tendance à se sentir eux-mêmes plus efficaces à la suite du stage. Or, la perception qu'ont les stagiaires du SEP de leur EA semble avoir une influence non négligeable sur leur propre SEP. Selon Hardin (2005), les stagiaires estiment que les occasions qu'ils ont d'observer l'enseignement de leur EA représentent une source de connaissances précieuse pour apprendre à enseigner, et particulièrement pour apprendre à enseigner à des élèves présentant des besoins particuliers. Les stagiaires accordent également beaucoup d'importance aux occasions de collaborer avec leurs EA puisqu'ils considèrent que les interactions et les échanges d'idées les aident à apprendre à enseigner. Finalement, il appert que la perception du rôle que s'attribue l'EA influence le type d'accompagnement qu'il offre aux stagiaires, dont les interactions qui se développent entre les stagiaires et l'EA et que ces interactions ont une influence significative sur le SEP des stagiaires (Rajuana, Beijaardb et Verloop, 2007).

Plusieurs études se sont intéressées à la perception du rôle de l'EA. Entre autres, Lai (2009) explique que cette perception agit sur la façon dont l'EA accompagne les stagiaires, influençant ainsi l'ensemble de l'expérience de stage vécue par les stagiaires. Boudreau (1999, 2001) souligne qu'elle affecte les comportements et les interventions des EA et, enfin, Portelance (2010) rapporte que cette perception détermine celle qu'a l'EA de son apport à la formation des stagiaires. Néanmoins, les rôles des EA ont été principalement identifiés par les chercheurs et peu de recherches ont mis l'accent sur la perception qu'ont

les EA de leur rôle (Rajuana et coll., 2007 ; Zanting, Verloop et Vermunt, 2001a, 2001b). Cette étude souhaite donc interroger les EA afin de connaître les rôles qu'ils s'attribuent.

Ainsi, puisque l'EA a un impact majeur dans le développement des stagiaires (Desbiens et coll., 2009), qu'il est un modèle pour eux et qu'il a une influence sur leurs attitudes et sur leurs comportements, en plus d'avoir une influence sur la conception qu'ils se font de l'enseignement et sur le style d'enseignement qu'ils privilégieront à titre d'enseignants (Chaliès, Ria, Bertone, Trohel et Durand, 2004 ; Coleman et Mitchell, 2000), il importe de mieux comprendre le lien entre l'accompagnement du stagiaire et le développement de son SEP. D'ailleurs, tel que le propose Androzzi (2011), Knoblauch et Woolfolk-Hoy (2008), les EA doivent être conscients que le SEP des stagiaires est influencé par les expériences de stages et qu'ils ont un impact important sur le développement du SEP de leurs stagiaires. Dans un domaine tel que l'enseignement, où l'écologie du milieu est très complexe, il est difficile, voire impossible d'isoler une variable telle que le SEP et de contrôler l'ensemble des influences, afin de décrire objectivement les comportements des EA qui favorisent le développement du SEP des stagiaires. Cependant, pour contribuer modestement à la compréhension du lien entre l'accompagnement offert par l'EA et le développement du SEP des stagiaires, il apparaît pertinent de décrire, du point de vue des EA le rôle qu'ils s'attribuent lorsqu'ils encadrent des stagiaires qui, à l'occasion d'un stage, ont augmenté ou ont maintenu leur SEP.

Or, mieux connaître les rôles que s'attribuent les EA jumelés à des stagiaires ayant augmenté ou maintenu leur SEP à la suite d'un stage pourrait fournir des pistes pour le développement du SEP des étudiants en formation à l'enseignement face à leur capacité à enseigner. C'est donc dans ce champ de recherche en émergence (Androzzi, 2011), soit l'étude de la perception du rôle des EA lors de l'accompagnement de stagiaires ayant développé ou maintenu leur SEP, que se situe cette étude.

CADRE CONCEPTUEL

En 1998, Boudreau et Baria ont publié les résultats d'une étude sur la perception du rôle des EA. Cette recherche qualitative a été menée auprès d'enseignants franco-ontariens qui ont répondu par écrit à une question ouverte leur permettant de décrire les rôles qu'ils assument lors de l'accompagnement de stagiaires. L'analyse inductive a permis d'élaborer cinq catégories de rôles que se donnent les EA dans le cadre de leur fonction : 1) l'offre d'occasions d'autodéveloppement personnel et professionnel, 2) l'échange d'idées et de rétroactions, 3) l'établissement d'une relation avec le stagiaire, 4) l'intégration du stagiaire au système scolaire et 5) l'organisation du stage. Les cinq catégories de rôles tirées de la recherche de Boudreau et Baria (1998) seront présentées dans cette section en y intégrant les conclusions de recherches scientifiques

actuelles sur la perception du rôle des EA afin de former le cadre conceptuel de l'étude (p.ex., Belton et coll., 2010 ; Graham, 2006 ; Portelance, 2010 et Rajuana et coll., 2007). Ces cinq catégories ont été utilisées à titre de catégories prédéterminées lors de l'analyse de contenu qui sera présentée à la prochaine section.

L'offre d'occasions d'autodéveloppement personnel et professionnel

Cette dimension du rôle de l'EA consiste à fournir des opportunités aux stagiaires de développer ses compétences professionnelles et ses méthodes d'enseignement. L'EA permet ainsi aux stagiaires de prendre des initiatives et d'essayer de nouvelles approches sans s'impliquer dans la tâche d'enseignement. Selon Belton et coll. (2010), les EA considèrent qu'ils ne doivent intervenir en classe qu'en cas de besoins importants tel que lorsque la sécurité des élèves ou des stagiaires est en jeu. De plus, Portelance (2010) précise que l'EA croit que son rôle n'est pas de former les stagiaires, mais plutôt de le laisser enseigner seul, de jeter un coup d'œil à la classe quelques fois et d'intervenir seulement en cas de problèmes de discipline importants, laissant ainsi beaucoup d'autonomie et de liberté aux stagiaires durant le stage.

L'échange d'idées et rétroactions

Cette dimension souligne l'importance de discuter avec les stagiaires à propos de la profession enseignante et de donner des rétroactions aux stagiaires à la suite de leurs prestations. Plusieurs EA considèrent qu'ils doivent accorder une grande place à la communication, donner des rétroactions régulières, être ouverts et disponibles pour discuter et animer des séminaires sur une base régulière afin de faire des liens entre la matière vue à l'université et les expériences vécues en stage (Graham, 2006). Ainsi, les EA considèrent qu'il est de leur devoir de fournir des rétroactions constructives afin de provoquer des réflexions chez les stagiaires lors des discussions (Belton et coll., 2010 ; Portelance et Gervais, 2009).

L'établissement d'une relation avec le stagiaire

Le rôle de l'EA consiste aussi à soutenir, aider, encourager et collaborer avec les stagiaires afin qu'ils soient à l'aise et qu'ils perçoivent que l'EA est là pour leur développement professionnel. Le rôle de l'EA est alors de contribuer à la qualité de la relation qu'il établit avec ses stagiaires. Les EA considèrent qu'ils doivent agir en tant que guide et établir une relation d'aide en étant à l'écoute des stagiaires. Ils sentent le besoin d'offrir un support personnel, d'être compréhensifs, sensibles, empathiques et de démontrer aux stagiaires qu'ils sont là pour eux (Rajuana et coll., 2007). Ils estiment que la fréquence et le caractère informel des interactions peuvent diminuer la pression constante de l'évaluation perçue par les stagiaires et leur permettre de se sentir à l'aise. Les EA contribuent ainsi à motiver et à augmenter la confiance des stagiaires

(Belton et coll., 2010). Le développement d'une bonne relation interpersonnelle avec les stagiaires en assurant un soutien émotionnel et psychologique constitue aussi, selon les EA une dimension de leur rôle (Graham, 2006).

L'intégration du stagiaire au système scolaire

Une dimension du rôle de l'EA implique de présenter les stagiaires à l'ensemble de la communauté scolaire. Afin d'intégrer les stagiaires au système scolaire, il importe de leur donner aussi accès à différents outils tels que les documents officiels liés à l'organisation de la profession enseignante de même qu'aux programmes de formation des élèves. Les EA précisent qu'il est de leur devoir de présenter les stagiaires aux élèves et de leur donner le maximum d'informations sur le programme et le matériel à leur disposition (Rajuana et coll., 2007). Selon les EA, une présentation adéquate de l'école et des membres qui y travaillent permettrait aux stagiaires d'être plus à l'aise lors de leur stage (Belton et coll., 2010).

L'organisation du stage

Une dernière dimension du rôle de l'EA se rapporte à l'établissement du bon déroulement du stage soit : cibler les objectifs à atteindre, répondre aux exigences de l'université, évaluer les stagiaires ou toute autre tâche administrative reliée à l'accueil des stagiaires dans le milieu. Il semble d'ailleurs que l'évaluation juste des capacités des stagiaires soit un souci important de l'EA (Portelance, 2010).

L'étude de Boudreau et Baria (1998) met en lumière l'aspect multidimensionnel du rôle de l'EA. De plus, les études sur les perceptions des rôles que s'attribuent les EA démontrent clairement la singularité de ces perceptions. En somme, sachant que la perception du rôle de l'EA influence l'accompagnement des stagiaires et que l'EA a une influence sur le développement du SEP des stagiaires, il est pertinent de mieux comprendre les rôles assumés par les EA qui ont encadré des stagiaires qui, à l'occasion de ce stage, ont augmenté ou ont maintenu leur SEP. Ces constats permettent de formuler la question de recherche : quels sont les rôles identifiés par les EA ayant accompagné des stagiaires qui ont développé ou maintenu leur SEP à la suite d'un stage ?

MÉTHODOLOGIE

Pour répondre à la question de recherche, un devis exploratoire de nature descriptive a été utilisé lors de l'étude qui a obtenu un certificat d'éthique. Cette étude qualitative s'est réalisée dans le contexte de formation au baccalauréat en enseignement de l'ÉPS de l'Université du Québec à Montréal. Cette formation initiale comporte quatre stages répartis sur les quatre années de formation. À chacun des stages, l'étudiant est accueilli par un enseignant d'éducation physique qui l'accompagne dans une prise en charge des groupes auxquels il enseigne habituellement. Ainsi, le stagiaire devra, à la fin des quatre stages,

démontrer sa capacité à enseigner seul à tous les groupes d'élèves qui sont sous la responsabilité de l'EA. Le stagiaire et l'EA sont accompagnés par un superviseur universitaire qui s'assure de la bonne marche du stage, puis, à la suite de visites dans le milieu de stage, prend part à l'évaluation des compétences du stagiaire. L'implication du stagiaire dans le milieu scolaire est graduelle. La structure et l'ordre des stages du programme de formation des enseignants en ÉPS à l'Université du Québec à Montréal est identique pour tous les étudiants. D'abord, lors des stages 1 et 2 d'une durée de 20 jours, l'EA accueille deux stagiaires qui enseigneront à tour de rôle aux élèves du primaire (6-12 ans) lors du stage 1 et du secondaire (12-17 ans) lors du stage 2. Puis, lors des stages 3 et 4, d'une durée de 40 jours, l'EA cédera progressivement ses groupes d'élèves du primaire lors du stage 3 et du secondaire lors du stage 4 à un stagiaire qui assurera seul la tâche d'enseignement de l'ÉPS.

Participants

L'échantillon de convenance regroupe sept EA volontaires (3 femmes - 4 hommes) dont les stagiaires ont maintenu ou développé leur SEP[1] lors de leur premier ou de leur quatrième stage. La mesure du SEP des stagiaires a été prise à l'aide du questionnaire *Sentiment d'efficacité personnelle en enseignement de l'éducation physique et à la santé* (Gagnon, Grenier, Monfette et Gosselin, 2010; Grenier, Gagnon, Monfette et Gosselin, 2012) avant et après un stage où ils étaient accompagnés par un EA pour l'ensemble de sa durée. Ce questionnaire, validé auprès d'experts et d'une population similaire, regroupe 62 items qui caractérisent chacune des douze compétences professionnelles des enseignants. Puisque le concept du SEP de Bandura (2007) constitue la base théorique pour le questionnaire, l'échelle de mesure suit les recommandations de Bandura (2007), soit une échelle linéaire allant de 0 à 100 points où 0 signifie « je ne peux pas le faire », 50 signifie « je suis modérément certain de pouvoir le faire » et 100 signifie « je suis sûr de pouvoir le faire ». Dans ce questionnaire, le participant peut indiquer le chiffre qui représente le mieux la perception de sa compétence sur l'échelle de 0 à 100 pour chaque item.

Le tableau 1 présente les EA qui ont participé à l'étude, le milieu scolaire où s'est déroulé le stage, l'année de formation et le genre des stagiaires qu'ils ont accompagnés ainsi que le changement du SEP de leurs stagiaires à la suite du stage. Les noms sont des pseudonymes.

Outils de collecte de données

Les EA ont participé à une entrevue téléphonique individuelle semi-dirigée réalisée à l'aide d'un canevas élaboré à partir de la littérature sur la perception du rôle de l'enseignant associé et validé auprès d'une population similaire. Le canevas d'entrevue regroupait 6 sections allant du plus général vers le plus spécifique : 1) questions socio démographiques (années d'expériences en enseignement, nombre de stagiaires reçus, milieu scolaire, etc.) ; 2) fonction

du stage dans l'ensemble de la formation du stagiaire ; 3) rôles des EA lors de l'accompagnement de stagiaires ; 4) formation et motivations de l'EA ; 5) retour sur la dernière expérience de stage et 6) changement du SEP des stagiaires. Ces entrevues d'environ 30 minutes se sont déroulées à la suite des stages, aux mois de mai et juin 2011 et ont été conduites par la chercheure principale de l'étude.

TABLEAU 1. *Présentation des EA participants et des stagiaires qu'ils ont accompagnés*

Enseignant associé	Milieu de stage	Année du stage et sexe du stagiaire	Variation du SEP
Sonia	Secondaire, école spéciale pour les élèves handicapés ou en difficulté d'adaptation ou d'apprentissage EHDAA	4e année - 1 femme	Augmenté
Jacinthe	Secondaire, publique	4e année - 1 homme	Augmenté
Sophie	Secondaire, publique	4e année - 1 femme	Augmenté
Mathieu	Primaire, publique	1ère année - 1 homme - 1 homme	Augmenté Augmenté
Gaston	Primaire, publique	1ère année - 1 femme - 1 homme	Augmenté Stable
Jocelyn	Secondaire, collège privé	4e année - 1 femme	Augmenté
Paul	Secondaire, public incluant des classes en adaptation scolaire	4e année - 1 homme	Stable

Stratégie d'analyse

L'ensemble des entrevues a été enregistré sur bande audio afin de permettre la transcription intégrale des propos en vue de l'analyse de contenu (Boutin, 2008). Parmi les six sections du canevas, les deux sections (section 3 et 5) qui permettaient d'obtenir des informations sur les rôles que s'attribuent les EA ont été analysées. Ces deux sections comportaient des questions telles que : « Quel est le rôle principal d'un EA lors de l'accompagnement de stagiaires ? » ; « J'aimerais que vous me parliez de votre dernière expérience de stage qui vient

de se terminer » et « Pouvez-vous me décrire la façon dont vous avez encadré votre stagiaire durant le stage ? » etc. La procédure d'analyse de contenu choisie consiste à classer les énoncés dans des catégories prédéterminées et de laisser la possibilité aux chercheurs d'ajouter des catégories selon les informations recueillies. Les cinq dimensions du rôle de l'EA (Boudreau et Baria, 1998) présentées dans le cadre conceptuel ont été utilisées à titre de catégories prédéterminées pour l'analyse de contenu qui a comporté quatre étapes : 1) lecture préliminaire du verbatim et établissement d'une liste d'énoncés en fonction des cinq dimensions du rôle de l'EA; 2) premiers regroupements des énoncés dans les catégories préexistantes et éventuellement en catégories préliminaires nouvelles; 3) identification définitive des catégories et 4) classification finale de tous les énoncés. L'ensemble du corpus, soit les 244 énoncés a fait l'objet d'un classement à l'aveugle par deux chercheures qui ont obtenu un taux de fidélité de 87 %. Ensuite, les énoncés qui faisaient l'objet de divergences ont été reclassés par consensus.

RÉSULTATS

L'analyse des propos des EA permet de souligner une perception multidimensionnelle de leur rôle. En effet, l'ensemble des énoncés se répartit parmi les cinq dimensions du cadre conceptuel. De plus, une sixième dimension a émergé de cette analyse, regroupant les propos des EA autour de la *transmission des savoirs* (Tableau 2). Pour chacune des dimensions, il est aussi possible d'illustrer quelques exemples d'actions posées par les EA pour assumer leur rôle.

Ainsi, quatre dimensions du rôle de l'EA s'avèrent d'une grande importance autant de par la quantité des propos recueillis que par le nombre d'EA qui en ont discuté : 1) Offre d'occasions d'autodéveloppement personnel et professionnel, 2) Échange d'idées et de rétroactions, 3) Établissement de relation avec le stagiaire et 4) Transmission du savoir.

TABLEAU 2. *Dimensions importantes du rôle de l'EA*

Catégories (dimensions)	Nombre d'énoncés	Nombre d'EA ayant mentionné ce rôle
Offre d'occasions d'autodéveloppement personnel et professionnel	56	7
Échange d'idées et de rétroactions	55	7
Établissement de relation avec le stagiaire	54	7
Transmission du savoir	51	7

Offre d'occasions d'autodéveloppement personnel et professionnel

Les EA de l'étude considèrent qu'une dimension principale de leur rôle est de permettre aux stagiaires de vivre des situations authentiques de la profession enseignante durant le stage et d'assurer le développement de l'autonomie des stagiaires. La totalité d'entre eux a exprimé la nécessité que le stage permette aux stagiaires de vivre « une expérience réelle de stage », « des expériences nouvelles et variées », « la réalité des groupes » et de leur donner « l'occasion de s'épanouir ». Paul explique que son rôle est de permettre aux stagiaires de : « vivre tout ce qu'ils ont à vivre, des groupes faciles, des groupes difficiles, des groupes sur des plateaux fonctionnels et des plateaux non fonctionnels ».

Situations authentiques. Afin d'assumer ce rôle, tous les EA déclarent qu'ils ont laissé leur place aux stagiaires pour leur permettre d'acquérir le maximum d'expérience d'enseignement. Certains EA comme Jocelyn et Sonia indiquent que leurs stagiaires ont hâtivement pris en charge les groupes après seulement quelques jours de stage. D'autres EA ont plutôt laissé leurs stagiaires choisir le moment de la prise en charge des groupes. Gaston explique qu'il leur a dit : « dès que vous vous sentirez prêts à prendre le plancher, je vais vous laisser de la place » et Sophie explique également qu'elle et sa stagiaire ont décidé ensemble du moment de la prise en charge dans le but de lui permettre d'enseigner quand elle était prête. Enfin, certains EA ont graduellement laissé la charge des groupes à leurs stagiaires tel que Mathieu, qui mentionne qu'il a tranquillement laissé de la place à ses stagiaires selon leurs niveaux d'habiletés pour ensuite les laisser enseigner seul aux différents groupes, mais sans jamais quitter le gymnase.

Développement de l'autonomie des stagiaires. En plus de laisser leurs stagiaires prendre la charge des groupes, certains EA ont offert des occasions d'autodéveloppement à leurs stagiaires en les aidants à développer leur autonomie et leur capacité d'adaptation. Jocelyn explique que son rôle principal est d'aider le stagiaire à développer sa capacité à prendre des décisions. Il explique qu'il pense que : « le stagiaire doit sentir que s'il y a un problème, c'est lui qui doit le régler tout de suite, sur le champ. Il doit trouver la bonne solution et s'adapter ». Sophie illustre aussi cette approche en expliquant qu'elle n'a jamais donné les réponses à sa stagiaire pour régler un problème, elle lui a plutôt demandé de chercher les réponses par elle-même afin qu'elle soit capable de trouver les solutions aux problèmes auxquelles elle fera face lorsqu'elle se retrouvera seule à titre d'enseignante dans une école.

Échange d'idées et rétroactions

Les propos des EA de l'étude laissent croire qu'ils considèrent aussi que cette dimension est importante. En effet, ils indiquent qu'ils accordent beaucoup de valeur à la communication avec leurs stagiaires et qu'ils prennent le temps de discuter avec eux. Jocelyn et Mathieu expliquent qu'il est important que la discussion soit réciproque et non pas unidirectionnelle où l'EA parle et le

stagiaire écoute. De plus, les EA expliquent que leur rôle est de faire ressortir les points positifs et les points négatifs en donnant beaucoup de rétroactions constructives à leurs stagiaires afin de les aider à réfléchir sur leur enseignement. Ainsi, l'observation de l'enseignement des stagiaires et la prise de notes sont des moyens privilégiés.

Observation de l'enseignement des stagiaires. Afin d'assumer ce rôle, tous les EA déclarent qu'ils ont observé leurs stagiaires lors des périodes d'enseignement et qu'ils ont fait des retours pour discuter de leurs prestations. Pour sa part, Gaston donnait des rétroactions durant la période, dans le « feu de l'action ». Il explique que : « la chance que l'on a en éducation physique est que dès que les élèves sont en action on peut tout de suite en parler avec le stagiaire puis il peut tout de suite se reprendre dès la prochaine intervention ». D'autres EA indiquent qu'ils ont plutôt fait leurs retours à la fin de la journée. Jocelyn explique qu'il se plaçait en retrait pour observer les périodes et, à la fin de la journée, faisait un retour sur les points forts et les ajustements à faire pour les périodes suivantes. Pour sa part, Jacinthe indique qu'elle faisait des rencontres spontanées, ponctuelles et informelles, selon leurs besoins, sans se soucier d'un horaire officiel de rencontres obligatoires. Enfin, Mathieu explique qu'il faisait des retours entre les périodes afin que les stagiaires puissent corriger certaines choses en vue du prochain groupe du même niveau à la période suivante. De plus, il explique que, lors d'un stage en dyade, pendant qu'un des deux stagiaires enseigne, il s'assoit avec l'autre stagiaire pour observer la période, discuter avec lui. Il explique que cette méthode permet de voir l'exemple et le contre-exemple lorsque les deux stagiaires enseignent à deux groupes différents du même niveau. Selon lui, cela permet de voir les différences entre les approches des stagiaires et d'en discuter.

Prises de notes. En somme, une dernière stratégie d'échanges et de rétroactions a été mentionnée par Jacinthe et Mathieu. Tous deux expliquent qu'ils utilisent un cahier, dans lequel ils prennent des notes sur les prestations de leurs stagiaires. Les stagiaires étaient également invités à prendre des notes dans ce cahier, à noter leurs observations, leurs commentaires et à poser des questions à leur EA par l'entremise du cahier qu'ils ont gardé à la fin du stage.

Établissement de relations avec le stagiaire

Les EA de l'étude soulignent également l'importance de cette dimension. La totalité des EA de l'étude a mentionné que leur rôle est d'accompagner les stagiaires afin de leur offrir ce dont ils ont besoin et de développer une relation positive avec eux. Entre autres, les EA expliquent qu'ils doivent : « guider les stagiaires », « être disponible pour eux », « les aider », « les mettre à l'aise », « les rendre confortables », « les encourager », « les soutenir », « être à l'écoute » et « travailler en équipe avec les stagiaires ». Gaston explique que son rôle est d'aider les stagiaires à se sentir confortable afin qu'ils développent une vision positive de l'enseignement au cours de leur formation initiale.

Disponibilités de l'EA. Afin d'assumer ce rôle, Mathieu explique qu'il est toujours disponible pour ses stagiaires : « je leur ai dit, mon numéro de téléphone vous l'avez, vous pouvez m'appeler n'importe quand dans vos années d'universités, ne vous gênez pas ».

Transmission du savoir

Les propos des EA de l'étude ont nécessité la création d'une nouvelle dimension de leur rôle. La totalité des EA a fréquemment mentionné que leur rôle est de permettre aux futurs enseignants de profiter de l'expérience des EA. Cette dimension s'illustre par le désir des EA de transmettre leurs connaissances, ainsi que leurs expériences de terrain aux stagiaires. Ils mentionnent qu'ils partagent leur vécu, leurs trucs du métier et leurs façons de faire. Mathieu explique qu'il a un rôle de mentor et de modèle pour les stagiaires. Il assume le rôle de transmission de savoir en exprimant qu'il souhaite que ses stagiaires retiennent le meilleur de ses pratiques pédagogiques ainsi que le meilleur des pratiques des autres EA qu'ils rencontreront durant leur formation. Ainsi, ils pourront mettre ces connaissances en application lorsqu'ils sont eux-mêmes enseignants.

Observation de l'enseignement des EA. Afin d'assumer cette dimension, les sept EA ont expliqué qu'au début du stage, ils ont demandé à leurs stagiaires de les observer enseigner afin qu'ils voient comment ils fonctionnent avec leurs groupes dans le gymnase. De plus, Sonia explique qu'elle a donné sa planification à sa stagiaire afin qu'elle ait des pistes et des ressources pour l'aider à planifier des cours pour des élèves ayant des besoins particuliers. Enfin, Gaston explique qu'il a transmis plusieurs trucs à ses stagiaires en lien avec les interactions avec les élèves pour les aider à mieux comprendre et à mieux intervenir lors de différentes situations.

Les résultats démontrent que les EA considèrent quatre dimensions primordiales lors de l'accompagnement de stagiaires. En effet, les dimensions *Offre d'occasions d'autodéveloppement* ; *Échange d'idées et de rétroactions* ; *Établissement de relations avec le stagiaire* ; et *Transmission du savoir* semblent centrales aux yeux des EA et ils indiquent qu'ils les assument en priorité. Cependant, les dimensions *Organisation du stage* et *Intégration du stagiaire dans le système scolaire* semblent plutôt accessoires (Tableau 3) pour les EA de l'étude.

TABLEAU 3. *Dimensions accessoires du rôle de l'EA*

Catégories (dimensions)	Nombre d'énoncés	Nombre d'EA ayant mentionné ce rôle
Organisation du stage	17	5
Intégration du stagiaire dans le système scolaire	11	5

Organisation du stage

Certains EA ont mentionné que l'organisation du stage fait partie du rôle qu'ils assument. Ceux-ci ont mentionné l'évaluation à la fin du stage en expliquant qu'ils ont le devoir de porter un jugement sur le niveau d'acquisition des compétences professionnelles de leurs stagiaires. Sophie explique qu'afin de bien assumer sa tâche d'évaluatrice, elle doit s'assurer de « garder une certaine distance » avec le stagiaire, c'est-à-dire qu'elle désire maintenir une relation davantage professionnelle qu'amicale durant le stage afin d'être en mesure de l'évaluer le plus objectivement possible, surtout lorsqu'elle reçoit des stagiaires de quatrième année qui obtiendront leur diplôme et leur brevet d'enseignement à la suite du stage. Enfin, les EA ont expliqué qu'ils ont le devoir de répondre aux demandes et aux exigences de l'université, de travailler à l'atteinte des objectifs préétablis des stagiaires, de travailler l'ensemble des douze compétences professionnelles en enseignement ainsi que de remplir tous les documents demandés par l'université.

Établissements d'objectifs supplémentaires. Afin d'assumer ce rôle, certains EA ont mentionné qu'ils établissent avec leur stagiaire de nouveaux objectifs à travailler durant le stage, tel qu'illustré dans les propos de Paul : « Si je me rends compte que le stage se passe bien, j'essaie de cibler des éléments sur lesquelles ils n'ont pas encore mis le doigt ou d'identifier des clientèles avec qui ils n'ont pas encore œuvré ». De plus, Mathieu explique qu'il s'investit dans cette dimension du rôle en proposant à ses stagiaires d'atteindre des objectifs qui dépassent les objectifs prescrits par l'université dans le cadre du stage.

Intégration du stagiaire au système scolaire

Enfin, quelques propos des EA sont reliés à l'intégration du stagiaire au système scolaire. Ils expliquent qu'ils aident les stagiaires à s'intégrer à l'école en les présentant aux élèves et à l'équipe pédagogique et en les accompagnants pour prendre connaissance des lieux et du matériel disponible. Finalement, ils considèrent qu'ils ont également le mandat de présenter aux stagiaires l'ensemble des outils pédagogiques existants liés à la profession enseignante.

Pour se faire, Paul explique qu'au début du stage il s'assure d'aider le stagiaire à trouver et à placer le matériel tout en lui expliquant en détails le fonctionnement de l'école.

Tel que présenté par les propos des EA qui ont encadré des stagiaires dont les SEP a augmenté ou s'est maintenu au cours du stage, leur rôle est complexe et comporte plusieurs dimensions.

DISCUSSION ET CONCLUSION

Un rôle multidimensionnel

Les résultats de cette recherche mettent en évidence une perception multidimensionnelle du rôle de l'EA. En effet, alors que les participants de l'étude de Boudreau et Baria (1998) reconnaissaient deux dimensions prédominantes, les propos des participants de cette étude laissent présager une priorité équivalente à quatre dimensions de leur rôle.

Tout comme les participants de la recherche de Boudreau et Baria (1998), les EA de cette étude considèrent qu'offrir des occasions d'autodéveloppement aux stagiaires et de favoriser l'échange d'idées et de rétroactions sont des dimensions importantes du rôle qu'ils assument. Ils croient aussi qu'ils doivent permettre aux stagiaires de vivre des expériences réelles en leur donnant du pouvoir décisionnel et organisationnel tel que l'ont mentionné les EA des études de Belton et coll. (2010) et de Portelance (2010). Cependant, la catégorie émergente : *Transmission du savoir* permet de soulever une certaine divergence entre nos résultats et ceux obtenus dans la recherche de Boudreau et Baria (1998). Contrairement aux participants de leur recherche, les participants de la présente étude place en priorité leur rôle de transmetteurs de savoirs, ce qui laisse croire, sur cet aspect, que la perception des participants de cette étude ressemblent davantage aux perceptions des participants interrogés par Rajuana et coll. (2007) qui se voient comme des modèles à suivre ayant le devoir de transmettre les trucs qui se sont avérés utiles au cours de leur carrière.

Enfin, les résultats de cette étude se rapprochent beaucoup des résultats des études de Graham (2006), Belton et coll. (2010) et Portelance et Gervais (2009) qui illustrent que l'établissement d'une bonne communication et des rétroactions constructives fréquentes sont des actions assumées par les EA. Toutefois, contrairement aux résultats rapportés par Graham (2006), les EA de cette étude n'ont pas mentionné qu'ils assument le rôle d'échanges d'idées et de rétroactions dans le but de faire des liens entre la théorie vue à l'université et les expériences vécues en stage. Ceci pourrait-il s'expliquer par une méconnaissance des contenus enseignés dans le programme de formation à l'enseignement ? En ce sens, les participants de cette étude sont semblables à l'EA de l'étude de Portelance (2010) qui affirme que son rôle n'est pas de former le stagiaire, mais bien de lui offrir un lieu d'expérimentation.

Le soutien du développement du sentiment d'efficacité personnelle

Les EA qui ont participé à cette étude sont tous des EA dont les stagiaires ont maintenu ou ont développé leur SEP à la suite du stage. Outre la perception multidimensionnelle de leur rôle, il est possible de percevoir, par leurs propos des éléments qui contribuent à la compréhension de l'accompagnement offert par des EA qui, à l'occasion d'un stage, ont encadré des stagiaires qui ont augmenté ou ont maintenu leur SEP.

En effet, les dimensions *Offre d'occasions d'autodéveloppement personnel et professionnel* et *Échange d'idées et de rétroactions* de leur rôle semblent directement liées à une première source de développement du SEP que sont les expériences actives de maîtrise (Bandura, 2007). Les EA indiquent clairement qu'ils tentent d'offrir à leurs stagiaires des conditions favorables à leur réussite. En amont, ils s'assurent du niveau de préparation du stagiaire avant de le laisser enseigner seul et, en aval, ils réalisent des retours sur les performances d'enseignement de leur stagiaire. Par un choix pertinent des expériences que vivront les stagiaires et par des retours adéquats sur leurs performances, l'EA pourrait contribuer au développement du SEP qui se construit après le traitement de l'information lors d'une performance dans une tâche donnée. Puisque la performance en soi n'a pas d'impact direct sur le SEP et que c'est plutôt la perception de l'individu à la suite du traitement de l'information après la performance qui joue un rôle déterminant sur le développement de son SEP (Bandura, 2007), un accompagnement quotidien de l'EA semble primordial.

Le stage est aussi un lieu d'expériences vicariantes. Cette source de développement du SEP (Bandura, 2007) est perceptible lors des dimensions *Échange d'idées et de rétroactions* et *Transmission du savoir.* Les EA mentionnent qu'ils sont à l'occasion des modèles pour leurs stagiaires en leur demandant de les observer afin d'apprendre des « trucs du métier ». Ils offrent aussi à leurs stagiaires un accompagnement lorsqu'ils observent leur collègue stagiaire enseigner. Ces actions de l'EA pourraient permettre aux stagiaires de réaliser une comparaison entre leur performance et celle des autres. Cette comparaison devient alors une source d'information pertinente pour faire un diagnostic de leur propre talent et pour établir le SEP.

Enfin, les *Échanges d'idées et de rétroactions* ainsi que l'*Établissement de relation avec le stagiaire* contribuent à la persuasion verbale qui constitue la troisième source de développement du SEP (Bandura, 2007). Les propos des EA sont très nombreux en ce sens, ils encouragent leurs stagiaires, les soutiennent, leur donnent de nombreuses rétroactions, les accompagnent et s'assurent d'établir une bonne relation avec eux. C'est par ces actions que les EA peuvent convaincre les stagiaires de leur propre efficacité en enseignement de l'éducation physique et pourraient les aider à fournir un effort supplémentaire lors d'une tâche, à maintenir l'effort plus longtemps et à confronter des difficultés. Combinée à des expériences positives, la persuasion verbale pourrait contribuer au développement du SEP des stagiaires.

Cette étude avait pour but non seulement de contribuer au développement des connaissances dans le domaine de la formation pratique à l'enseignement de l'ÉPS, mais aussi de contribuer modestement à la compréhension du lien entre l'accompagnement offert par l'EA et le développement du SEP des stagiaires. De plus, étudier la formation pratique dans le contexte propre à l'ÉPS permet de prendre en compte la dynamique unique lors de l'accompagnement des

stagiaires dont : les cours en gymnase, les élèves en action, la possibilité de répéter un même cours avec des élèves d'un même niveau, l'utilisation de différents plateaux, etc.

Malgré l'identification des rôles que s'attribuent des EA jumelés à des stagiaires ayant développé ou maintenu leur SEP à la suite d'un stage, une étude plus approfondie regroupant plusieurs EA et leurs stagiaires permettrait de faire les liens entre les rôles qu'assument les EA et le développement du SEP. De plus, il serait intéressant de mesurer les concordances entre les perceptions des EA et celles des stagiaires en regard du développement du SEP en plus d'interroger les stagiaires sur les actions de leur EA qui les ont aidés à se sentir plus compétents. De même, une méthodologie d'observation directe des échanges entre les stagiaires et leur EA pourrait éclairer davantage l'impact de l'EA sur le développement du SEP de ses stagiaires.

NOTES

1. Les stagiaires ayant obtenu un score global au questionnaire égal ou plus élevé après le stage qu'avant le stage ont été considérés comme ayant maintenu ou augmenté leur SEP à la suite du stage.

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LES ÉTUDIANTS « SANS TÂCHE » D'ENSEIGNEMENT EN FORMATION À L'ENSEIGNEMENT PROFESSIONNEL : UN PHÉNOMÈNE NOUVEAU ET UNIQUE

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RÉSUMÉ. Les programmes québécois de formation à l'enseignement professionnel permettent, depuis 2003, l'accès à la formation universitaire aux étudiants sans tâche (ST) d'enseignement. Cet article vise à dresser un portrait inédit de ces futurs enseignants par l'analyse des données recueillies à l'aide d'un sondage en ligne auprès de 709 étudiants, dont 102 ST. Ces résultats révèlent la présence plus importante des étudiants ST dans un nombre restreint de secteurs de formation. Aussi, cette contribution discute des choix, des stratégies et des contraintes avec lesquels ces nouveaux étudiants doivent composer au cœur de leur bifurcation professionnelle.

"NON-TEACHING" STUDENTS IN BACHELOR'S PROGRAMS IN VOCATIONAL EDUCATION: A NEW AND UNIQUE PHENOMENON

ABSTRACT. New Bachelor's degree programs in vocational education in Quebec now accept students who are not already teaching (NT). This paper aims to present the unique situation of those NT teachers-in-training by analyzing data collected in an on-line survey with 709 students, of whom 102 are NT. Results show that NT students are concentrated in certain training sectors. Also, this paper analyzes the choices, strategies and constraints that affect those students who are experiencing a change in their career path.

PROBLÉMATIQUE

Au Québec, la formation du personnel enseignant des niveaux primaire et secondaire a été confiée, il y a plusieurs années, aux universités. La préparation de ce futur personnel enseignant, au secteur général, implique des apprentissages théoriques préalables à la prise en charge d'un groupe d'élèves par les étudiants en formation à l'enseignement. La logique fondamentale est évidemment de se former avant d'enseigner. Dans le processus actuellement en vigueur, en

partenariat avec le système scolaire, ce sont des stages d'une durée minimale de 700 heures dans chaque programme de formation à l'enseignement qui permettent une prise en charge progressive et accompagnée de la classe. Ces prescriptions font partie de la dernière réforme de la formation à l'enseignement, annoncée en 2001 (ministère de l'Éducation du Québec [MEQ], 2001a) et implantée dans les universités en 2003. Toutefois, même si elles sont moins connues, le MEQ (2001b) a aussi énoncé des orientations de formation à l'enseignement pour un autre secteur, celui de la formation professionnelle. Ce secteur, indépendant de celui de la formation générale, se préoccupe des formations dites professionnelles offertes au niveau secondaire (par exemple l'électricité, la boucherie, la conduite de véhicules lourds, la coiffure) qui sont, dans les faits, les premières sorties qualifiantes du système scolaire québécois. Les enseignants qui y travaillent ne partagent pas les mêmes caractéristiques que leurs collègues du secteur général ni le même parcours de formation. Par ailleurs, c'est la nouveauté du plan de formation à l'enseignement professionnel (MEQ, 2001b) qui a modifié la pratique très largement répandue de l'inscription des enseignants de la formation professionnelle (FP) dans un programme universitaire après avoir débuté en enseignement. Ce plan de formation visant l'instauration des baccalauréats de 120 crédits en 2003 indique « que le baccalauréat en enseignement professionnel s'adresse autant aux enseignantes et aux enseignants déjà en exercice qu'aux personnes qui ont une expérience de travail et qui aspirent à devenir enseignantes ou enseignants » (MEQ, 2001b, p. 163). Cette ouverture a eu un impact sur les programmes de formation à l'enseignement professionnel jusque là dessinés pour répondre aux besoins des enseignants en exercice et explique la présence des étudiants sans tâche d'enseignement dans les programmes offerts depuis 2003.

Un parcours de formation singulier

Entre autres parce que, pour la majorité, leur spécialité ne s'enseigne pas à l'université et surtout parce que l'expérience de métier est fondamentale afin de pouvoir préparer la future main-d'œuvre (Caron et St-Aubin, 1997), afin de compter sur des enseignants reconnus compétents dans leur milieu de travail (Beaudet, 2003) et, selon nous, pour assurer leur crédibilité technique auprès des élèves, les enseignants de la formation professionnelle (FP) sont principalement recrutés dans les milieux de pratique. Ils débutent dans l'enseignement bien souvent avant d'entreprendre une formation universitaire (Balleux, 2006; Deschenaux et Roussel, 2010; Grossman, 2011). Avant 2003, les exigences ministérielles quant à leur formation pédagogique se résumaient en l'obtention d'un certificat de 30 crédits ou, plus rarement, d'un baccalauréat de 90 crédits et, au même titre que les stages, d'une période probatoire de deux ans dans leur milieu d'enseignement (MEQ, 2001b). Dans la plupart des universités, l'admission à un certificat de 30 crédits était conditionnelle à un engagement, comme enseignant, dans un programme de FP offert dans un établissement d'enseignement reconnu, habituellement appelé un centre de

formation professionnelle (MEQ, 2001b). Depuis 2003, pour toute personne qui entreprend un programme de formation à l'enseignement professionnel, la réussite d'un baccalauréat en enseignement professionnel (BEP) de 120 crédits est exigée pour l'obtention du brevet, l'autorisation permanente d'enseigner. Toutefois, même s'il partage ses principales caractéristiques avec ceux de la formation à l'enseignement au général (programme de 120 crédits, référentiel de 12 compétences, minimum de 700 heures de stages) (MEQ, 2001a), le programme de formation à l'enseignement professionnel présente plusieurs spécificités qui lui sont propres et il est dispensé de manière bien différente compte tenu de la grande hétérogénéité des parcours et des domaines de la FP.

Parmi les différences majeures entre ces programmes, notons que, dans le cadre du BEP, les compétences développées lors de l'exercice du métier offrent la possibilité d'une reconnaissance des acquis disciplinaires. Une autre différence importante tient au fait que l'étudiant inscrit au BEP chemine de manière individualisée, sans appartenance à une cohorte d'étudiants et, sauf pour quelques exceptions, à temps partiel. Tout ceci est bien différent d'un parcours universitaire divisé en huit sessions à temps complet réparties sur quatre ans, comme c'est le cas pour les futurs enseignants du primaire et du secondaire. La durée du programme de formation est donc variable et étendue dans le temps. Cette caractéristique a été prise en compte par le ministère de l'Éducation, du Loisir et du Sport (MELS) qui accorde une période de 10 ans pour compléter les 90 crédits nécessaires à l'obtention d'une licence d'enseignement, un type d'autorisation légale d'enseigner, non permanente, mais renouvelable à certaines conditions. Avant de recevoir la licence, au cours de cette période maximale de 10 ans tout en progressant dans leur formation universitaire, plusieurs étudiants obtiennent une autorisation provisoire d'enseigner renouvelable à certaines conditions, notamment par l'obtention de crédits universitaires, ce qui leur permet l'accès à des contrats d'enseignement dans leur commission scolaire.

Des changements importants conduisant à l'apparition d'un nouveau type d'enseignant en FP

La dernière réforme a introduit deux changements importants dans le programme de formation à l'enseignement professionnel qui le rend un peu semblable aux autres du général. Premièrement, la mise en place des BEP en 2003 s'est faite avec l'exigence, comme dans les autres programmes, des stages d'enseignement. Ils sont cependant organisés différemment des autres programmes du fait que les étudiants en exercice peuvent, à même leurs heures d'enseignement rémunérées, satisfaire aux exigences de stage. Par conséquent, le rôle et surtout la disponibilité des enseignants associés marquent des différences importantes.

Deuxièmement, depuis 2003, des étudiants peuvent être admis en formation à l'enseignement professionnel sans détenir une charge d'enseignement, comme c'est la norme dans les autres programmes, ce qui leur permet de se

préparer avant d'être engagés comme enseignants. Ces étudiants sans tâche (ST) d'enseignement doivent, pour être admis dans un programme de formation à l'enseignement professionnel, répondre à certaines exigences, dont celle d'une expérience de travail pertinente et suffisante. Toutefois, ces étudiants ST n'ont pas accès à cette autorisation provisoire d'enseigner, ne répondant pas à la condition de détenir une preuve d'engagement par une commission scolaire. Or, depuis 2003, c'est un nombre croissant de personnes qui entreprend une formation universitaire à l'enseignement professionnel sans détenir une tâche d'enseignement dans un centre de formation professionnelle (Deschenaux et Tardif, 2012). Bien que les orientations ministérielles (MEQ, 2001b) permettent l'arrivée d'étudiants ST dans les universités, ces dernières, de façon générale, ont développé des programmes destinés, en priorité, aux étudiants détenant une tâche d'enseignement. La réalité est que les deux catégories d'étudiants partagent un même programme, se retrouvent dans les mêmes cours, leur nombre respectif ne permettant pas l'offre de deux voies de formation distinctes, malgré des différences évidentes. Même si le nombre d'étudiants ST inscrits dans les BEP est inférieur à celui des étudiants en exercice, leur présence dans les programmes de formation à l'enseignement professionnel constitue une réalité nouvelle, dans un contexte singulier.

L'objectif de la recherche

Au Québec, la FP fait de plus en plus fréquemment l'objet d'écrits scientifiques. Deschenaux et Roussel (2011) ont montré qu'il est possible d'observer trois objets relativement distincts dans les publications sur ce thème. On trouve, d'une part, plusieurs travaux, un peu moins récents, qui s'affairent à décrire cette filière d'études, particulièrement du point de vue de son évolution historique. D'autre part, des écrits touchent différentes formes d'alternance vécue chez les élèves inscrits dans différents parcours de formation professionnelle. Enfin, ces dernières années, on remarque une concentration plus importante de travaux sur la transition vécue par les enseignants entre la pratique de leur métier et son enseignement en mettant l'accent sur le rapport à la profession enseignante, à la formation universitaire et sur la construction de l'identité professionnelle de ces nouveaux enseignants. Toutefois, toutes ces recherches laissent dans l'ombre la réalité des étudiants ST.

En 2009, la Table MELS-Universités a souhaité faire le bilan de l'implantation du BEP de 120 crédits dans six universités québécoises depuis son instauration en septembre 2003. À cet effet, elle a formé le Groupe de réflexion sur la formation à l'enseignement professionnel qui a mené une vaste enquête à la fin de 2010 et au début de 2011 auprès de cinq groupes de répondants, dont les étudiants. C'est dans ce contexte, et à partir de ces données, que nous avons eu l'opportunité de brosser le portrait de ces futurs enseignants, les étudiants ST, qui n'ont jamais, à notre connaissance, fait l'objet de travaux, étant donné le caractère exceptionnel de leur parcours.

Donc, cet article présente une visée essentiellement descriptive. Il ne prétend pas remettre en cause des décisions ministérielles ni dénoncer une incapacité des universités à répondre à une demande sociale. Il souhaite uniquement mettre en lumière, à partir de données inédites, cette nouvelle réalité en FP.

CADRE CONCEPTUEL

Afin de cerner la réalité des étudiants ST, nous mobilisons un cadre conceptuel autour de la notion de parcours, plus particulièrement autour d'outils théoriques permettant de mieux les comprendre, comme celui d'évènement marquant ou de bifurcation. D'ailleurs, « le terme « bifurcation » est apparu pour désigner des configurations dans lesquelles des évènements contingents, des perturbations légères peuvent être la source de réorientations importantes dans les trajectoires individuelles ou les processus collectifs » (Bessin, Bidart et Grossetti, 2010, p. 9).

Des particularités théoriques des étudiants ST

Le cas des étudiants ST en formation à l'enseignement professionnel présente un certain intérêt théorique, puisque la bifurcation est habituellement définie comme « un processus dans lequel une séquence d'action comportant une part d'imprévisibilité produit des irréversibilités qui concernent des séquences ultérieures » (Grossetti, 2010, p. 147). Or, pour ces étudiants ST, on peut penser que l'imprévisibilité est plutôt marginale, puisqu'ils semblent planifier à long terme leur entrée dans la carrière enseignante, s'inscrivant en formation universitaire avant même d'avoir obtenu une tâche d'enseignement, contrairement à la très grande majorité des enseignants de la FP.

Les reconversions professionnelles volontaires sont souvent appréhendées au moyen d'histoires de vie. Cette méthodologie est mobilisée afin de prendre en compte adéquatement la complexité des processus sociaux et les multiples socialisations vécues par les individus (Lahire, 1998). Dans cette perspective microsociologique, il importe de saisir le portrait intime de la personne pour débusquer les motifs ayant précédé la reconversion professionnelle volontaire. Ce faisant, les auteurs tentent de reconstituer l'ensemble du parcours individuel afin de distinguer la part de l'imprévisible (Grossetti, 2004) de la part du choix rationnel. En effet, Grafmeyer (1994) insiste sur la nécessaire prise en considération de l'hétérogénéité des trajectoires individuelles organisées autour de remises en question, de réorganisations ou de ruptures d'appartenance.

Ainsi, nous aurions pu réaliser une analyse fine du parcours des individus prenant la décision d'enseigner leur métier, à l'instar de Balleux, Beaucher et Saussez (2009) qui énoncent cinq étapes ponctuant le processus de reconversion. En effet, chaque nouvel enseignant en FP a une histoire qui lui est propre, marquée des bouleversements provoqués par cette importante décision. Toutefois, compte tenu des données dont nous disposons et de l'objectif de

cet article, il nous semble valable d'augmenter l'amplitude de l'analyse à une conception macrosociologique de l'évènement marquant de leur trajectoire professionnelle. En le considérant de manière large, sans directement interroger les acteurs sur leur reconversion professionnelle, il sous semble toutefois possible de dégager des régularités de cette apparente idiosyncrasie des parcours individuels. D'autres concepts sont alors nécessaires pour tenir en compte le caractère subjectif et objectif de l'action sociale.

La stratégie et l'intérêt : deux moteurs de l'action sociale

Sans faire de l'acteur un être pleinement rationnel comme dans l'individualisme méthodologique de Boudon et sans non plus sombrer dans un déterminisme à outrance, Bourdieu (1994) abandonne la vision mécaniste de la structure pour plutôt se concentrer sur une logique dynamique et ouverte du jeu qui oblige à tenir compte de toutes les actions d'un acteur dans le jeu afin de comprendre pourquoi il agit comme il le fait. L'espace social où se déroule le jeu est un champ. Chaque champ valorise certains types de capitaux qui ne transcendent pas nécessairement tous les champs. Par conséquent, l'acquisition de capital social dans un champ n'est pas nécessairement transférable ailleurs, dans un autre espace de jeu.

Quant aux motivations des acteurs, il est possible de les saisir grâce à la notion de stratégie, qui tient compte autant des contraintes structurales que de la possibilité de réponses actives de la part de l'acteur faisant face à ces contraintes. Ici, l'acception du terme « stratégie » rompt avec l'usage courant qui considère les visées conscientes et à long terme d'un acteur comme des stratégies pour plutôt définir cette notion comme « un ensemble d'actions ordonnées en vue d'objectifs à plus ou moins long terme et non nécessairement posés comme tels » (Bourdieu, 1994, p. 4).

Selon ces nuances, la notion de stratégie pourrait être utilisée au sens faible du terme (Rose, 2000). En effet, Bourdieu et Wacquant (1992) formulent une définition de la stratégie qui semble convenir à ce dessein. Ils définissent la stratégie comme des « lignes d'action objectivement orientées que les agents sociaux construisent sans cesse dans la pratique et en pratique, et qui se définissent dans la rencontre entre l'*habitus* et une conjonction particulière du champ » (p. 104). Donc, la stratégie est possible quand un acteur possède les capitaux nécessaires et qu'il se trouve en présence d'une situation sociale à laquelle il a un intérêt à participer. Dans le cas des étudiants ST, on peut affirmer qu'ils possèdent une expérience à valoriser, à transmettre par l'enseignement. Dans plusieurs domaines, les candidats intéressés à l'enseignement sont rares, alors que, dans certains autres, les recrues sont trop nombreuses. Dans ce dernier cas, la rareté des places disponibles en enseignement conduirait certains aspirants à adopter le statut de ST. Pour d'autres, le statut de ST est planifié afin d'amorcer, dans un avenir plus ou moins proche, une reconversion

professionnelle. Ceci dit, sans égard à la définition prisée de la stratégie, la bifurcation vers l'enseignement ne peut exister sans l'intérêt de l'acteur.

À ce propos, la définition de l'intérêt telle qu'elle a été présentée par Bourdieu est éclairante. La notion d'intérêt est corolaire à la notion de stratégie et n'est pas univoque. En fait, il n'existe pas qu'un seul intérêt, il en existe plusieurs, variables selon le temps et les lieux. « Il y a autant d'intérêts qu'il y a de champs, comme espaces de jeu historiquement constitués avec leurs institutions et leurs lois de fonctionnement propres » (Accardo et Corcuff, 1989, p. 154).

L'intérêt est aussi traversé par un rapport dialectique : en plus d'être une condition de fonctionnement du champ, car il motive les gens à concourir pour l'enjeu, il est aussi le produit du fonctionnement du champ. En jouant le jeu, les agents investissent leurs capitaux dans le champ dans le but de recevoir un dividende et, par conséquent, d'augmenter la valeur des capitaux. Étymologiquement, le mot intérêt provient du latin *interesse* qui veut dire « en être », témoignant donc d'une forme de consentement à une participation à quelque chose, dans ce cas-ci au jeu qui se déroule dans un champ autour d'un enjeu accepté — tacitement ou explicitement — par les acteurs qui s'y prêtent. C'est ce qui pourrait expliquer la présence des étudiants ST parmi les étudiants actifs dans les programmes de formation à l'enseignement professionnel. Ils souhaitent enseigner et ils consentent à se former pour y parvenir.

MÉTHODOLOGIE

Afin de répondre au mandat qui lui a été confié par la Table MELS-Universités, le Groupe de réflexion sur la formation à l'enseignement professionnel a mené son enquête auprès de cinq groupes de répondants. Ceux-ci sont les étudiants (actifs, diplômés, ayant abandonné), les directions d'établissement d'enseignement et les intervenants (professeurs, chargés de cours, superviseurs de stage, enseignants associés, mentors, et personnels professionnels dans les universités). En tout, plus de 1 325 personnes ont participé à cette enquête.

Des questionnaires ont été développés pour chacun des groupes interrogés. Lorsqu'un questionnaire était finalisé, il était validé à l'aide d'une préexpérimentation visant à s'assurer de la clarté et la pertinence des questions. À la suite des ajustements nécessaires, chaque questionnaire a été traduit dans un format électronique permettant la cueillette des données à l'aide d'un sondage en ligne administré par la firme SOM, sauf dans le cas des étudiants ayant abandonné leur programme de formation qui ont été joints au téléphone. Dans chaque université, les autorisations relatives à la dimension éthique ont été obtenues avant de procéder à la cueillette des données.

Les questionnaires étaient surtout composés de questions fermées. Celles-ci utilisent, autant que faire se peut, une échelle de type Likert en six points, selon la variable identifiée. Par exemple, chaque personne était invitée à

s'exprimer en termes d'accord selon les six niveaux suivants : 1) Entièrement en désaccord; 2) En désaccord; 3) Plutôt en désaccord; 4) Plutôt en accord; 5) En accord; 6) Entièrement en accord. Des variables sociodémographiques ont également été recueillies auprès des répondants de chaque groupe.

En janvier 2012, le rapport du Groupe de réflexion a été déposé aux membres de la Table MELS-Universités (Deschenaux, Monette et Tardif, 2012). Afin d'atteindre l'objectif de cet article, nous avons spécifiquement utilisé les données provenant du fichier des étudiants actifs, c'est-à-dire des personnes qui étaient, à la session d'automne 2010, inscriptibles dans les programmes de formation à l'enseignement professionnel au Québec. Inscriptible signifie que chaque personne concernée avait la possibilité, au cours de cette session d'automne 2010, de s'inscrire à une ou des activités pédagogiques du programme dans lequel elle était considérée comme un étudiant régulier. Puisque les programmes de formation à l'enseignement professionnel sont tous offerts à temps partiel, une personne peut, lors d'un semestre, ne pas s'inscrire à une activité pédagogique et être toujours considérée comme active dans son programme d'études. Les règles précisant le nombre de mois consécutifs pendant lesquels un étudiant peut ne pas s'inscrire à une activité pédagogique et conserver le statut d'actif est variable d'une université à l'autre. Chaque université a fourni la liste de ses étudiants actifs afin de créer une seule liste pour ce groupe.

Ainsi, le sondage a été envoyé à toutes les personnes inscrites sur la liste des étudiants actifs, par le biais du courrier électronique. La date de l'envoi initial a été le 3 novembre 2010, quatre rappels ont été effectués et la cueillette s'est terminée le 28 janvier 2011. Au total, 3 167 adresses de courrier électronique ont été utilisées et 709 personnes ont rempli le questionnaire pour un taux de réponse de 22,4 %. Parmi ces 709 répondants, 102 ont indiqué ne pas détenir de tâche d'enseignement, ni d'autorisation légale d'enseigner, sous quelque forme que ce soit et ils sont ici considérés comme les étudiants ST.

RÉSULTATS[1]

Les résultats recueillis auprès des étudiants ST sont présentés en trois sections : les principales caractéristiques des étudiants ST, leur perception du programme de formation et de ses composantes et enfin leurs intentions par rapport au BEP. Dans chacune des sections, nous présentons la situation des étudiants ST et nous comparons les données de ces étudiants ST avec celles des étudiants qui détiennent une tâche d'enseignement.

Les caractéristiques des étudiants ST

Concernant les caractéristiques sociodémographiques des étudiants actifs, les données montrent qu'il y a une plus grande proportion de femmes chez les étudiants ST (72,5 %) que chez ceux ayant une tâche d'enseignement (52,0 %). Ces données indiquent aussi que l'âge moyen de tous les étudiants ST est de

35,8 ans alors qu'il est de 40,7 ans pour ceux en exercice. Le tableau 1, qui présente la répartition des étudiants avec et ST d'enseignement selon des catégories d'âge, fait ressortir cette différence. Parmi les étudiants ST, les femmes sont en moyenne légèrement plus âgées (36,09 ans) que les hommes (34,96 ans).

TABLEAU 1. *Répartition, en pourcentage, des étudiants avec et sans tâche d'enseignement selon les catégories d'âge*

Âge	Étudiants avec tâche (%)	Étudiants sans tâche (%)	Tous les étudiants actifs (%)
29 ans et moins	9,8 %	29,4 %	12,7 %
30 à 39 ans	36,4 %	38,2 %	36,6 %
40 à 49 ans	34,7 %	22,5 %	32,8 %
50 ans et plus	19,1 %	9,8 %	18,0 %

Par ailleurs, le tableau 2 présente la répartition, en pourcentage, des étudiants ST dans les quatre secteurs de formation où ils sont le plus présents. Sachant qu'il existe 21 secteurs d'enseignement qui regroupent, en nombre variable, des programmes d'études appelés Diplômes d'études professionnelles (DEP) et Attestations de spécialisation professionnelle (ASP), on constate que les étudiants ST ne se répartissent pas également dans ces 21 secteurs. Ce sont presque 63 % des étudiants ST qui se retrouvent dans ces quatre secteurs d'enseignement laissant à peine plus du tiers des autres étudiants ST dans les 17 autres secteurs.

TABLEAU 2. *Répartition, en pourcentage, des étudiants actifs selon les secteurs de formation*

Secteurs de formation	Avec tâche	Sans tâche
Administration, commerce et informatique	14,7 %	18,6 %
Alimentation et tourisme	5,2 %	14,7 %
Santé	25,1 %	13,7 %
Soins esthétiques	6,2 %	15,7 %
Autres secteurs	48,8 %	37,3 %
Total	100 %	100 %

Il est intéressant de noter, en comparant avec la répartition des étudiants en exercice, la plus grande place occupée par les étudiants ST dans 3 des 4 secteurs présentés, seul celui de la Santé affichant un pourcentage moins élevé chez les étudiants ST. Il faut toutefois remarquer que le quart des étudiants en exercice sont du secteur de la Santé où, au cours des dernières années, les DEP qui le composent ont connu une augmentation phénoménale des inscriptions de 45,5 % de 2005-2006 à 2009-2010 (MELS, 2008, 2013).

Quant au tableau 3, il montre que, sur la base de 98 réponses obtenues, presque les deux tiers (63,3 %) des admissions au BEP des étudiants ST ont été faits à partir de 2009. Le corolaire est que plus du tiers des étudiants ST a été admis au BEP de 2003 à 2008 inclusivement et présente encore le même statut d'étudiant en attente d'obtenir une tâche d'enseignement.

TABLEAU 3. *Répartition des admissions des étudiants ST selon l'année d'admission au BEP*

Année d'admission	Étudiants ST
2003	5,1 %
2004	3,1 %
2005	0,0 %
2006	7,1 %
2007	7,1 %
2008	14,3 %
2009	25,5 %
2010	37,8 %
Total	100 %

La perception du programme et de ses composantes

Invités à se prononcer globalement sur la qualité des programmes offerts, les étudiants ST sont proportionnellement plus enclins à la considérer comme Très bonne ou Excellente mais avec une légère différence avec leurs collègues en exercice (49 % par rapport à 41,4 %). L'écart diminue en y ajoutant la catégorie Plutôt bonne (86,3 % par rapport à 81,8 %).

TABLEAU 4. *Qualité du BEP selon les étudiants avec et sans tâche d'enseignement*

Qualité des BEP	Avec tâche	Sans tâche
Excellente	11,5 %	10,8 %
Très bonne	29,9 %	38,2 %
Plutôt bonne	40,4 %	37,3 %

Pour ce qui est de la pertinence des diverses composantes des BEP, les pourcentages présentés dans le tableau 5 correspondent au regroupement des degrés d'accord 5 (En accord) et 6 (Entièrement en accord) énoncés par les répondants. Nous présentons la perception des étudiants relativement à 7 des 8 composantes des BEP. En fait, pour la composante intitulée Cours de psychopédagogie, la perception des répondants relative au développement des compétences du référentiel, donc à la dimension psychopédagogique du programme, est traitée plus en détail dans la section traitant de la capacité des programmes à développer ces compétences.

Donc, pour la pertinence, nous remarquons d'abord l'écart important entre les étudiants avec une tâche d'enseignement et ceux ST, à l'avantage de ces derniers, concernant la pertinence de l'activité d'initiation. Il est évident que pour une part des étudiants en exercice, divers aspects du cours d'initiation au programme sont moins pertinents, étant dans le milieu depuis quelque temps, en comparaison avec les étudiants ST. Cet écart se creuse et devient plus important quand il est question des stages avec plus de 18 points de pourcentage, les étudiants ST les trouvant davantage pertinents, ce qui n'est pas plus surprenant. Ce sont leurs premiers contacts réels avec des élèves en FP, situation à laquelle ils aspirent. Mais c'est la composante du perfectionnement dans le métier, que les enseignants en exercice estiment beaucoup plus pertinent, qui affiche l'écart le plus important avec plus 32 points de pourcentage. Il semble que l'éloignement de la réalité du marché du travail pour les étudiants en exercice, jumelé au fait que les étudiants qui sont ST y soient encore présents, puisse expliquer cette si grande différence quant à la pertinence de ce type de perfectionnement.

TABLEAU 5. *Pertinence des composantes des BEP selon les étudiants avec et sans tâche d'enseignement*

Composantes	Avec tâche	Sans tâche
Cours d'initiation	58,1 %	70,5 %
Stages	59,2 %	78,0 %
Cours en langue d'enseignement	70,8 %	80,0 %
Reconnaissance des acquis	78,2 %	68,0 %
Perfectionnement en enseignement	65,4 %	60,0 %
Perfectionnement dans le métier	69,8 %	37,5 %
Test de langue	58,3 %	64,9 %

Comme mentionné précédemment, plutôt que de se prononcer sur la composante principale des Cours de psychopédagogie, nous avons invité les étudiants à le faire à propos des 12 compétences du MELS, puisqu'ils sont plus familiers avec cette nomenclature. C'est donc au sujet de la capacité des programmes de formation à développer les compétences du référentiel que les étudiants se sont prononcés (tableau 6). Les étudiants ST jugent plus positivement, à une exception près, la capacité des programmes à développer les compétences du référentiel. Le plus haut niveau d'accord, ici encore observé par les pourcentages obtenus par le regroupement des degrés d'accord 5 (En accord) et 6 (Entièrement en accord), s'observe pour les compétences liées à la conception des situations d'enseignement-apprentissage et à l'éthique professionnelle. Un écart important, soit plus de 12 points de pourcentage à l'avantage des étudiants ST, est aussi observé pour la compétence à gérer la classe. Les compétences liées à l'adaptation des interventions aux besoins des élèves en difficulté et à l'intégration des TICS obtiennent des taux d'accord moins élevés pour les deux catégories d'étudiants.

Concernant la composante des stages, l'inscription au stage et la disponibilité d'un milieu de stage distinguent l'opinion des étudiants ST de celle des étudiants en exercice, les pourcentages présentés dans le tableau 7 ayant été calculés en regroupant les réponses aux degrés d'accord 5 (En accord) et 6 (Entièrement en accord). Les étudiants ST sont en plus grande partie d'accord avec le fait que l'inscription au stage ait été possible au moment qui leur convenait le mieux tandis que les étudiants en exercice estiment dans une plus grande

proportion que le milieu de stage était disponible au moment où ils étaient prêts à faire leur stage. Cet aspect de la disponibilité d'un milieu de stage pour lequel l'accord des étudiants ST est nettement inférieur à celui des étudiants en exercice, est intéressant. Pour le reste, les variations sont infimes quant à la disponibilité et à la qualité de la supervision des stages.

TABLEAU 6. *Capacité des programmes de formation à développer les compétences du référentiel*

Compétences	Avec tâche	Sans tâche
Concevoir des situations d'enseignement-apprentissage	62,0 %	74,7 %
Piloter des situations d'enseignement-apprentissage	58,7 %	68,9 %
Gérer la classe	50,6 %	63,0 %
Évaluer les compétences des élèves	57,1 %	62,2 %
Adapter ses interventions aux besoins des élèves en difficulté	47,4 %	45,8 %
Intégrer les TIC	51,3 %	52,9 %
Coopérer avec les partenaires et les collègues enseignants	45,4 %	54,3 %
Agir de façon éthique et responsable dans l'exercice de ses fonctions	64,4 %	72,6 %

Les intentions par rapport au BEP

La préoccupation de la poursuite et de la réussite des études universitaires n'est pas nouvelle. Rappelons que la problématique de l'abandon des études universitaires a été, au début des années 2000, au centre du réinvestissement universitaire dans ce qui a été appelé les contrats de performance entre le ministère de l'Éducation et les universités québécoises. C'est entre autres en lien avec cette préoccupation que les étudiants des programmes de formation à l'enseignement professionnel ont été questionnés.

D'emblée, en observant le tableau 8 qui expose les facteurs pouvant favoriser l'abandon du BEP, on peut mentionner que la durée des études est le facteur le plus susceptible de favoriser l'abandon de leur programme, autant pour les

étudiants en exercice que pour ceux ST, ces derniers l'affirmant de manière moins marquée que leurs collègues en exercice. Tous les facteurs ont été présentés aux répondants et les pourcentages représentent la proportion de ceux qui croient que le facteur peut favoriser l'abandon des études en formation à l'enseignement professionnel.

TABLEAU 7. *Opinions à propos des stages selon étudiants avec ou sans tâche d'enseignement*

Situations liées aux stages	Avec tâche	Sans tâche
L'inscription à un stage est possible au moment où vous êtes prêts à l'effectuer	66,5 %	76,0 %
Un milieu de stage est disponible au moment où vous êtes prêts à faire votre stage	72,3 %	58,0 %
Les superviseurs de stage sont disponibles au moment où j'en ai besoin	68,5 %	66,7 %
Les enseignants associés sont disponibles au moment où j'en ai besoin	68,7 %	67,3 %
L'encadrement fourni par les enseignants associés est de qualité	68,4 %	68,8 %
L'encadrement fourni par les superviseurs de stage est de qualité	68,7 %	67,3 %

En examinant les facteurs pouvant favoriser l'abandon et les pourcentages obtenus, on peut déceler deux ordres de préoccupations, selon que les répondants soient des étudiants en exercice ou ST. Pour ces derniers, les facteurs liés aux perspectives de carrière en enseignement ou aux conditions financières, comme la précarité ou le manque de ressources financières pour étudier, sont plus susceptibles de favoriser l'abandon du programme. Chez les étudiants en exercice, ce sont les facteurs associés à la gestion du temps ou à la conciliation de leurs études et du travail avec leur vie personnelle qui pourraient favoriser l'abandon de leur programme d'études. Il semble qu'ils arrivent difficilement à concilier l'enseignement, la formation universitaire et le reste de leur vie personnelle. À noter enfin que les étudiants, tant en exercice que ST, estiment très peu probable que les aptitudes requises pour réaliser ces études puissent jouer un rôle dans le fait d'abandonner le programme.

TABLEAU 8. *Facteurs pouvant favoriser l'abandon des études au BEP*

Facteurs pouvant favoriser l'abandon	Avec Tâche	Sans tâche
L'intérêt pour la profession enseignante	26,6 %	27,4 %
L'intérêt pour les études	37,8 %	20,8 %
Les possibilités d'emplois en enseignement professionnel	24,9 %	45,5 %
Les perspectives de carrière en enseignement professionnel	29,9 %	43,0 %
Le temps pour poursuivre vos études	55,8 %	33,3 %
La conciliation entre le travail et les études	61,2 %	41,1 %
La conciliation entre la vie personnelle et les études	57,2 %	32,6 %
Les aptitudes requises pour ces études	14,2 %	6,0 %
Les exigences des cours	35,2 %	17,0 %
Les exigences des stages	34,2 %	29,3 %
Le test de certification en français	39,0 %	32,5 %
Lourdeur tâche d'enseignement	37,6 %	23,3 %
Les ressources financières suffisantes	31,3 %	46,1 %
La précarité en enseignement professionnel	37,0 %	45,7 %
La durée des études	67,0 %	50,0 %
L'éloignement du lieu de formation	27,8 %	24,8 %

Enfin, quand on leur demande quels sont leurs plans relativement à leurs études dans le BEP, le tableau 9 montre que les étudiants ST sont plus optimistes de compléter leur programme d'études que les étudiants en exercice.

TABLEAU 9. *Intentions des étudiants avec et sans tâche relatives au BEP*

Intentions	Avec tâche	Sans tâche
A l'intention d'arrêter les études après l'obtention de la licence	20,5 %	10,4 %
A l'intention de compléter	45,2 %	74,8 %
A l'intention de répondre aux exigences minimales pour le renouvèlement de l'autorisation provisoire	34,3 %	14,8 %

ANALYSE ET DISCUSSION

En fonction du cadre conceptuel et des résultats présentés précédemment, nous analysons ici les données qui apparaissent les plus révélatrices de la situation des étudiants ST.

Concernant les caractéristiques des étudiants ST, c'est d'abord le nombre plus élevé de femmes qui composent le groupe des étudiants ST qui attire l'attention. Cette particularité n'est pas étrangère au fait que les emplois des secteurs de la Santé et des Soins esthétiques sont presque exclusivement occupés par des femmes. En effet, les étudiants ST de ces deux seuls secteurs de formation comptent pour presque 30 % de tous les étudiants ST de cette étude.

L'autre particularité des étudiants ST qui nous préoccupe, liée à la précédente, est leur présence dans un nombre restreint de secteurs de formation. Nous croyons que la bifurcation opérée par ces étudiants est liée aux caractéristiques des emplois que ces personnes ont occupés ou, pour la plupart, occupent encore. En fait, les données recueillies par le Groupe de réflexion montrent que les étudiants ST sont majoritairement concentrés dans quatre secteurs de formation. Or, à l'analyse, ces quatre secteurs connaissent des difficultés sur le plan de l'insertion professionnelle de leurs diplômés comme le montrent les données du tableau 10 tirées des enquêtes La Relance au secondaire en formation professionnelle du Gouvernement du Québec (MELS, 2011). Ces enquêtes visent à faire connaitre la situation des personnes diplômées de la formation professionnelle du secondaire après l'obtention de leur diplôme.

Le tableau 10 présente trois indicateurs (le pourcentage (%) des diplômés de l'année précisée qui sont en emploi, le pourcentage (%) travaillant à temps complet et le salaire, en dollars ($), hebdomadaire brut moyen) pour les diplômés des quatre secteurs concernés (en abréviation) et les mêmes informations pour tous les détenteurs d'un DEP, de tous les secteurs, délivrés selon l'année d'obtention du diplôme.

TABLEAU 10. *Indicateurs des diplômés selon les secteurs et l'année d'obtention du diplôme*

Secteurs	En emploi (%)			À temps plein (%)			Salaire ($) brut moyen hebdomadaire		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
Administ.	74,1	70,2	69,3	87,0	85,3	83,3	561	584	603
Aliment.	72,4	70,4	69,3	83,7	83,1	84,4	489	509	502
Santé	85,4	83,6	84,3	74,9	74,6	75,3	572	588	597
Soins Est.	78,6	73,7	72,5	78,4	77,2	73,0	359	395	402
Ens. DEP	77,8	73,5	73,8	88,6	87,9	87,4	611	635	647

Ces indicateurs permettent d'apprécier globalement le contexte d'emploi des nouveaux détenteurs d'un DEP rattaché à un secteur déterminé. Ces indicateurs sont connus comme des facteurs qui peuvent influencer les personnes qui se trouvent dans ces situations, lorsqu'elles sont défavorables, à évaluer la possibilité d'améliorer leur sort. Pour le secteur Administration, commerce et informatique, bien que les pourcentages de ceux qui travaillent à temps plein soient juste en dessous de la moyenne de l'ensemble des détenteurs d'un DEP, le pourcentage des diplômés qui sont emploi et le salaire sont sous la moyenne de l'ensemble des DEP. La situation est encore moins favorable au secteur Alimentation et tourisme alors que les trois indicateurs se retrouvent sous la moyenne de l'ensemble des détenteurs d'un DEP. Pour ce secteur, même si les données ne sont pas ici présentées, il est connu de tout un chacun que les conditions de travail, précisément les horaires de travail, sont difficiles, le travail de soir et lors des fins de semaine étant la règle.

Pour le secteur de la Santé, bien que les médias informent régulièrement qu'on cherche du personnel qualifié dans ce secteur, ce que le pourcentage de diplômés en emploi du tableau 10 confirme, ce sont les conditions de travail peu avantageuses, se traduisant notamment par des horaires de travail de nuit et de fin de semaine pour les nouveaux arrivants sur le marché du travail, qui pourraient expliquer leur intention de se diriger vers l'enseignement. Pour ce secteur, l'indicateur du pourcentage de travailleurs à temps plein est aussi révélateur de conditions de travail difficiles. Enfin pour le secteur des Soins esthétiques, il apparait comme le pire des quatre secteurs selon les indicateurs présentés, et aussi en fonction des autres conditions de travail considérées comme difficiles.

Or des personnes qui se retrouvent dans ces contextes de travail peuvent identifier l'enseignement de leur métier, la stratégie, comme un moyen d'améliorer leur situation professionnelle, un intérêt. Elles y voient certainement des avantages liés aux horaires de travail et au salaire tout en ayant la possibilité de garder un lien d'emploi, souvent à temps partiel, avec leur métier initial. Ces résultats corroborent les constats de l'enquête qualitative de Deschenaux et Roussel (2010, 2011). Nous croyons que ce sont majoritairement ces personnes qui se dirigent vers l'enseignement puisqu'elles se distinguent des autres étudiants du BEP, notamment parce qu'elles sont plus jeunes. En effet, comme nous l'avons vu précédemment, les étudiants ST sont, en moyenne, plus jeunes (35,8 ans) que ceux en exercice d'enseignement (40,7 ans). En analysant plus à fond les données permettant la composition du tableau 1 qui indique la répartition, selon des catégories d'âge, des étudiants ST par secteur de formation, on peut déterminer l'âge moyen des étudiants ST dans les quatre secteurs concernés, ce que nous présentons au tableau 11. On y constate que les secteurs Alimentation et tourisme ainsi que Soins esthétiques affichent les moyennes d'âge les plus basses.

TABLEAU 11. *Âge moyen des étudiants ST selon les secteurs de formation*

Secteurs	Âge moyen des étudiants ST
Administration, commerce et informatique	39,7 ans
Alimentation et tourisme	33,5 ans
Santé	36,1 ans
Soins esthétiques	32,0 ans
Autres secteurs	36,2 ans
Tous	35,8 ans

Plus encore, les étudiants ST de ces quatre secteurs représentent 70 % de tous les étudiants ST de moins de 30 ans interrogés dans cette étude. Il s'agit, selon nous, d'une indication très forte du choix de ces jeunes personnes à opérer une bifurcation professionnelle liée aux conditions de travail difficiles dans leur métier initial. Les conditions de travail en enseignement leur apparaissant bien meilleures, ils choisissent de s'y préparer même si des contraintes se présentent dans leur cheminement.

Par ailleurs, une autre particularité soulevée est de la présence d'un fort pourcentage d'étudiants ST admis au BEP lors des années 2009 et 2010. D'une part, nous croyons que son explication réside dans la nouveauté du phénomène puisque ce n'est que depuis 2003 que cette possibilité de se former à l'enseignement professionnel existe et elle est relativement inconnue. Ce n'est donc pas un choix de carrière connu du grand public ni des personnes spécialisées dans les processus d'orientation professionnelle. D'autre part, il nous apparait tout à fait normal et rationnel d'observer une diminution du pourcentage, en fonction de leur année d'admission à leur programme de formation, des étudiants ST au fil des années. En effet, ces étudiants ST se font connaitre par les directions de centre de formation professionnelle lors de leur stage et, normalement, passent à un statut d'étudiant en exercice. La stratégie des étudiants ST serait alors confirmée par ce passage du statut de ST à celui d'étudiants en exercice tout en notant que les diverses contraintes rencontrées, comme celle des stages qui sera traitée plus loin, n'auront pas freiné leur processus de changement.

En fait, nous croyons qu'il serait très intéressant de suivre l'évolution du nombre d'étudiants ST au fil des prochaines années pour voir si un effet d'étranglement du système se produit ou si ce dernier se régularise et que cette façon de faire, soit le passage du statut d'étudiant ST à celui en exercice, devient une tendance. Malheureusement, les données recueillies nous permettent uniquement d'observer la première de ces deux possibilités. Même si les données ne permettent pas d'analyser la seconde possibilité, par expérience professionnelle, mais sans pouvoir l'objectiver, nous savons que des étudiants ont débuté le BEP à titre de ST et sont passés au statut d'étudiants en exercice. Par contre, à partir des données recueillies, en recoupant la présence des étudiants ST dans les 4 secteurs identifiés avec l'année d'admission au BEP de ceux-ci, et en considérant que le pourcentage des étudiants ST admis en 2009 et 2010 qui détiennent toujours ce statut au moment de la cueillette des données ne représente pas une situation problématique, on obtient les données du tableau 12. Un indice de l'effet d'étranglement du système serait lorsque ce dernier ne peut intégrer une partie non négligeable d'étudiants ST, tout en supposant que ces étudiants ST répondent aux attentes des employeurs pour les postes à combler.

TABLEAU 12. *Nombre et pourcentage d'étudiants ST de 4 secteurs selon les années d'admission 2003 à 2008*

Années d'admission	Sans tâche 4 secteurs (*n*)	Sans tâche Total (*n*)	% ST des 4 secteurs
2003 à 2008	28	36	77,8 %

Or, on observe que les étudiants ST admis depuis plus de deux ans au moment de la cueillette des données, et qui ne sont pas passés du statut d'étudiant ST à celui en exercice, sont fortement concentrés dans les 4 secteurs identifiés. Nous avions identifié, au tableau 2, que les étudiants ST dans ces secteurs représentaient 62,7 % de tous les étudiants ST à l'étude. Comme le montre le tableau 12, la proportion des étudiants ST, des mêmes quatre secteurs, qui a été admise de 2003 à 2008 et qui a encore le même statut de ST est plus élevée (78 %) que celle des étudiants ST dans les 4 secteurs désignés (62,7 %). On pourrait y voir un effet d'étranglement du système qui implique certainement des contraintes importantes pour plusieurs étudiants ST dans leur projet de devenir enseignant. Il semble que ce phénomène soit concentré sur quelques secteurs de formation.

D'un autre côté, les résultats présentés dans la section de la perception des étudiants ST laissent croire qu'ils sont davantage motivés, car ils évaluent plus positivement les programmes, tant en pertinence qu'en qualité. Ils ont choisi d'étudier dans le but d'enseigner leur métier, ce qui semble faire la

différence avec leurs collègues qui peuvent, pour certains, avoir été contraints de le faire pour obtenir leur contrat à la commission scolaire. Toutefois, même s'ils semblent plus motivés que leurs collègues en exercice, les étudiants ST sont confrontés à diverses contraintes dont celle, importante, de l'accès plus difficile à un stage. C'est le nombre de stagiaires à placer, pour les secteurs concernés, qui expliquent cette difficulté.

En effet, la nouveauté des stages dans les BEP implique une plus grande participation du personnel enseignant régulier pour accompagner des stagiaires et avant de recevoir des étudiants ST, plusieurs enseignants devront accompagner des étudiants en exercice, leurs collègues de travail. Ainsi, des centres de formation professionnelle priorisent les stagiaires qui sont en exercice, donc leurs nouveaux enseignants, avant de se préoccuper des futurs enseignants. Cette réaction de centres de formation professionnelle de ne pas accueillir des étudiants ST, souvent basée sur les ressources limitées dont disposent ces centres, pourrait être amplifiée si ces derniers possèdent déjà une liste de suppléants suffisante dans les secteurs concernés. Il s'agit certainement d'une contrainte à laquelle les étudiants ST des secteurs identifiés doivent faire face. C'est, à notre point de vue, cette représentation plus importante d'étudiants ST dans quelques secteurs de formation qui explique cette disponibilité réduite des milieux de stages pour ces étudiants ST.

Enfin, les résultats exposés dans la section des intentions des étudiants semblent confirmer qu'ils sont davantage motivés, car, en plus d'évaluer plus positivement le BEP, ils ont l'intention, en plus grande proportion, de le terminer comparativement à leurs collègues en exercice. Cette intention des étudiants ST renvoie une fois de plus à la notion de stratégie. Cette intention changera peut-être en devenant plus objective, en vivant les difficultés soulevées par un grand nombre de répondants comme la durée des études ou les possibilités d'emplois en enseignement professionnel. Ces contraintes affecteront, peut-être, leur stratégie en retour, mais, pour l'instant, les étudiants ST se démarquent de ceux en exercice.

CONCLUSION

C'est à partir de l'analyse des données recueillies par le Groupe de réflexion sur la formation à l'enseignement professionnel que nous avons présenté, pour une première fois, certaines particularités d'un tout nouveau type d'étudiants dans les programmes de formation à l'enseignement professionnel au Québec. Cette nouveauté dans la fréquentation de ces programmes de formation a été induite à la suite de nouvelles obligations ministérielles de formation énoncées en 2001 et instaurées en 2003. En concordance avec notre objectif, nous avons donc dépeint la réalité de ces étudiants ST telle qu'observée à la fin de 2010 et au début 2011, particulièrement sous l'angle de leur parcours professionnel.

En ce sens, ce sont des caractéristiques liées au marché du travail qui semblent expliquer, en partie, la décision d'un plus grand nombre de femmes, plus jeunes, en provenance de quelques secteurs de formation, de choisir de se préparer à l'enseignement de leur métier. Nous retenons aussi que les personnes qui vivent cette bifurcation professionnelle rencontrent des contraintes plus importantes dans ces mêmes secteurs de formation, entre autres liées aux stages d'enseignement. En outre, le fait qu'une part non négligeable de ces étudiants ST de ces secteurs ne changent pas de statut, pour devenir, après un certain temps, des étudiants avec une tâche d'enseignement semble indiquer que ces secteurs vivent des situations particulières puisque dans la majorité des secteurs de la FP, les nouveaux enseignants ne demeurent pas longtemps sans tâche une fois qu'ils ont manifesté l'intérêt de vivre cette bifurcation professionnelle.

À ce point, on pourrait se questionner à savoir ce que ces premières indications signifient pour l'avenir de ce nouveau parcours de formation à l'enseignement professionnel. Est-il question de l'émergence d'un nouveau type d'enseignant, au secteur professionnel, formé avant d'enseigner? C'est alors tout le modèle de formation à l'enseignement professionnel qui serait remis en question pour devenir identique à celui des enseignants du secteur général, auquel cas toute la question des stages devient préoccupante. En fait, nous pourrions envisager que, si les universités décidaient, en formation à l'enseignement professionnel, de se lancer dans le recrutement d'un plus grand nombre d'étudiants ST, elles seraient, fort probablement, rapidement confrontées à l'incapacité des centres de formation professionnelle d'accueillir un nombre trop grand de stagiaires. À partir des données présentées, il s'agirait certainement d'une question importante à approfondir.

Enfin, en lien avec notre objectif et le cadre conceptuel utilisé, nous pouvons uniquement prétendre brosser un portrait ponctuel de la situation, sachant que les étudiants qui étaient ST au moment de l'enquête ne le sont peut-être déjà plus. Aussi, même si le nombre de postes d'enseignants en formation professionnelle est en hausse depuis les dernières années au Québec, nous savons que celui-ci est tributaire du marché du travail en termes d'offre et de demande de la main-d'œuvre. Ainsi, un étudiant ayant une tâche d'enseignement au cours d'une année pourrait ne plus en avoir l'année suivante. Ces circonstances ont certainement un impact sur les choix, professionnels et scolaires, des personnes en formation à l'enseignement professionnel. Nous en sommes donc au tout début de l'analyse et de la compréhension de ce phénomène des étudiants ST en formation à l'enseignement professionnel.

NOTE

1. Il importe de mentionner que les données ont été recueillies par le comité mandaté par la Table de concertation MELS-Universités sur la formation à l'enseignement et financé par le MELS, les universités participantes et l'Association des doyens, doyennes et directeurs, directrices pour l'étude et la recherche en éducation au Québec (ADEREQ). Toutefois, les calculs, analyses, propos et conclusions ici exposés n'engagent en rien cette instance et demeurent notre entière responsabilité.

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SUPPORTING EDUCATIONAL SUCCESS FOR ABORIGINAL STUDENTS: IDENTIFYING KEY INFLUENCES

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ABSTRACT. The academic difficulties experienced by many Aboriginal (First Nations, Métis, Inuit) students in Canada have been well-documented. Indicators such as school persistence and post-secondary enrollment are typically far lower for Aboriginal students as a group compared to non-Aboriginal students. Identifying facilitators of success is key to improving the academic experiences of Aboriginal students. Accordingly, the objective of the current study was to identify influential factors related to the educational success of Aboriginal students, from the perspective of students and teachers, through the lens of Bronfenbrenner's (1995) "Bioecological Model." The insights of participants spoke to the importance of relationships, self-concept and academic expectations, the relevance of the school curriculum, and academic aspirations as factors influencing educational success.

SOUTENIR LA RÉUSSITE SCOLAIRE DES ÉTUDIANTS D'ORIGINE AUTOCHTONE : IDENTIFIER LES INFLUENCES-CLÉS

RÉSUMÉ. Les difficultés académiques vécues par plusieurs étudiants autochtones (Premières Nations, Métis, Inuit) au Canada ont été bien documentées. Des indicateurs tels que la persévérance scolaire et les inscriptions post-secondaires sont habituellement beaucoup plus faibles pour un groupe d'étudiants d'origine autochtone que pour un groupe d'étudiants non autochtones. Identifier les éléments facilitant leur succès est essentiel à l'amélioration de l'expérience scolaire des étudiants autochtones. Par conséquent, le but de cette recherche était d'identifier les facteurs favorisant le succès académique des étudiants autochtones en se basant sur les points de vue des étudiants et des enseignants et en utilisant le modèle bioécologique de Bronfenbrenner (1995). Les observations formulées par les participants soulignent l'importance des relations, du concept de soi et des attentes académiques, de la pertinence des programmes ainsi que des aspirations scolaires en tant que facteurs influençant la réussite en éducation.

The academic difficulties experienced by many Aboriginal (First Nations, Métis and Inuit) students in Canada have been well-documented. Indicators such as school persistence, graduation rates, and post-secondary enrollment are typically far lower for Aboriginal students as a group compared to non-Aboriginal students (Kirmayer, Boothroyd, & Hodgins, 1998; Levin, 2009; MacIver, 2012; Malchy, Enns, Young, & Cox, 1997; Richards, Vining & Weimer, 2010). Longer term effects of these include lower employment rates and lower income levels (Luffman & Sussman, 2007). Research that uncovers the mechanisms which lead to the ongoing disparity between Aboriginal and non-Aboriginal students is necessary in order to effect change. As the review of literature will demonstrate, however, research in this area is scarce and explanations for the relative academic difficulties experienced by many Aboriginal students often fail to include the perspectives of the primary experts — students themselves. Accordingly, the current study adds to the literature by applying the lens of Bronfenbrenner's (1995; 1999) bioecological model to an exploration of the perceptions of small groups of Aboriginal students and their teachers regarding barriers and facilitators to educational success.

There are many explanations for the "gap" that exists between Aboriginal and non-Aboriginal students in Canada. One of these is the mismatch or poor fit between elements of the mainstream, formal, off-reserve school environment (pedagogical approaches, curriculum, assessment methods), and the particular learning needs, interests and values of Aboriginal students and their families (Brady, 1996; Kanu, 2002; Neeganagwedgin, 2013; Royal Commission on Aboriginal Peoples, 1996; Schissel & Wotherspoon, 2002; Snively & Williams, 2006; Toulouse, 2010). For example, while some educational settings might value the holistic (intellectual, spiritual, emotional, physical) development of students as paramount, others may focus more narrowly on traditional measures of achievement. According to Redwing Saunders and Hill (2007), "...the largest problem lies in teachers locked by pedagogies of practice that simulate past unsuccessful methods" (p. 1016). Given the intergenerational effects of the residential school system, where Aboriginal students were stripped of their language, cultures and communities, many families may continue to fear an agenda of assimilation for their children and view educational institutions as perpetuating colonization, making the development of collaborative relationships with teachers and administrators even more challenging (Battiste & McLean, 2005; Brown, Rodger & Fraehlich, 2009; Goddard & Foster, 2002). These issues are exacerbated by the fact that few teachers in off-reserve K-12 settings are Aboriginal and consequently the availability of staff with in-depth understanding of Aboriginal cultures may be limited, also presenting the issue of few school-based role models for Aboriginal students (Ryan, Pollock, & Antonelli, 2009; St. Denis, Bouvier, & Battiste, 1998).

Another related explanation for the difficulties experienced by some Aboriginal students in mainstream school settings is the racism and prejudice that

may exist where Aboriginal students are viewed as less capable and lowered expectations of their success are held by their teachers and other members of the communities (Battiste & McLean, 2005; Brown et al., 2009; Richards et al., 2010; Richardson & Blanchet-Cohen, 2000). According to Battiste and McLean (2005), "these developmental issues are not intellectual capacity or inferiority of First Nations students, they are systematic discriminatory educational systems and bias against them and their achievement" (p. 2).

While many Aboriginal students struggle to achieve academically at levels similar to their non-Aboriginal peers, there are of course many who are very successful in this area. Aboriginal students, as with non-Aboriginal students, comprise a heterogenous group in terms of, for example, background experiences, living in urban or more remote communities, first language, cultural identity, academic abilities, strengths, family support, academic motivation and self-concept. All of these elements influence students' academic persistence and achievement (Areepattamannil & Freeman, 2008; Boon, 2008; McInerney, 2001). For students experiencing academic difficulties, the identification of influential factors such as these can lead to the development of better-informed programming and ultimately more successful outcomes.

A bioecological model, provides a lens through which to view and explore the academic success of students. This perspective proposes that a child's development is influenced by the dynamic, reciprocal relationships that exist in the environments in which he or she is situated. Those enduring, repetitive interactions that are most powerful are found in the immediate environment and are referred to as proximal processes. These would typically include interactions between, for example, parent and child or peer relationships or in the interactions between a child and academic work or tasks. The current study will focus on interactions within one the most immediate environments to the student, namely their school. Rather than viewing the gaps between groups of Aboriginal and non-Aboriginal students as static phenomenon, understanding the dynamic influences of factors in students' environments, including the perceptions of teachers, provides insight into areas where change can be made.

Influences that have been identified as particularly salient to academic achievement include those more proximal to the student (self-concept, academic motivation), as well as those further removed or more distal including family, peer and community factors as well as those related to classrooms and schools.

In the general literature, there are a number of student-level factors that have been explored with respect to achievement. These typically include student demographics as well as social, behavioural, motivational, affective, and cognitive characteristics and competencies. Reviews of literature focused on diverse groups of students have confirmed the moderate to large significant influence of these types of factors on academic achievement (e.g., Hattie, 2003; Wang, Haertel, & Walberg, 1993).

There have been a number of studies, largely taking place in Australia and the United States, that have explored the self-concept of Aboriginal students and the relationship between this construct and academic achievement (e.g., Bodkin-Andrews, Rourke, & Craven, 2010; Purdie & McCrindle, 2004). It has been hypothesized that children belonging to a minority cultural or ethnic group with attributes that may not be viewed positively by the majority cultures may have low self-esteem (e.g., Annis & Corenblum, 1986). In research using varied measures, findings reveal that the self-concept or self-esteem of Aboriginal students may be higher (Bodkin-Andrews, Craven, & Marsh, 2005; Craven & Marsh, 2004; Purdie & McCrindle, 2004; Purdie, Tripcony, Boulton-Lewis, Fanshawe, & Gunstone, 2000) or lower than non-Aboriginal students (Bodkin-Andrews et al., 2005; Craven et al., 2005; McInerney, 2001). However, this research highlights the importance of drawing on multidimensional perspectives of self-concept. For example, studies in Australia have found that Aboriginal students reported higher self-concept in physical, art or family domains but lower self-concept in areas of academics including math and reading (Bodkin-Andrews, et al., 2010; Purdie & McCrindle, 2004).

With respect to relationships between self-concept and academic achievement for Aboriginal students, academic domains of self-concept (e.g., math, verbal, general academic) have been found to explain significant variation in student grades (Bodkin-Andrews, et al., 2010; Brickman, McInerney, & Martin, 2009; Purdie & McCrindle, 2004). General self-concept has also been found to significantly predict school aspirations (Bodkin-Andrews, et al., 2010).

Findings from qualitative explorations also shed light on the views of students with respect to their own academic success. Craven et al., (2005) interviewed over 100 Aboriginal secondary students in Australia who described holding lower educational aspirations and having less of an understanding of the education required for them to attain chosen occupations compared to their non-Aboriginal peers. Students in studies conducted in Australia and Canada also described the low expectations they faced with respect to academic streaming and the beliefs of teachers and peers (Purdie et al., 2000; Walton et al., 2009). Students described how the decisions made by school staff early in their school careers (e.g. grade 8 or 9), namely that they belonged in lower-level courses, affected their academic self-concept and preventing them from possibly improving or excelling in various subjects. Students highlighted feeling disengaged and unmotivated as a result of the low expectations and lack of support they experienced at school.

Similar findings were reported by Toulouse (2010) in her exploration of perceptions of Aboriginal post-secondary students in Ontario. Students listed motivation and self-esteem that was reinforced both at home and school as key to their success. They also described the need for clear career pathways, beginning early in their schooling, that highlight and align with their strengths.

In addition to student-level factors, the experiences of students at school clearly influence their achievement as well. For example, drawing on focus groups with Aboriginal students in Saskatchewan middle schools, Melnechenko and Horsman (1998) identified family influences, healthy relationships with teachers, and peer relationships as key to success, which they defined in both academic and non-academic terms.

With respect to teachers, student-teacher relationships have been found to have a significant impact on student engagement and achievement, with medium to large effect sizes (for a review, see Roorda, Koomen, Spilt & Oort, 2011). As an element of student-teacher relationship, teacher expectations in particular have been found to be related to academic achievement and self-concept among Aboriginal and non-Aboriginal students (Bell, 2004; Cook, Herman, Phillips, & Settersten, 2002; Lan & Lanthier, 2003). Concerns have been expressed regarding the potentially lower expectations of teachers with respect to students of visible minorities, including those who are Aboriginal, although little empirical evidence has been presented (Burgess & Berwick, 2009; Richer, Godfrey, Partington, Harslett & Harrison, 1998). In characterizing schools in British Columbia that were the most successful in terms of promoting success among Aboriginal learners, McBride and McKee (2001) listed key factors such as holding high academic expectations for Aboriginal students, making extensive efforts to include Aboriginal staff and creating a welcoming environment for parents and children. Similarly, Bell (2004) in his richly described case studies of 10 on and off-reserve schools, listed high expectations for students, a secure and welcoming climate and respect for Aboriginal culture and traditions to make learning relevant as essential to success.

Given findings reported in the small body of extant literature, it is evident that individual student variables such as self-concept, motivation and academic aspirations are likely as influential on academic success for Aboriginal students as they are for non-Aboriginal students. More distal influences, such as school experiences, also play significant roles in student success and clearly these two groups of influences are strongly related. However, most of the limited research that exists has been conducted outside of Canada with students enrolled in higher grades. As well, little research has been conducted that explicitly explores the perceptions of teachers regarding the facilitators and barriers to success for the Aboriginal students that they teach. In order to develop a deeper understanding of the self-views of Aboriginal students in Canadian classrooms with respect to academic competence and motivation that may potentially shed light on the achievement gap and avenues to it's narrowing, it is important that their voices be heard. It is also essential that the views of their teachers be explored, given the documented links between school climate (including teacher expectations and relationships) and student success.

Accordingly, the present study focuses on a qualitative exploration of the perspectives of small groups of Aboriginal students (Grades 4 through 8) as well

as teachers at their schools, regarding facilitators and barriers to school success, including self-concept and academic aspirations. Although this is a small study, capturing the views of a few students and teachers, it is novel in terms of its multi-reporter approach as well as its focus on the voices of Aboriginal students that are rarely heard in the research community. This type of study represents a move towards documenting contextualized, first-hand accounts of student and teachers experiences rather than relying on deficit-based explanations of the academic disparities that exist in Canada.

METHOD

Context

The study took place in two K-8 schools in an urban setting in northwestern Ontario. Approximately 30% of students at the two schools self-identify as Aboriginal (First Nations, Métis or Inuit), and the number of Aboriginal students (largely First Nations) in the community continues to grow. A very small number of students at the schools have arrived at some point from on-reserve schools and from more Northern and remote communities. The majority were born and had received all of their formal education in the city in which the schools are located.

The school board has an Aboriginal Education Advisory Committee, a full-time Aboriginal Community Liaison Officer and the schools also have part-time Aboriginal resource personnel who work with small groups of Aboriginal students during and after school (e.g. leading a drumming group, teaching Aboriginal language classes). As well, a number of policy and resource documents have been developed to assist school staff support Aboriginal student success.

The study was conducted as part of an initiative facilitated by the school board, with the guidance, advice and direction of the Aboriginal Education Advisory Committee, which sought to provide a range of supports and interventions in local schools with the goal to increase success (e.g. academic achievement and graduation rates) for Aboriginal students. This included professional development for staff, the inclusion of Aboriginal content/resources, bringing Aboriginal role models into classrooms, increasing collaboration with parents, and including local Elders in the development and delivery of culturally-relevant content. The initiative also provided funds for small-scale relevant research, which included the current study. The study goals and procedures were approved by the committee.

Participants

All students in Grades 4 through 8 at the two schools who had been identified as of Aboriginal ancestry through the self-identification process were eligible to participate in the study. Recruitment letters, consent forms and assent forms

for students were sent home with those eligible. Contact information was provided for the researchers should parents have any questions or concerns; some did choose this option. Parents / guardians who wanted their children to take part in the study returned the envelope to the school with their child. Some parents chose to bring the form to the school themselves. The school had taken part in previous research and students and parents were familiar with the process. In total, five students at one school (one girl and four boys) and six students at the other (four girls and two boys) were given written permission by parents to take part in the study. One student was absent on the day that the focus group was being held; therefore the final groups consisted of five girls and five boys. All students gave verbal and written assent to take part in the study. Students were fairly evenly distributed across the five grades.

It is important to note that for many reasons, including those discussed in the introduction, parents of some Aboriginal students may not have felt comfortable with the research process or with giving permission for their child to take part in the study. For example, previous research has documented the negative intergenerational effects of residential schooling on relationships between families and school staff and indeed between families and educational institutions broadly (Battiste & McLean, 2005; Brown, Rodger & Fraehlich, 2009; Goddard & Foster, 2002). We would hypothesize that those who did give permission may have more positive or trusting relationships with the schools. The few parents who spoke to the researchers directly expressed a desire to have their children voice their experiences and were clearly parents who were comfortable discussing the pertinent issues and advocating for their children. Again, the group of students who did participate is not assumed to represent the much larger population of Aboriginal students in the community or beyond.

All school staff who taught students in Grades 4 through 8 at the two schools was also invited to participate. In order to recruit school staff participants, the principal circulated information regarding the study to all those working with students in the target grades. Those staff members who expressed an interest in participating to the principal were invited by the researchers to attend a focus group. In total, two staff members at one school and three at the other agreed to take part in the study. All provided written consent.

Procedure

Four focus groups were conducted altogether; one for students and one for teachers at each school. Focus groups were chosen as they are particularly appropriate for use with children (Eder & Fingerson, 2001) and are particularly effective at eliciting "respondents' attitudes, feelings, beliefs, experiences and reactions in a way in which would not be feasible using other methods" (Gibbs, 1997, para. 4). A senior female graduate student in Social Work conducted all four focus groups. This individual was familiar with teachers and students through previous projects and had extensive experience conducting focus

groups. She was also extremely familiar with the larger community, having worked with various social service agencies. Being a young, informal presence, students engaged quickly with the focus group leader and appeared at ease describing their thoughts and experiences. It is important to note that, while students appeared to be very comfortable in discussing issues with the focus group leader, having a facilitator who was Aboriginal may have resulted in a different relationship and potentially different results as well. For example, students may have been more or less willing to discuss culturally-related ideas with someone they perceived as not belonging to that culture. Research is mixed on whether having a facilitator who is a member of the same cultural or community group as the participants is a barrier or an impediment to full and honest disclosure (Halcomb, Gholizadeh, DiGiacomo, Phillips, & Davidson, 2007). Teachers also established a good rapport with the focus group leader.

In the student and staff focus groups, participants were arranged in a circle along with the facilitator. They were provided with instructions regarding the overall goals of the focus group and issues of confidentiality were also discussed. A few students noted that they had taken part in similar groups before. A discussion about summer holiday plans first took place in order to develop a level of comfort among the groups. The length of the student focus groups ranged from 30 to 40 minutes and the teachers from 30 to 60 minutes in length. Each of the four focus groups was recorded using digital recorders. During the student focus groups, notes were taken as well by a member of the research team.

A semi-structured topic guide covering questions about beliefs regarding strengths, academic success, academic motivation, and long-term aspirations was developed for students. A similar guide was developed for teachers.

Analyses

Audio recordings were transcribed verbatim by the focus group leader and verified by a second member of the research team. Transcripts of the focus groups were read and reread and explored first for initial coding categories aligned with Bronfenbrenner's model (Hsieh & Shannon, 2005; Vaughn, Shay Shumm, & Sinagub, 1996): namely the salient interactions within the school environment. Within these, more specific themes were identified and supporting text was coded (Stewart, Shamdasani, & Rook, 2007). A second member of the research team also analyzed all data independently. In the few instances where disagreement arose, discussions continued until a category and/or theme could be assigned to the satisfaction of both researchers. It is important to note again the limits of the analytic process as conducted by non-Aboriginal scholars who, while very familiar with the local context as well as academic literature in the area, cannot possibly represent Aboriginal viewpoints or interpret the data through any lens other than their own (e.g. White, female, dominant culture, social workers / teachers; Halcomb et al., 2007).

RESULTS

A summary of the findings arising from both the student groups as well as the teacher groups is presented below. Findings are organized by categories (interactions with school curricula, school staff, and peers) and in some cases, themes. Given the small number of teachers and the possibility of identification of individual students and / or teachers, quotes supporting the findings are not associated with any particular participant and are simply attributed to a student or a teacher.

In all areas of discussion, students displayed a range of perspectives and opinions. Girls and younger students in both groups were generally quieter while boys and older students spoke more often. Within both student focus groups there were clear differences between students who (a) were engaged with their schooling, had goals for their future and were able to identify areas of strength and competence, and (b) were unsure about ways to succeed at school, claimed or appeared to be disengaged from their schooling and struggled to identify areas of strength or positive attributes about themselves. Categories that were observed among the student data included: Interactions with curricula, interactions with peers and interactions with staff.

In the teacher focus groups, although not asked to do so, teachers often focused on making comparisons between Aboriginal and non-Aboriginal students. They also highlighted the heterogeneity that existed among the Aboriginal students they taught and tended to focus their discussion on those students who were struggling academically. These tendencies should be considered in interpreting the results from the teacher focus group in particular. Categories aligning with Bronfenbrenner's theory that emerged among the teacher groups included interactions with curricula, interactions with school staff, interactions with broader community and interactions with peers.

Student findings: Interactions with school curricula

Students described their interactions with school curricula as particularly important, with both positive and negative implications for school success. School curricula is intended to mean the actual provincial curriculum, which outlines the aspects of subject matter to be taught (product model), but also refers to the interactive process of engaging in learning that includes student choice, social skills, and the conditions that facilitate learning (process model) (Knight, 2001; O'Neill, 2010; Sheehan, 1986). Within the interactions with school curricula category, themes emerged from student discussions relating to perceptions of relevance, fit between curricula and interest, and student achievement self-efficacy.

Perceptions of relevance. When discussing their interactions with school curriculum, one of the issues raised most strongly and often among the groups was relevance. There was agreement about the need to "do school" as a requisite

for long-term success but also a sense of disparity or distance between the curricula that was provided and its perceived relevance.

While the majority of students deemed success in school to be important, students disagreed about what parts of school would prove relevant to their future plans. Some students indicated that everything they learned in school would benefit them in their future; as one student put it, "If you get a job, then you'll use your knowledge from school and stuff." Others felt that completing school was more of a means to an end: "Cause you need to pass elementary to get into high school, and you need to pass high school to get into college or university, and you need to take college and university courses to get a good jobs."

Other students listed numerous subjects that they considered irrelevant to their future, including science, some math, history, French, and geography. One student described this in the following way: "Cause we're forced to speak French. As opposed to speak Ojibway. As a second language, and it doesn't say French.... I don't really want to go to Quebec anyways or France."

Students seemed unsure as to what skills and competencies would be required in various jobs and professions. This issue is raised in a discussion between two students:

> Student 1: I don't think you really need to know how to divide.
> Student 2: If you're a steel worker, you gotta know how to divide
> Student 1: Just those manual jobs, not the, like... good paying jobs

Still other students felt that math may actually be of use in certain professions: "And the only basically thing you're gonna use mostly is math cause if you learn science and most people don't get a science job, they'll probably be a businessman or something." Similarly, some students who reported feeling disengaged from school had difficulty connecting their goals for the future with their current or future schooling.

Fit between curricula and interest. While relevance was the key issue raised by students when discussing school curricula, they also discussed areas where there was a poor fit between curricula and their interest, strengths, or competencies. The interactions between students and areas of the curricula where the fit was perceived as poor were identified as barriers to school success. One area of the curriculum where this was noted was with respect to options for students with respect to coursework. This was perhaps in part a function of the age of students, most of whom were looking ahead to what they perceived as the more flexible world of secondary school, where they would be able to exercise more control over the courses they took. One student stated "It would be awesome if you could choose what you want to do in grade school instead of just doing it in high school". The lack of choice was as presented as part of a more negative interaction with school curriculum and perceived by students as a barrier to success.

The fit between the curriculum and the interests or strengths of students also arose in students' discussion of the types of classes or the nature of learning that they felt would be more aligned with them, and therefore more conducive to their success. Many students discussed a need for more applied options, including cooking, auto repair, or film-making. A number of students also commented on a desire for more time spent being physically active in all areas of the curriculum as well as increased time spent on the arts. As stated by one student: "'Cause being active actually helps your brain work". Some students also asserted that they would be interested in learning traditional Aboriginal languages in school in place of French, rather than having to join after school programming to gain this knowledge.

Student achievement self-efficacy. The third theme to emerge within the interactions with curriculum category was the sense of control or efficacy that students believed they had with respect to achievement in their classes. As one indicator and predictor of student success, and as a key focus of most schools, student grades and their perceptions of these are important to consider. Student's relationships with their academic work and the messages of success transmitted through grades and assessment feedback are important influences on self-concept and later success.

Some students expressed a lack of agency with respect to grades they received in their classes and their academic achievement in general. They expressed confusion regarding the influence that they had over their grades and the relationship between their effort and persistence and recognition of success by others. This was described by students in Grade 7 and 8 who stated: "I got 79 in Science. I was like, what?" And, "I'm doing well in school, I don't care about it."

Student findings: Interactions with school staff

In addition to interactions with school curricula and peers, a third focus of discussion by students was their interactions with school staff. These interpersonal relationships within the school environment can be particularly influential to the development and school success of students.

Students had a wide range of opinions and thoughts about their teachers. A number said that they believed that teachers recognized their strengths, and one cited an example of a teacher giving him time to showcase his extra-curricular strengths to the class. Others, however, felt that this was not the case, and still others were unsure as to whether their teachers recognized their strengths.

A few students remarked that they felt ignored, saying of their teachers that, "I don't think he even pays attention," or "[I] don't think he cares." Students who discussed an issue of bullying felt that their teachers would be powerless to stop this practice, and so chose not to confide in their teachers about this matter. As in previous findings, while students spoke of the importance of

having a teacher with whom they had a positive relationship, a range existed among the groups in terms of those who believed that they had this type of relationship with one or more of their teachers and those who felt that they did not. With respect to influences on school success, the positive relationships were more likely to be highlighted by students as facilitators of this; those with less positive relationships described a discounting of this element of their school environment.

Student findings: Interactions with peers

Relationships with peers played a large role in both student groups and were raised frequently throughout the discussions. Given the developmental stage of the participants, it would be expected that peers would begin to take a primary role in terms of importance and focus. Students described the positive aspects of peer relationships, in terms of their peer self-concept and the influence that these relationships had on their sense of belonging and engagement with school.

More specifically, a number of students discussed the importance of their friends and their desire to spend as much time with them as possible. Some students did posit that they were good at spending time with peers; identifying themselves as strong and supportive friends; students thus indicated that they perceived themselves as having good interpersonal skills. One student stated that he was "good at helping people, because other people think they can just cheer people up just by telling a dumb joke, and then it's gonna be ok, instead of like talking to them."

Some students indicated, indirectly, that they had some negative senses of self, referring to themselves as "lazy" or "a starter." Negative references were largely related to behaviour and the views of others, including their peers, regarding this behaviour. One student expressed concern that he may come to be perceived as a frightening figure, saying "you don't want people to be scared of you ... and think you're going to rip them apart," based on getting into trouble in the past. Students at one school also reported being members of a school "clique" that was unpopular and picked on, and indicated that they had not chosen to be part of this group, and felt this association was unfair: "they choose what group you should be in, and then they ignore you." Students felt that reputation also impacted on the perceptions of teachers toward students "the teacher's like 'I don't like that kid'." Thus the students' sense of their reputation and place within their peer groups and school appeared to play an important role in terms of their self-concept and engagement with school.

Teacher findings: Interactions with school curricula

Fit between curricula and strengths. As with the student groups, the teachers also identified that when school curricula was a poor fit with the students' strengths, the students' interactions with the curriculum was negative. This was described

in terms of particular types of learning behaviours or characteristics that they felt were more common among the Aboriginal students they taught and / or were at odds with those valued by the school system. Interestingly, teachers also discussed the many strengths of the Aboriginal students they taught, but described these in comparison to their non-Aboriginal peers or "despite" the challenges that students faced.

One particular strength identified by teachers was "thoughtfulness," which was often observed before students spoke or provided a response to a question in class. Although identified as an important quality of all students, and influential in terms of classroom success, the teachers raised it specifically as it was noted that this thoughtfulness was not always perceived as a strength in the classroom, where pressures and deadlines enforce a quicker pace. Thus while listed as a strength in an academic context, in terms of interactions with school curriculum, this may in fact serve as a negative influence on success, as it may not be valued by the school community.

Teachers also pointed to kinaesthetic learning as a strength exhibited by Aboriginal students, but noted that elementary school did not always provide the types of courses that might draw on these strengths: "[Kinaesthetic learning] is not really the type... of thing that we benefit from in elementary school, compared to ... a high school where they could do things like shop classes." While teachers made efforts to provide this type of learning, as one teacher put it: "there aren't as many opportunities here for those kinds of things." This perspective aligns with that expressed by students and again describes a strength that teachers observed as being more common among the Aboriginal students they taught but also one that may not be valued or be integrated into the learning experiences and curricula that students engage with.

Access to curricula. One major theme that emerged when exploring the interactions between students and the school curricula was simply access to it. Staff pointed to attendance at school playing a role in low self-esteem; they noted that if students miss a significant amount of school, they trail academically and thus view themselves as less capable in school than other students. They noted attendance as playing a detrimental role in mediating the relationship between students and the school. Teachers agreed that, while students were eager to celebrate their school successes with their teachers, this enthusiasm was not continual as described in the following quote from one participant: "School as a priority is not sustained. It's like, in the moment, this is great... but then they may not come again for a week and a half." Teachers expressed concern that when students missed school it affected both their academic strengths as well as their perceptions of themselves as learners.

Teachers believed that lack of attendance perpetuated a further cycle of lower achievement, poor self-esteem and lack of attendance: "If they're not here, how do you help them catch up? And then when they do come, it's probably not

as positive, because they can see their peers can do things that they can't." Similarly, one teacher stated: "But, if you have huge gaps and you can't read, like I'm thinking of my [student], I mean he can't read. So smart, can't read. And so that effects self-esteem, that's probably why he doesn't come a lot of the time." As mentioned previously, teachers connected concerns around motivation with concerns around school attendance.

Engagement with curricula. Tied to access to curricula is another issue raised by most teachers related to the engagement of student with curricula. This highlights the belief of teachers that motivation is a major barrier to school success for students, and that many Aboriginal students in particular, exhibit lower levels of motivation.

Staff believed that many Aboriginal students did not seem to connect their schooling with future plans and aspirations. Most teachers remarked that students rarely set goals for their schooling independently, noting that this reluctance aligned with low engagement and motivation in schooling. Teachers recognized that students had hopes for the future, but felt that they had to intentionally and repeatedly show many students the connection between their current education and achieving these goals. This aligns with the perceptions of students, many of whom struggled to link specific courses and curricula with 'real-life' learning and careers.

Concerns about motivation arose repeatedly during both focus groups. Teachers felt that their students would experience improved academic and psychosocial outcomes if their motivation increased. As such, they reported many efforts to engage and encourage Aboriginal students. These efforts included developing good rapport and relationships with students, developing culturally relevant lesson plans, and trying to include families and the community within the school.

Teacher findings: Interactions with school staff

Creating conditions for success. Staff recognized that students' experiences in school and in the classroom figure prominently in their self-concept. Teachers noted that their behaviour in the classroom and their interactions with students were inextricably bound up in students' ideas about themselves and their successes. Staff repeatedly spoke about making space for students to succeed and celebrating those successes: "They have to feel valued when they come here," said one teacher, "[they] have to feel they can succeed." Others talked about "establishing a pattern of success," and making efforts to raise students' self-esteem through relationship-building and by making school a welcoming and positive place. This was described by one teacher: "Just giving them a sense of self-worth. In my room, that's what I do when they come to me: 'You're good at this! You're really good'... And that's all they need. Just a little bit." Teachers felt that they spent much of their time in a counselling

or social work role with some students, which they felt was unavoidable given students' emotional and psychological needs.

Every teacher spoke of their personal efforts to encourage students to come to school and to see themselves as capable and valuable within the school context. Teachers described welcoming and encouraging their students into their classrooms: "It's never 'Where have you been?' It's always 'Oh, I'm so glad you're here! You have to come tomorrow!'"

Another teacher described the importance of welcoming students with difficult home lives in the following way: "For some of them, it's just making sure that it's as positive as possible when they're here, so that the kids want to come. Some of them do come, not because someone tells them to go, or wakes them up in the morning, but because maybe they like school more than they like home." However, overall, teachers expressed significant concerns about school attendance as essential for school success and future goals. One teacher described the frustration that struggling students face with an analogy about running to catch a bus:

> If you run for the bus, and you see the bus just pulling in and you're behind, you start running and running, and you're willing to work hard... because it's right within reach.... But there's a point sometimes when you're running... and you realize the bus driver hasn't noticed you... and you realize that "no matter how hard I run, that bus driver is not going to see me, and not going to subsequently stop".... And what's your natural thing? You just stop running. Essentially. You give up. And unlike a bus, where you know there's another one coming along, in a school grade you miss it, you don't just grab the next one and go.... It does have an impact on you... and it starts eating away at your persona.... And that's kind of what happens to our kids, they say, "Why am I going to bother? I'm not going to pass, so I might as well save my time."

Teachers described a constant struggle to counteract this impulse to "opt out" of schooling. Some teachers posited that students might not participate in school because of their self-perception as academically unsuccessful. One teacher described students as choosing not to attend events and classes so that "they don't have to fail a lot of the things.... Because they choose not to go, there's no pressure." Another claimed that "it's very disturbing for me, because I feel like they're opting out as a prelude to dropping out... Like they think that they're empowering themselves by saying, 'Pft! I can't go.'"

Teachers recognized the importance of Aboriginal students feeling valued by their teachers and school community, and made efforts to welcome and value their students. Nonetheless, some teachers expressed concerns that students who are struggling may feel a sense of "segregation" because of their Individual Education Plans (IEPs) or by being pulled out for extra help. Teachers believed that students may also feel isolated in classrooms where they were not being accommodated or receiving the help they required. If students feel thus margin-

alized, their negative sense of school is exacerbated; as one teacher phrased it, "they don't set goals because they fundamentally don't feel like they belong."

Setting expectations for success. In addition to creating conditions for success, teachers also described the key role of expectations. Teachers were reluctant to make claims about "all" Aboriginal students and commented that they had encountered students who were successful and well-rounded. Common prejudices, however, that Aboriginal students encountered in their schooling contexts were noted. Teachers remarked that the most common response to hearing of an Aboriginal student who was academically successful was one of shock or surprise; a response that teachers felt was detrimental to the school experiences of Aboriginal students: "We have a student that just came to us, Aboriginal student, straight A student, and I say 'he's a straight A student,' everyone's like 'Really!' and you shouldn't be shocked by that!"

Further, some teachers remarked on the need to encourage students to aim towards future careers that are highly respected, such as teachers, lawyers, and doctors; teachers held these high expectations in order to show their students what was possible for them in the future: "Sometimes we don't see them going beyond us. That they're never going to make it. And I think we can change that reality."

Providing culturally relevant programming. In terms of instruction, some teachers felt that including culturally relevant material, such as history and literature, was important to students and their sense of identity. They believed that by valuing the "stories" of students, they would "see themselves in what we teach and what we do, so... then acknowledging them and... their value". Other teachers felt that, although they tailored some of their lessons to include elements of Aboriginal cultures, these were discounted or looked down upon by some of the students. From the perspective of these teachers, cultural programming was valuable if it promoted academic improvement within the school context. The main role of teachers and schools, then, was to educate students and to give them the skills to be successful in the broader Canadian milieu.

Staff noted that they often had very different life experiences than their Aboriginal students, which affected what they expected and how they interacted with their students. Noting that teachers and administrators hold university degrees and tend to have a comfortable income, some teachers remarked that this "middle-class" lifestyle was extremely different from the lifestyles of many of their Aboriginal students. Teachers felt that they and their colleagues had some trouble relating to or understanding the lives of their students.

The issue of resources and financing came up in both focus groups. A number of teachers emphasized how important the funding and support that the Ministry provided for programming had become to their school, indicating that a significant number of students had "gone from 0 to 100. And [these

students] attend, and it's fabulous... They're here everyday, they're passing, they're involved." Similarly, many teachers expressed a desire for more support in the classroom; they believed that, with the proper supports, they could reach out to and engage a number of the students who were currently disengaged with school.

Interactions with broader community. Teachers reported that, on the whole, they did not believe that the Aboriginal students that they worked with had positive self-concept. Some staff felt that difficulties within students' family life, including low academic self-concept on the part of parents and other family members, might contribute to this. Also noted was the impact of living in a society in which racism exists, and in which students see few Aboriginal people involved in the power structures (for example, as teachers or as doctors). Some of the teachers felt that Aboriginal students did not have role models in the school and larger community to help propel them forward and to guide them towards successful futures. Noting hopelessness related to this perception, one teacher framed the situation in the following way:

> And every day, I'm not even worried about this in school, they have to go out in a society, a community that is racist. And when I say that I don't mean to be inflammatory, but they deal with that every day. So they think, "What's the point of even going to school? When I come out, I'm just always going to be an Indian."

Interactions with peers. Teachers suggested that Aboriginal students may feel marginalized when they came to school. As one teacher framed it, "It's tough when you walk into that school... [and] don't fit in." Some asserted a reason for this perception may be that students feel alienated by a school structure that does not reflect them, or come from families and communities that do not value formalized education. Some teachers also asserted that Aboriginal students who do not attend school regularly, and are struggling to catch-up on school-work, may perceive themselves to be lagging behind their peers, and thus

> often feel marginalized a little bit within the classroom. Even though they're welcomed, and they're open-armed every time they show up, and you try to catch them up, but they're still, they're missing some of the learning, so they they're not quite fitting in.

Teachers (from one school in particular) reported that some socio-economic factors also impacted Aboriginal students' relationships with their peers. Teachers reported that students developed a sense of themselves as "have-nots" in the face of students of a higher socio-economic status; "I don't know how else to say it but to say that they felt ghettoized. The kids were all like 'Oh, look [at what those other students have]!' and there was this sense of being beaten down." Further, teachers believed that these socio-economic realities also affected the bullying issue that some Aboriginal students were facing. However, some staff also posited that this socio-economic status contributed to the sharing and strong support system that occurred between Aboriginal

students. Overall, while relationships with peers were mentioned by teachers, these were viewed as much less influential than the interactions with school curriculum and school staff.

DISCUSSION

The findings discussed in the current study represent the views of small groups of students and teachers and cannot be viewed as typical or representative of Aboriginal or non-Aboriginal students and teachers. However, our analyses of the discussions held within student and teacher focus groups revealed several interesting findings, many of which are supported by existing literature and theory. Both students and staff identified a number of interactions proximal to students including interactions with curricula, school staff, peers and the broader community. According to Bronfenbrenner's bioecological model (1999) as well as a wealth of research literature, aspects of these interactions are among those identified as contributing to the development of students and their academic success.

The first area highlighted by students and staff was the interaction with school curricula. Many similarities emerged between the student and staff findings. For example, both described the fit, or lack thereof, between the curricula and instructional and assessment approaches that was provided within the schools and the strengths, interests and preferences of students. Students described being unable to make choices in their learning and also identified the types of classes they would prefer to take, as well as the ways in which they preferred to learn (e.g. more active). Interestingly, teachers also identified kinesthetic ways of learning as a strength of many Aboriginal students that they taught but also highlighted that while a strength, it was not necessarily an approach that was reflected in the curricula available to students. Teachers also provided the example of thoughtfulness as a quality that they observed among their Aboriginal students but that was not necessarily valued within the fast-paced school curriculum.

The perspectives of students and teachers speak to areas in which interactions between students and curricula may in fact be detrimental to school success. Certainly the mismatch between elements of the school curriculum and the learning needs, interests and values of Aboriginal students and their families has been documented by researchers and has been posited as one explanation for the difficulties experienced by many Aboriginal students within mainstream school systems (Kanu, 2002; Neeganagwedgin, 2013; Royal Commission on Aboriginal Peoples, 1996; Schissel & Wotherspoon, 2002; Snively & Williams, 2006; Toulouse, 2010). That students and teachers in the study actually agree on some of these areas of mismatch and raised similar issues independently provides further evidence that there is a gap between the strengths and interests of many Aboriginal students and the school curricula and that this presents barriers in terms of students achieving school-defined success.

A second area where similarities emerged between students and teachers was with respect to engagement with curricula. Students discussed this largely in terms of a lack of relevance that they perceived in their course work — particularly with respect to the links between coursework and future jobs and professions. Teachers discussed the lack of engagement with curricula that they observed among many of the Aboriginal students they taught; this was perceived as key to motivation and ultimately, achievement. They also described how they had to make explicit links between the curricula and students' future goals; clearly the small groups of students in the focus groups did not express an understanding or belief in these links.

That students might describe their interactions with school curricula as less than ideal and cite irrelevance as a barrier to learning and engagement is not new nor is it at all unique to Aboriginal students. Literature examining school drop-out processes has identified lack of school engagement, as defined by behavioural indicators (active participation in school, including attendance), affective indicators (attitudes toward school and belongingness), and cognitive indicators (psychological investment in learning, perceptions of competency, setting goals, etc., Fredericks, Blumenfeld, & Paris, 2004), as a key predictor for adolescents (e.g., Archambault, Janosz, Fally & Pagani, 2009; Janosz, LeBlanc, Boulerice, & Tremblay, 2000). Providing ways for students to see meaning and relevance in their work as well as pathways from their school curricula to future goals are often suggested as ways to increase engagement and ultimately prevent drop-out (Lehr, Hanson, Sinclair, & Christenson, 2003 for a review).

Teachers, however, perceived lack of engagement with the curricula as an issue more likely observed among the Aboriginal students they taught. They also described engagement in terms of access to curricula. While, cognitively and affectively, students may not be engaged with the curriculum and may perceive themselves as less capable than their peers, teachers prioritized behavioural engagement, which they defined as lack of attendance or inconsistent attendance. Teachers outlined a cycle including lack of attendance, poor academic self-concept, low motivation, and poor achievement. Certainly ample evidence exists to support the connections between these variables, for Aboriginal and non-Aboriginal students (e.g., Bodkin-Andrews, et al., 2010; Toulouse, 2010). Improvements in attendance were seen as key to breaking the cycle and ultimately improving engagement and school success.

In the expectancy-value model of achievement-related choices developed by Eccles and others (Eccles & Wigfield, 2002; Wigfield & Eccles, 1992), students' academic persistence and performance on tasks is influenced by their expectations of success and their valuing of the task which are in turn influenced by their self-evaluation of competence, goals, and socialization factors such as stereotypes. Certainly it can be expected, then, that students who are unsure of how to set goals, who are perceived as less competent by their

teachers and communities, and who are less connected to school are more likely to do poorly academically and to make academic choices that are less likely to engender success.

While interactions with curricula emerged from the data as most salient, interactions with school staff came a close second. Students spoke briefly about these, mostly in terms of describing teachers who they did or did not feel recognized and valued their strengths. From the perspective of the teachers, their relationships with students were key to success, and they described creating conditions for success, setting expectations for success, and providing culturally relevant programming. Teachers outlined the ways in which they attempted to provide largely social and emotional support within their classrooms and creating welcoming environments in order to encourage student attendance and engagement. The approaches taken by teachers are certainly those that are recommended for facilitating success for Aboriginal students. Teachers are clearly aware of the need to move beyond simply instructing students to building caring environments and adopting the role as counsellor when needed. Teachers also described the frustration and hopelessness that they experienced in attempting to counteract the negative self-perceptions of some of the Aboriginal students they taught. However they also identified the lowered academic expectations of Aboriginal students that existed within their schools. Clearly the teachers who self-selected to participate in the study may not be typical of those who hold negative perceptions and lower expectations of the academic competence of Aboriginal students. However, even these teachers reflected upon the uneven standards and expectations that they held for their Aboriginal students, while at the same time making extensive efforts to ensure their success.

Teachers also highlighted the limited understanding that they had of the lives, values and realities of the Aboriginal students they taught, particularly those who came from low socio-economic backgrounds, and how this prevented them from being able to relate to and engage many Aboriginal students. The limited cultural understanding that many non-Aboriginal teachers have about the Aboriginal communities and families they work with has certainly been posited as a barrier to effective instruction (e.g., St. Denis et al., 1998; Kanu, 2005; Ryan et al., 2009). There have been many calls for increasing numbers of Aboriginal teachers in urban, off-reserve classrooms (McBride & McKee, 2001; St. Denis, 2010), although numbers remain low. Aboriginal teachers working in urban schools also describe numerous barriers to entering and remaining in the profession, including racism, a devaluing of values and backgrounds, (St. Denis, 2010). Clearly this is an area that requires an ongoing focus.

The examples presented by the teachers shed light on the realities experienced by some Aboriginal students in schools and a board that have the success of Aboriginal students as a key priority. Certainly there has been other evidence

of the expectations of teachers with respect to the academic potential of Aboriginal students in mainstream settings (Battiste & McLean, 2005; Brown et al., 2009; Richards et al., 2010; Richardson & Blanchet-Cohen, 2000). There has also been discussion in the literature regarding how key high academic expectations are for the success of Aboriginal students (e.g., Bell, 2004; McBride & McKee, 2001). However the direct and forthright perspective of teachers has been absent in much of the literature.

The views of teachers in this regard speak more broadly to the perceptions of the communities in which students live. This is not a perspective that is unique to teachers, however. Students' interactions with school staff play a powerful role in their development as competent learners who see themselves as capable of success in mainstream, minority settings. Although not raised in discussions with students, teachers described the interactions they perceived between students and the larger urban community within which the school was situated. Teachers believed that racism, lack of role models, and difficulties with students' family lives were some of the issues that further contributed to poor perceptions of competence and worth, and ultimately the lack of motivation and success of many of the Aboriginal students they taught.

While noting racism in the broader community, however, teachers did not identify racism and discrimination as key barriers to success that existed within their own classrooms and schools. Pedagogical approaches, curriculum, and behavioural expectations were all listed as areas where cultural mismatch may occur. That certain forms of these would be privileged by teachers, thus creating failure for some Aboriginal students, was not discussed. Harris (1990) described how the "hidden curriculum undermines Aboriginal values in a variety of ways.... The values held by non-Aboriginal teachers, and the values implied by school organisation... can be unconsciously imparted" (p. 8). Teachers working within mainstream schools may not recognize the myriad ways in which accepted, status quo approaches to teaching and learning present active barriers to the success of Aboriginal students. The previously-noted tendency of teacher participants to compare non-Aboriginal students to Aboriginal students in terms of their academic success also reflects a view of non-Aboriginal students and their strengths as normative. According to Hewitt (2000), "Despite increasing recognition of the importance of acknowledging the cultural contribution students bring to the school, teachers still tend to blame children for their failure to adapt to the values of the dominant culture on which the school culture is based" (p. 113).

Certainly there are many years of systemic racism that have affected Aboriginal students and families. The intergenerational effects of overt discrimination in the form of residential schools certainly still resonate within many families (Battiste & McLean, 2005; Brown, Rodger & Fraehlich, 2009; Goddard & Foster, 2002). As well, many non-Aboriginal students and community members

lack a real understanding of the deep-rooted issues facing many Aboriginal families and can challenge or resent Aboriginal-specific services or programs (St. Denis, Silver, Ireland, George, & Bouvier, 2008). As was noted by teachers, however, much broader structural factors including socioeconomic inequity also play a major role in perpetuating the division between Aboriginal and non-Aboriginal populations (Brady, 1996; Wotherspoon & Schissel, 1998). An understanding of the multiple influences on student success, including those that exist within the broader community, is essential for school staff to truly be able to address the equally multi-faceted solutions.

Educational and research implications

The findings emerging from this study are based on the perspectives of a very small number of participants and as such major directives about changes to the state of education are clearly inappropriate. However, a few areas where future research should be focused and where current teachers and other school-based professionals may choose to explore and reflect upon their own practice can be identified. These include a focus on student strengths, the inclusion and highlighting of relevant, meaningful material, making explicit links to future education and careers, and providing support for teachers. Certainly all students, particularly those feeling disengaged from their education, could likely benefit from these strategies. Some literature has supported the importance of personally relevant curriculum for Aboriginal students in particular (e.g. Radda, Iwamoto, & Patrick, 1998; Snively & Williams, 2006; Toulouse, 2010). However, it is important to point out that a desire for 'culturally' revelant curriculum was not a dominant theme in the current study, with the notable exception of the inclusion of Aboriginal languages. Rather, students expressed a desire to have greater choice in their schooling and for coursework that reflected their interests and skills.

It was clear through the discussions with the few teachers who took part in the study that balancing the provision of social, emotional and psychological support for those students who they perceived as requiring this with an academic and curriculum-based focus was an ongoing challenge. Teachers also described the limited understanding they had with respect to the lives and background of the students they taught. Teachers may also not be aware of the myriad ways in which the education system privileges non-Aboriginal students and their role they may play in perpetuating discrimination. Prioritizing the inclusion of Aboriginal school staff as well as the contributions of parents and extended families within school curricula, who can work with teachers and also act as role models for students, should be considered by schools and boards.

It is also essential, whether within teacher education programs or professional learning events, that teachers and broader groups of school staff engage in deep reflection about the perceptions they hold for Aboriginal students. Many teachers who work in cross-cultural contexts devote considerable time

and resources to the integration of culturally-relevant materials and activities. However, the perspectives of the few teachers involved in the current study are that these efforts may not always be aligned with the needs and interests of the Aboriginal students they are working with. It is important that school, board, and teacher education staff move beyond a surface-level focus on cultural celebrations or activities, what Battiste and McLean (2005) refer to as the "add and stir" (p. 7) model of education (see also Kanu, 2005) to deeply explore the ways in which students are taught, the messages students receive within and beyond schools with respect to competence and worth, and the valuing of student interests and strengths.

Limitations

Generalization of findings from this study is limited due to the small number of participants. As well, those few Aboriginal students who took part in the focus groups likely do not reflect the perceptions of all Aboriginal students, particularly those who most struggle in school. The same is true for the few teachers who participated, whose beliefs may not align with those who did not participate. Furthermore, the experiences of students in an urban setting in northwestern Ontario may not extend to students in more rural or remote settings or in larger centres across Canada. As such, findings should be viewed as providing suggestions for potential areas for future research as well as identifying elements to explore when developing interventions for students struggling academically. Finally, the focus groups were conducted by a non-Aboriginal facilitator, which may have impacted the discussion among students in particular.

CONCLUDING REMARKS

This study reflects the voices of only a few students and teachers in one community within Canada. These participants clearly have varied experiences, backgrounds, and beliefs regarding the paths to school success. However, many of the key interactions highlighted by the participants are those that have been identified previously as highly impactful. Discussions regarding the interactions between students and school curricula, in particular, shed light on the various ways that students and teachers perceived a mismatch between the strengths and interests of students and the curricula provided within the schools. These conversations were not focused on culturally-specific materials or activities but were focused at a much deeper level, a level where reflection by teachers and the broader educational community is warranted. Teachers also described the many ways that they attempted to provide conditions and expectations for success, including a focus on the social and emotional needs of their students. This more holistic view of student development is key to promoting engagement and achievement among all students. However, the beliefs of the teachers in the current study indicated that this was not always sufficient to ensure academic success. Teachers will continue to require sup-

ports, in the form of human resources (e.g. counsellors, Aboriginal resource staff), authentic professional learning opportunities, and the collaboration of families and communities to truly create conditions of success for all of the Aboriginal students they teach.

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REVENGE OF THE BETA BOYS: OPTING OUT AS AN EXERCISE IN MASCULINITY[1]

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ABSTRACT. This study examines the factors influencing underachieving boys on a high-performing high school campus. Unlike the "laddishness" often seen in studies of underachievement among boys, the boys in this study were quiet, unobtrusive, and compliant within the classroom. Using qualitative interviews and observations conducted over a one-year period, the study showed the formation of student identities in response to the hegemonic masculinity of the "golden boy" portrayed by the popular boys on campus, which included high academic performance. The boys constructed an alternate masculinity, the Beta Boy, designed to demonstrate superior intellect through eschewing in-class work and homework but performing particularly well on tests.

LA REVANCHE DES HOMMES BÊTA: LE DÉSENGAGEMENT COMME EXPRESSION DE MASCULINITÉ

RÉSUMÉ. Ce projet de recherche étudie les facteurs ayant une influence sur des garçons sous-performant au sein du campus d'une école secondaire à rendement supérieur. Contrairement aux comportements immatures et tapageurs fréquemment observés dans le cadre d'études portant sur l'échec scolaire chez les garçons, les jeunes hommes de ce projet de recherche étaient silencieux, effacés et respectueux des règles de la classe. En se basant sur des entrevues qualitatives et des observations menées sur une période d'un an, les résultats de recherche montrent la formation d'identités étudiantes en réaction à la masculinité hégémonique du «golden boy», représenté par les garçons populaires du campus, incluant ceux réussissant sur le plan académique. Ces garçons ont élaboré une identité masculine alternative, les Beta Boy. Cette masculinité cherche à démontrer des capacités intellectuelles supérieures, en évitant tout travail scolaire en classe et à la maison, mais en réussissant particulièrement bien les évaluations.

The academic underachievement of boys is an educational issue around the globe in industrialized societies. In the U.S., it is a growing problem in particular. Numerous sources indicate that boys are lagging behind as soon as they enter the education system, and that this continues over the life

course throughout both their college and working years. Indeed, contrary to past patterns in higher education, in 2008, the U.S. Census Bureau (2008) estimated that only two-thirds of young men ever darkened the doors of higher education and that they are significantly less likely than their female counterparts to earn their degrees. This growing issue has only been exacerbated by the Great Recession during the late 2000s, as men held three-quarters of the 8 million jobs lost (Rosin, 2010). This is largely due to the specific fields in which those losses occurred, which have long been considered the work of men: construction and manufacturing. It's no coincidence that these fields do not require higher education.

The phenomenon of underachieving boys is not a new topic. There has been much discussion and inquiry into this subject in recent decades. Some attention has been given to working class students on this issue (Epstein, Elwood, Hey, & Maw, 1998; Ingram, 2009; Lucey, 2001; Lucey & Walkerdine, 2000; Morris, 2005; 2008; Reay, 2001; Weiner, 1998; Willis, 1997) as well as race (Conchas & Nogura, 2004; Ferguson, 2000; Luttrell, 2005; Majors, 2001; Osborne, 1999; 2001; Oyserman, Gant & Ager, 1995; Polite and Davis, 1999; Oyserman & James, 2008), while some researchers call attention to the intersectionality of race and class (Griffin, 2000). Many discussions look at shifts in education over the last few decades to locate the problem within schools themselves (Raphael, 1998; Johnston & Watson, 2005). Among these foci is a discussion pitting boys' success against the success of girls (Gurian, 1996; Hoff-Sommers, 2000; Pollack, 1998). Much criticism has been raised concerning the way the discourse posits boys as "victims" and girls as "privileged" (Epstein et al., 1998; Griffin 2000; Lingard & Douglas, 1999; Rowan, Knobel, Bigum & Lankshear, 2002; Watson, Kehler, & Martino, 2010), and many researchers have cited the entire "masculinity in crisis" discourse as a backlash against feminism (Epstein et al., 1998; Raphael, 1999; Skelton, 1998).

Of particular interest is the phenomenon of capable boys choosing to disengage from their academic work, but who are doing so in a very restrained and subdued manner as opposed to the assertiveness of hegemonic masculinity or the disruptive nature of laddishness described in previous studies. The purpose of this data collection was to discern some of the factors triggering the lack of engagement of certain male students, who based upon all available educational indicators should be performing at high levels. This study strove to understand the context and motivation of the underachievement of boys on a high-performing campus.

MASCULINITY AS A LENS TO VIEW UNDERACHIEVEMENT

Masculinity is an oft-used concept in the academic discourse surrounding the underachievement of boys, and the most commonly referenced in the literature is hegemonic masculinity (Carrigan, Connell & Lee, 1985; Connell

& Messerschmidt, 2005; Connell, 1987; Epstein, 2006; Frank, Kehler, Lovell & Davison, 2003; Kessler, Ashenden, Connell & Dowsett, 1982; Renold, 2001). Hegemonic masculinity is predicated on the male norms, which Sexton explained "stress values such as courage, inner direction, certain forms of aggression, autonomy, mastery, technological skill, group solidarity, adventure and considerable amounts of toughness in mind and body" (as cited in Donaldson, 1993, p. 644). Hegemonic masculinity provides the nebulous and tenuous answer to the question, "what does it mean to be a man?" The posture of hegemonic masculinity is often enacted in an attempt of self-protection. Jefferson (as cited in Connell & Messerschmidt, 2005, p. 842) explains that "boys and men choose these discursive positions that help them ward off anxiety and avoid feelings of powerlessness."

Although other masculinities exist, hegemonic masculinity is the "dominant and dominating forms of masculinity which claim the highest status and the greatest influence and authority," and which serve as "the standard-bearer of what it means to be a 'real' man or boy" (Kenway & Fitzclarence, 1997, p. 119-120). Dalley-Trim (2007) asserts that "hegemonic masculinity is the form of masculine identity frequently aspired to by many boys, and that comes to dominate classroom sites" (p. 201). On many high-performing campuses, the most salient and desirable masculinity enacted is that of the "golden boy," who is well-liked by teachers, peers, and the opposite sex; confident; he is athletic;and academically successful. Connell (1996) explains this masculinity as that enacted by "a small number of highly influential boys [who] are admired by many others who cannot reproduce their performance" (p. 209). These are the boys everyone knows on campus. The mention of these boys' names will evoke warm gushing about their positive qualities. They are popular and well known. As Connell points out, "hegemonic masculinity is highly visible" (p. 209).

A type of hegemonic masculinity which has been put forth in the discourse on underachievement in studies of boys' anti-school identities is the concept of "laddishness" (Connell, 1989; Gilbert & Gilbert, 1998; Jackson, 2002; Kessler, Ashenden, Connell & Dowsett, 1985; Mac an Ghaill, 1994; Willis, 1997). Laddishness is a generally disruptive masculinity enacted in resistance to the perceived "feminine" nature of schoolwork. "Central to 'laddishness' is the 'uncool to work' pupil discourse, which means to be cool and popular students must generally avoid overt academic work" (Jackson, 2006, p. xix). It is characterized as disruptive, homophobic, and sexist, the type of behavior that is at times written off or excused with a "boys will be boys" remark, but within the classroom can be very unproductive. Laddishness is often considered the dominant masculinity enacted in present classrooms, and it requires boys to renounce anything "feminine" — which includes schoolwork — and to place their social status with peers above all else in importance. A fear of being seen as "homosexual" — in their view, synonymous with feminine — often pervades the laddish culture in classrooms (Jackson, 2003). Although laddishness is

often discussed in conjunction with underachievement, it's important to recognize that the terms are not synonymous (Jackson, 2006). Often conflated with hegemonic masculinity, it is theorized that laddishness is an enactment of a form or type of hegemonic masculinity; however, neither is laddishness synonymous with hegemonic masculinity (Jackson, 2006).

MULTIPLE STUDENT STYLES

Lyng (2009) elucidates the multiple student styles available to students on a campus. Her yearlong study in two Norwegian junior highs found that the student styles available to boys on campus included "macho boy, golden boy, geek, and nerd" (p. 464). These presentations of self (Goffman, 1959) were identities enacted by students in part in response to the social dynamics of their campus. As Reicher (2004) explains, "we can define ourselves either in terms of what makes us unique compared to other individuals (personal identity) or in terms of our membership in social groups (social identity)" (p. 928). At school, students choose from "pre-existing, symbolic categories" for their "public identities that are recognized and accepted by peers" (Barber, Eccles & Stone, 2001, p. 431). Thus, our own self-concept and our public self or social role are contingent upon the available social identities, from which we choose an identity or we construct an "othered" identity in contrast to them (Brown, Mory & Kinney, 1994).

METHODS

Collective case studies permitted the researcher to develop a full picture of the quiet, non-disruptive underperformer, about whom we know little. This qualitative collective case study included data collected through a combination of interviews, observation, and data review. This paper utilizes only part of a much larger several year study looking at what attitudes, values, and beliefs may exist to hinder students' achievement in one setting and promote it in another. To capture data for the larger study, interviews and focus groups with students, teachers, administrators, and superintendents of multiple districts, surveys, observation, and document review were employed. One hundred teachers, twenty central office personnel, fifty campus administrators, and fifteen superintendents were interviewed either individually or in focus groups for the larger project. Interview questions for the students included in this paper were developed to more fully investigate the phenomenon of underachievement among boys on high-performing campuses.

DATA COLLECTION

A combination of participant observation, individual interviews, and data review were used to gather data for the study discussed here. Participant observation involves researchers methodically experiencing and intentionally recording

in detail the many facets of a situation while continuously analyzing their observations for both meaning and personal assumptions. The observation data used in this study were collected in academic settings. The students were observed in academic classes, elective classes, the cafeteria, the school library, the gymnasium, and the school corridors as students passed between classes over the course of an academic school year. The researcher was also privy to the teachers' lounge, and teacher and administrator discussions regarding academic concerns. Ninety-minute semi-structured interviews designed to investigate the manner in which the young men interpreted aspects of their school experience were conducted with twenty sophomore and junior year high schools males, who were regarded by their teachers as underperforming. Interviewing the participants enabled a picture of the young men's perceptions to emerge. Each boys' transcripts were identified by a self-selected pseudonym.

DATA ANALYSIS AND INTERPRETATION

The researcher employed the constant comparative method to code and analyze the data (Glaser & Strauss, 2009). Once the data is collected, the key points within the data were marked via a *code*, which is then used to group similar concepts and ideas. The researcher "simultaneously codes and analyses data in order to develop concepts" (Taylor & Bogdan, 1984, p. 126). The concepts themselves are refined and their relationships explored through the process of constantly contrasting incidents within the data. Out of the gathered codes, the researcher then forms categories or themes. From those categories, the researcher can then form a reverse-engineered explanation regarding what is in fact happening. Thus, in lieu of beginning with a theory regarding how the boys would perceive their academic experiences or what was motivating their choice to disengage, the researcher let the data itself shape the theory of the boys' behavior.

Using the constant comparative method, the researcher began analyzing the data through categorizing and coding, which recognizes common units of meaning within the data across cases and arranges them into groupings which exemplify the experiences of the study participants as a whole. This was done by hand, in lieu of utilizing any software to run analysis. Transcript documents were reviewed line by line and allocated to develop themes and patterns that gave shape to the data. In qualitative research, it is critical to let the participants' words guide the theory creation when coding. As Maykut and Morehouse (1994) explained, "words are the way more people come to understand their situations; we create our world with words; we explain ourselves with words; we defend and hide ourselves with words" (p. 18). Coding and categorizing take on even more importance because the entire mission of the researcher is "to find patterns within those words and to present those patterns for others to inspect while at the same time staying as close to the construction of the world as the participants originally experienced it" (p. 18). In qualitative data

collection, data collected from interview transcripts are not arranged in line with pre-defined categories. Instead, the researcher derives her categories, and the relationships between those categories, and their meaning from the data itself. Salient categories become obvious during the coding and collection process. This enables the integration of perspectives into a theoretical model explaining the social process the researcher is investigating.

SETTING

The study took place at Essex High School,[2] a four-year high school located on the outskirts of a suburban area in the southwestern United States. Nestled among an enclave of half a million dollar homes, Essex is the newest high school in the district. Most of the citizens within the boundaries of Essex are affluent, long-time residents of the community with deep ties to the traditions of the area. Essex is a campus of approximately 900 students. The student body is largely White, and come from middle class to affluent homes. Roughly 18% of the student population is Hispanic; less than 10% of the entire student body is African American. Fifteen percent of the students are officially identified as economically disadvantaged by the qualifications for free and reduced lunch. There is not a significant presence of students officially identified as students who speak a language other than English in their homes. The campus currently serves freshman, sophomore, junior, and senior year students.

The campus is highly rated in its state rating system. The students embrace this mark of excellence and academic achievement is highly valued among the students. Everything in the state-of-the-art building is still pristine. From the outside, a passerby might mistake the building for an office building for a small tech company. Visitors to the building always comment on the condition and quality materials used to construct the school.

SELECTION OF THE PARTICIPANTS

Students were identified with the input of campus teachers based on the following criteria: (1) the student had been identified as a high performer based upon consistently scoring in the top tenth percentile on state standardized tests; (2) the student consistently showed failing grades at progress report time only to barely pass two or more classes by the end of the marking period; and (3) the student consistently failed to turn in work despite numerous attempts on the part of the teacher and the student's parents to get the student to complete assignments. All of the participants were White, male, from two-parent, high income homes, whose parents were not only college educated themselves, but held professional, white-collar positions.

The initial portion of the interview was used to develop a rapport with the participants and put them at ease. The interview was used to gain a better understanding of the participant's view of their underachievement as well as

what they viewed as the causes for it. The interview also focused on the climate within the campus and classroom and its possible contribution to the behavior. The influence of the interviewees' peers was explored during the interview as well as what possible changes the interviewee would like to see in his learning environment. The interviews helped the researcher gain greater insight into the complexities of the conditions that lead to underachieving behaviors.

PARTICIPANTS

All participants in this study chose their own pseudonyms. Cody, Adrian, Phillip, Owen, Calvin, Sam, Dennis, Hayden, Dalton, and Ryan were all sophomores the year of the study. Skylar, Alex, Cooper, Dallas, Finn, Stuart, James, Cameron, Liam, and Jake were all juniors the year of the study.

RESULTS

The student styles Lyng (2009) identified were visible among boys on this campus. The golden boy is "polite, reasonable and quite serious," enjoys "high status," is "quite clever in school," and "worries about grades" (p. 468). In fact, this was the dominant masculinity on campus. The golden boy was the standard for boys in terms of what everyone aspired to be. In this study, the Beta Boys named by name the students who were, as Cody explained, "the gods of our school." The geek was also an obvious identity: "calm, nice, pleasant, friendly" and "keeps up in school" (p. 469). This identity, too, was referenced by the Beta Boys. Skylar explained, "I'm not one of the geeks, one of the next Bill Gates." The identity of "macho boy" was only present in a few boys in each grade, who were barely tolerated by students and teachers. The macho boy has a "tendency to take center stage when he enters a scene" and is disinterested in school (p. 470). However, on Essex's campus, the macho boys were not underachieving by choice. These were the boys whose names were tossed about in teachers' meetings when discussing potential failing students on state standardized tests. Often these boys were tapped to be included in special tutoring and remedial services. Thus, their dismal educational performance was assumed to be the result of being behind academically. These boys didn't warrant mention by the Beta Boys. "The nerd," which was a unisexual identity in Lyng's study, is present and unisexual on Essex's campus as well. The nerd is an "academic" and not very athletic. Unlike the nerds in Lyng's study who were "often alone" and "often had no complete membership in a friendship group," (p. 471) the nerds on Essex's campus were plentiful and formed their own, distinct group. Although friendly with the golden boys and girls, they differed from this group by their absence in athletic endeavors. The Beta Boys sometimes conflated nerds with geeks, but sometimes referenced them. Phillip made mention of this identity, "I don't stay with one group of friends like them" in reference to some students he had named by name.

Alongside these identities was a competing identity, salient in the underperformers considered in this study. Rather than displaying the "laddishness" of disruptive, sexist, and homophobic behavior prominent in educational literature on underachievement, these "Beta Boys" were quiet, unassuming, and submissive to the teacher in the classroom. There were no reported incidents of Beta Boys accosting or bullying other students, nor were they to be found cat-calling their female peers. In fact, it would be easy to completely overlook these boys in the classroom. When the assignments were given out, he can be seen getting out paper and pen and beginning work. Indeed, Alex remarked, "there are times I have the work finished in my backpack, but I cannot bring myself to turn it in on principle." There were no overt behaviors of resistance or opposition to the teacher or the mission of the course. Even Alex's admission was not overt. His teachers assumed he had simply not completed the work. Beta Boys' names were not on the lips of their teachers or the administrators in the building as ill-behaved, troublesome, or rowdy students. Their school existence was wholly unremarkable with one single exception: they often simply did not turn in assignments at all. During the interviews, five themes emerged among the interview responses of the Beta Boys.

PRIMA DONNA SYNDROME

Throughout the interviews, all Beta Boys expressed a complete disinterest in doing tasks educators would consider "practice." To use a sports analogy, the boys were much like the players on the team who want to skip practice, then show up and play in the games. These boys resented being asked to do in-class assignments and homework. They would complete projects — as long as they didn't require creativity and art supplies — and tests, but purposefully not complete, or not turn in other work. Contrary to the "laddishness" seen in previous studies, there was no animosity or aggression in their statements. In fact, many interviewees fought back tears or wiped them away as we talked. All of the participants appeared to be exercising tremendous restraint to control and conceal their emotions throughout the interviews. Adrian started crying as he explained, "People give busy work, and I won't do it. And I fail." Ryan remarked, "I slack on doing my work because I know the material, so it's too boring to complete." Dallas stated, "All of this 'do you know this?' work is stupid. I don't need to waste my time." Finn summed it up: "I think homework is a waste of time. It's like regurgitating what you already learned. But you already know you learned it." Connell and Messerschmidt (2005) point out that "boys and men choose these discursive positions that help them ward off anxiety and avoid feelings of powerlessness" (p. 842). For these boys, making a statement by demonstrating their intellect by showing they didn't *need* to do the same level of "practice" work as the other students was particularly important.

LOOKING FOR THE "IN YOUR FACE" OPPORTUNITY

The Beta Boys all spoke of savoring the opportunity to "show" the people around them how smart they really were by outscoring everyone on tests. The chance to come "out of nowhere" and trounce everyone else academically was obviously a delicious idea to the boys. Dallas explained his strategy, "I do well on the standardized tests, just to show I know what I'm doing." Adrian smiled as he related, "Even if they think I'm stupid, who cares? I get the same grades on the tests or higher than all the kids who do all the work. And they're always shocked when I outdo them on the test." Owen said, "I don't do the work and then test will come and I'll get a 100. And no one else really got a 100 on them. So, yeah. Then people are shocked." Sometimes this idea went beyond the academic world. Finn said he was considering being a doctor. "Then my friends would see my name plate and I'd be like, 'yeah, I did that!'"

SEEKING HERCULEAN TASKS

The boys' perception of work they believed lacked relevance, necessity, and importance was that it was somehow insulting and wounding to their sense of self. The slight incurred by enduring coursework and assignments they saw as beneath them was only abated through the resistance of not turning them in and still passing the course because of their performance on tests. Interestingly, all of the boys spoke of desiring work that was *harder* than what was currently being asked of them. The researcher found it curious that students who were not completing their current workload would report that the real problem was that they needed more challenging work. But Beta Boys reported that they prefer work that is a "challenge." Cooper said he preferred work that "takes a certain level of thinking." Finn said, "Put all that [busy work] away and give me hard-hard stuff and see what I can do." Sam echoed the sentiment: "If something's really hard, I will try to beat it." Stuart added, "If it's really hard, I want to do it. But it's easy, I throw it away." Liam remarked, "Make it a little harder. When it's challenging, I perform closer to my potential." Sometimes their own philosophy seemed to confound them. Dallas said he often had the work in question *finished* in his hand, but could not bring himself to turn it in. When asked why, he explained that the work itself "seemed so pointless" to him.

In this same vein, over half of the boys spoke openly about their derision for the projects that were "too easy to bother with" or "insulting" to their abilities, which they also regarded as assignments that "integrate[d] art" into the coursework. Owen explained, "Contrived and inorganic projects or assignments really bug me. Those things shouldn't be for a grade." Adrian echoed this sentiment with his pronouncement that "glitter is the herpes of craft equipment." Calvin remarked, "Stupid artsy stuff... that is worthless. I won't do it." Hayden explained that "This shouldn't be all crazy and let's

arrange stuff all creative. It's like everyone is too focused on trying to make everything fun! This isn't supposed to be fun. It should be hard."

EXPERTS ON THE "REAL WORLD"

Another common theme among the Beta Boys was the idea that only work that was "relevant" to their future lives warranted completion. The boys themselves seemed to believe that they could accurately discern which work was useful to them. In fact, they shared the belief that most of their teachers had no real concept of which types of work and information were valuable in the "real world." Cameron complained, "We're learning how lawyers work, and I'm not even training to be a lawyer in real life, so how is this going to help me?" Adrian spoke of his favorite teacher (English) but had one big issue in her class: an assignment requiring him to identify the theme of the work. "When will I have to write the theme of the book if I want to be a pilot?" Hayden decried his history class, "Who cares what general fought where? No one is going to ask me that when I grow up." And Jake explained, "I'm moving out of [the state] after I graduate. Why would I care about the history of here? That's not going to matter in my job." Dalton summed it up: "I hate it here. The classes suck. I don't feel like I'm getting much that will help me in the future."

All of the boys talked about evaluating their classes and their assignments on whether or not they would be useful in the "real world." The idea that they themselves were the arbiters of a task's usefulness and transferability was above question. At no point did any Beta Boy consider the idea that since their teachers had more education and followed the curriculum set by the state education agency, perhaps they might have a better grasp on the skills needed by students to be successful. In their minds, the only judge of the future utilitarian value of the work was the Beta Boys themselves.

"I'M NOT GETTING THE KWAN"

A big complaint of the Beta Boys was not getting the recognition and respect they felt due from their peers; they also believed that lack of peer status impacted how some of their teachers regarded them. Adrian fought tears as he revealed that a teacher saw him at last year's awards ceremony and commented, "'I didn't think I'd see you here.' She didn't think I was smart enough to be getting an award." Finn recounted with irritation an incident in a science class where the teacher lent a popular student a pencil, but refused to lend his friend — a less popular student — the same item. Ryan explained, "It's like the popular boys are popular with the students *and* the teachers. And everyone treats them better." Hayden reiterated this point: "Some teachers think liking the kids all the other kids like will make them popular too. And sometimes it works!" Owen sighed as he explained, "It's hard to get motivated in a class with popular boys. If I raise my hand and they do too, the teacher is probably

going to call on the kid they like." James looked down as he related a daily ritual in his math class, "We walk into class together and the teacher says, 'Hey, [popular student]!' and I'm right there too and she says nothing to me."

In conjunction with the perceived preference for golden boys, Beta Boys also expressed upset that their teachers made no effort to find out about their lives. Owen reported an ongoing incidence of bullying, about which he had not told anyone at the school, because he perceived that they had shown no interest in him personally. He explained, "If they asked me what was going on, I'd tell them." When the researcher asked why he didn't independently share the salient challenges in his life with his teachers or parents, he said, "I don't want to seem whiny." Dennis echoed this: "I just try to hold back whatever I'm feeling." Finn summed it up: "I'm not the person who will tell you about my life, but if you ask me questions, I will tell you." When asked whether they shared their hurt feelings — or any feelings — with their peers, each Beta Boy looked at the researcher in utter horror. Skylar explained it best: "We don't have that kind of relationship. We're not girls. We don't talk about our feelings. I wouldn't even know *how* to go about that." Although the boys openly shunned "busy work," judged much of what was taught as useless, and lost respect for teachers they believed preferred popular boys over others', their teachers' perceived lack of interest in their lives also served as an insult to them.

DISCUSSION

Based on the data, it appears that the boys experienced a sense of weakness and apprehension of not being in control of their academic lives. They described that being forced to sit through courses with teachers the boys felt didn't understand, value, or respect them only then to be expected to produce work they patently found ridiculous to complete was more than they could bear. Each communicated that this sense of outrage combined with not being able to verbalize it was then coupled with the sense of powerlessness and angst; the boys reported that this was more than they could process. For these boys, the only behavior they could summon to combat it was to make a power play of their own. Refusing to participate is a covert power move. It is non-threatening, but still an exertion of power. Like the toddler who refuses to eat and cannot be forced to do so by his parents, boys who refuse to engage during class and turn in their work are contesting the authority of those in charge of them. Yet the behavior is not punishable. You can't send a boy to office for not being enthusiastic, or for not completing the work that he does in fact "work on" during class time. It is a shrewd exercise of power. As Schrock and Schwalbe (2009) explain, sometimes marginalized men "instead of trying to control others… try to show that they cannot be controlled" (p. 285). That is the essence of what these boys are doing. This alternate masculinity performance is enacted by males who feel unable to reach the ideal level of

hegemonic masculinity performance. Their behavior diverges from their female peers because of the burden of masculinity, which requires the acceptance, approval, and admiration of one's male peers.

While this student style or identity is not the dominant masculinity on their campus, the Beta Boys are enacting an alternate masculinity. As Connell (as cited in Schippers 2007) explains, "masculinity is a social position, a set of practices" (p. 86). Indeed, that's precisely what these boys are doing: drawing the boundaries of a social position in which they are not the receiver of rules and orders. They participate or not as they please. And their behavior causes their parents and their teachers to become attuned to their needs, wants, and desires. The adults in their lives cajole, bribe, and plead with them to get into the game and participate. This enactment of masculinity means they become the power-wielder by refusing to be controlled. These behaviors would fall into the category of those masculinity practices which fall into "how they elicit deference from others" (Schrock & Schwalbe, 2009, p. 277). Carrigan, Connell & Lee (as cited in Schrock & Swalbe, 2009) remind of another important point of how masculinity is being exercised by these boys: "masculinity [is] about power relations *among* [emphasis added] men, not only between women and men" (p. 278). Most of the boys mentioned that they felt pity for the "sheep" who didn't manage their academic lives as they did, and instead obeyed every mandate and completed every assignment as they chased after their As. By circumventing the system and shirking work, these boys are — perhaps privately, in their own minds — asserting their own dominance and superiority over the other boys around them. This is of particular interest considering these boys were not only not campus sports heroes, most did not play sports at all. The key to masculine status in this particular K-12 setting where this study took place was to excel at sports. At minimum, one must participate. In light of this fact, Schrock and Schwalbe's assertion that "the process of learning how to signify a masculine self in situationally appropriate ways continues throughout life" (p. 283) takes on more relevance. In a situation where a boy is marginalized through his inability to perform masculinity in the most culturally accepted way, he may choose more covert and passive assertions of signifying his masculine identity.

Hegemonic masculinity — and the multiple masculinities men enact both in response to, and in lieu, of hegemonic masculinity — not only exist to support, perpetuate and legitimize male dominance over women, but to buttress the superiority of certain men over other men. However, like bell hooks pointed out in *Will to Change*, men are suffering under the weight of patriarchy just as women are. Yes, their suffering is different, and they do enjoy much entitlement and privilege as a result of its norms and standards. Unlike the suppositions of many researchers, it seems obvious from the interviews in this study that the Beta Boys are not responding to any systemic or curricular policy, and by their own admission, their behavioral response had nothing to do with how their

female peers were treated. To the researcher's surprise, the success of female students on their campus didn't warrant mention. Although they were asked specifically about both the structural practices and policies of their campus and their female peers' treatment, the interviewees dismissed those lines of inquiry entirely. In fact, when asked what their teachers, peers, or principals could do to impact their willingness to perform to their potential, the Beta Boys consistently came up empty. Not one of them felt that their unwillingness to engage would be impacted by a shift in campus rules or policies. Their only suggestions were harder work and a curriculum tailored to the boy himself — that is, work that was directly relevant to the boy's chosen future profession.

But like Connell (2005) points out, the life of the male laboring under the weight of masculinity is not a happy one. The constraints of masculinity are like the beast whose appetite cannot be quenched. Men are constantly asking themselves and one another to reify their masculinity, to adjust to changing climates, and to bend themselves to other men who are a more ideal model of hegemonic masculinity. While femininity exists in response and in contrast to hegemonic masculinity as well as multiple masculinities and exerts considerable restriction and limitations over women, men are by no means getting off scot-free themselves. The patriarchal system leaves no individual untouched and content. However, the Beta Boys demonstrate that when constructing and envisioning their school identity, the treatment of female students was not a factor. They considered only other male peers when positioning themselves and constructing an identity. As Hodgetts (2008) points out, "to be a boy is to 'succeed without trying'" (p. 476). The Beta Boys' stated desire to demonstrate their intelligence through high test scores without putting in the prerequisite work required of others is a display of their ease with which they navigate academics. The Beta Boys communicate their superiority over their peers through this practice of underachievement. By rejecting work their teachers value as "pointless" and not useful in the "real world," they likewise convey their superiority over their teachers.

CONCLUSION

Unable to enact the salient masculinity of their campus through athletic performance, the Beta Boys eschew attempts at assertive hegemonic masculinity or disruptive "laddish" behaviors, and opt instead for a more stoic approach to affirming their masculinity in the face of what they perceive to be social slights. In their minds, the most powerful move of all is to refuse to engage, and they exercise this play on a routine basis. Saving their best performance for high-stakes standardized tests and tests in their courses weighted high enough to ensure a passing grade permits them a "shock and awe" factor among their peers. This quiet, unassuming, and not disruptive alternative masculine identity proved maddening to their teachers, who were at a loss to motivate the boys to alter their academic behaviors.

The Beta Boys' emotionality during the interviews as well as their admissions that they very much desired a more personal interaction with their teachers was of particular interest to the researcher. The gendered nature of this refusal to engage academically has been confounding to many educators and researchers. Given the particularly emotional nature of the Beta Boys during the interviews themselves and their obvious and open derision and scorn for those teachers they felt *could* have engaged them on a personal level and asked about their emotional lives, but did not do so out of what the boys perceived as a greater interest in the "golden boys," it seems possible that the gendered aspect may lie in the lack of socially approved emotional outlets for boys in our schools. The Beta Boys were clearly sitting on an enormous amount of rage, pain, and hurt, and yet felt they had no one to whom they could confess these emotions. Without a sympathetic ear, they seemed unable to work through these negative, confusing emotions, which they professed having harbored for years. In fact, in every Beta Boys' story, the onset of their opting out behaviors was tied to a moment of outrage and feeling disrespected in the classroom.

Given the emotional basis and foundation underlying Beta Boys' conscious decisions to disengage from performing at potential, the gendered nature of underachievement in many Western societies' classrooms seems obvious. Girls who feel hurt, insulted, or affronted at school can turn to their parents, their teachers, or their friends with their feelings. This allows them to work through their pain, put it aside, and continue on with their academic behaviors unscathed. Because boys lack the outlet to process their emotions, they simply carry them about, nursing their hurt as it consumes more and more of their mental and psychological energy. Perceiving themselves as unable to volunteer these emotions without being prompted, they are trapped in a prison of the burden of masculinity, which says men are to be stoic and detached. It is this mandate of masculinity underscoring the Beta Boys' underachievement.

The findings of this study suggest that one area for future research is the performance of underachievers by choice in college. I hypothesize that of the reasons why some boys don't do as well in college — based on national graduation rates – is because they are no longer able to "prove" themselves through blowing away traditional middle and high school types of exams or standardized tests. When faced with exams that require analytic skills based on homework and practice they should have been doing during the semester, they struggle. All of the Beta Boys spoke candidly about the one or two teachers in their lives who they perceived to be "different" in that the teacher was genuinely interested in their lives and engaged them academically. However, each Beta Boy revealed that simply putting aside their opting-out practices — even in that one class — proved very difficult for them as they had become so accustomed to their systematic rejection of routine assignments and tasks. This leads the researcher to wonder if once they arrive on college campuses

these practices are so ingrained they find it difficult to transition into a work ethic that would serve them in the higher education setting.

Solving the problem of the underachievement of Beta Boys requires greater involvement by teachers in the lives of their students. Put simply, teachers should, to whatever extent practicable, make an attempt to be engaged with every student — especially those who seem to be disengaged — because this could be the key to unlocking their patterns of underperformance. One single teacher alone cannot shift a Beta Boy's paradigm. Rather, he needs the efforts of all of his teachers if he is going to be able to set aside these patterns of behavior. However, each Beta Boy spoke favorably and tenderly about the one or two teachers who were engaged with them, and certainly tried harder in their classes. The broader implication of this data point is that while teachers need to show engagement and caring to all of their students, this is especially important when working with these quiet underperformers. Showing specific interest, concern, and attention was reported by these Beta Boys to be a determining factor in their decision to engage and participate.

NOTES

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2. "Essex High School" is a pseudonym.

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THE ROAD TO CULTURALLY RELEVANT PEDAGOGY: EXPATRIATE TEACHERS' PEDAGOGICAL PRACTICES IN THE CULTURAL CONTEXT OF SAUDI ARABIAN HIGHER EDUCATION

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ABSTRACT. This case study explored the need for culturally relevant pedagogy (CRP) in Saudi Arabian higher education, especially when students have a cultural background that differs from that of their instructor. The study documented how expatriate teachers structured their pedagogical practices in the Saudi Arabian context. It examined how these university teachers attempted to proactively accommodate students' needs, prior experiences and performance, and how they promoted academic progress while teaching in a different culture. Six themes were revealed: (1) the challenges of constructivism in the Saudi Arabian context; (2) linking pedagogy to the lives of Saudi students; (3) alternating and adjusting teaching to address student needs; (4) connecting with students'; (5) discrepancies in teachers' beliefs; and (6) teachers' assumptions and expectations about knowledge. It is argued that CRP offers opportunities for better learning experiences for Saudi students. Through CRP, learning can be made more meaningful and can help in the development of a positive student identity. Some pedagogical strategies are offered to help teachers implement CRP.

VERS UNE PÉDAGOGIE CULTURELLEMENT ADAPTÉE : LES PRATIQUES PÉDAGOGIQUES D'ENSEIGNANTS EXPATRIÉS ET À L'ENSEIGNEMENT SUPÉRIEUR DANS LE CONTEXTE CULTUREL DE L'ARABIE SAOUDITE

RÉSUMÉ. Cet article examine les besoins en termes de pédagogie culturellement adaptée au niveau de l'enseignement supérieur en Arabie Saoudite et cible particulièrement les étudiants possédant un profil culturel différent de celui de leur enseignant. Cette étude présente comment les enseignants expatriés déploient leurs pratiques pédagogiques en Arabie Saoudite. Celle-ci analyse de quelle manière proactive les enseignants essaient d'accommoder les besoins, les expériences et les réalisations préalables des étudiants et comment ils encouragent les progrès scolaires tout en enseignant dans une culture différente. Six thèmes sont explorés: (1) relever les défis du constructivisme dans le contexte de l'Arabie Saoudite; (2) arrimer la pédagogie au vécu des étudiants saoudiens; (3) effectuer une alternance ou un ajustement de l'enseignement pour rencontrer les besoins des étudiants; (4) établir des liens avec les étudiants; (5) les divergences entre les croyances des enseignants et (6) les hypothèses et attentes des enseignants relativement au savoir. Dans cet article, l'auteur avance que la pédagogie culturellement adaptée offre de meilleures opportunités d'apprentissages aux

étudiants saoudiens. Grâce à la pédagogie culturellement adaptée, l'apprentissage peut devenir plus pertinent et faciliter le développement d'une identité culturelle positive chez l'étudiant. Quelques pistes pédagogiques sont présentées pour aider les enseignants à utiliser ce type de pédagogie.

The circulation of teachers around the globe, the internationalization of programs, and the growth in opportunities for students and teachers who are willing to travel abroad to learn and teach raise important questions about culture and pedagogy. This study focused on the perspectives of university teachers working outside of their native culture and on how the associated cultural differences affected their pedagogical choices and the learning of their students. The main question of this study is as follows: How do diverse teacher populations engage in culturally relevant pedagogy (CRP) in Saudi Arabian higher education? The participants in this study have taught or are currently teaching in a culture that differs from their own.

Saudi Arabia is moving toward a revitalized vision based on a *knowledge-based* economy — which emphasizes human intelligence — and away from a *resource-based* economy — which emphasizes oil. This transition is increasing the demands on the higher education sector. Saudi Arabian graduates need to be prepared to address unforeseen problems in a knowledge-based economy with unique, creative solutions rather than with traditional solutions premised on the old resource-extraction perspective.

The article first provides an overview of the Saudi Arabian context, followed by a discussion of the culture of learning in Saudi Arabia and of how this culture plays out in higher education. This article focuses on the non-Saudi expatriate faculty in private higher-education institutions and on their use of CRP. The following section explains CRP and the framework for teaching from it in order to explore the Saudi context for foreign teachers and native students. The possibilities and challenges associated with CRP are revealed through a case study, and recommendations are offered for the successful implementation of CRP in the Saudi Arabian context.

BACKGROUND AND CONTEXT

The Saudi Arabian context: Demographics, culture, and education

The Kingdom of Saudi Arabia (KSA) is a historic geographical area in the Middle East that extends over 2,250 million km^2, making it the second largest country by area in the Arab world and the largest in the region. Saudi Arabia has the world's largest oil reserves and one of its highest birth rates. It is sparsely populated, with most of its population of 27 million (including 8 million non-native guest workers or labourers comprising 33% of the

population) being concentrated in large cities (Al-Seghayer, 2011). Almost all native Saudis[1] are Muslim, and nearly 98% are Arab (Central Department of Statistics and Information, 2010). They are bound together by a high degree of cultural homogeneity as reflected in their common mother tongue (Arabic), strong family tribal relationships, and adherence to Islam (Al-Seghayer, 2011). In Islam, education is highly regarded for both males and females.

Public education became mandatory from ages 6 to 15 starting in the 1960s. The public schools were open to all students. Schools are segregated by gender, with males and females attending separate schools from Grade 1. Public universities for men and women are found in most major (and in some small) cities, with universities offering specializations in arts, humanities, sciences, and professional programs. The KSA government aims to provide free education to all (AlMunajjed, 2009). The National Commission for Academic Accreditation and Assessment (NCAAA), established in 2006, is responsible for the accreditation of higher-education institutions beyond the secondary level, with the exception of military education. The NCAAA seeks to upgrade the quality of private and public higher education to ensure clarity and transparency, and to provide codified standards for academic performance (Ministry of Higher Education, 2011a, 2012).

Due to the increasing birth rate in Saudi Arabia and the influx of expatriates and their families, the number of high-school graduates has exceeded the admission capacity of public universities. The capacity limitations of public universities have encouraged exceptional growth in the number of private institutions. There are now eight private universities and more than 15 private colleges and other higher-education institutions for every million people (Ministry of Higher Education, 2011b). These institutions are not free, but high-school students with a GPA of 3.75 or above are eligible for government scholarships. Many private and a few public universities aspire to offer courses strictly in English, and this is resulting in high demand for native English teachers to teach English courses and specific subjects in English (e.g., business, computer sciences, and engineering). Many higher-education institutions believe that there is greater prestige associated with hiring native English speakers to teach such courses. This overall increase in demand for these teachers has in turn led to an influx of expatriate teachers from Australia, Canada, the US, the UK, and South Africa. Consequently, there are more faculty members who do not share their students' culture (i.e., religion and language) than those who do (AlKhazim, personal communication, January, 31, 2012). The demand for high-quality, English-speaking teachers and the need to internationalize the curriculum have been partially addressed by offering scholarships to Saudi students for studies in English-speaking countries. These scholarships are offered with the expectation that the individuals will return with international ideas that will help achieve the national educational goals and make progress towards building a knowledge-based economy.

The culture of learning in Saudi Arabia

In general, the Saudi education system manifests many aspects of the banking system of education (see Freire, 1970). Rather than engaging in dialogue with students, professors tend to impose information that may be irrelevant to students' lives and experiences. Saudi commentators have noted that the current education system is based on the transmission of uncontested knowledge from professors to students, depends heavily on rote learning, and generally fails to impart critical — and analytical — thinking skills (Al Lily, 2011; AlHashr, 2007; AlKhazim, 2003; AlMezani, 2010; AlQhatani, 2006; Al-Seghayer, 2011). This pedagogical approach entails two major issues that contribute to the passivity of learners, an issue that must be addressed if Saudi citizens are to critically engage in creating a knowledge-based economy:

- Students' overdependence and overreliance on authority — the teacher in this case — to solve problems and provide ready answers; and
- The instilling in students the inability to question the teacher's answers.

Critical thinking — that is, reflective and independent thinking based on problem solving to determine what to believe or do — is discouraged in schools. Saudi students learn from a very young age that all knowledge is fixed as "truth [constitutes] a static entity that is context and value free" (Ghosh & Abdi, 2004, p. 37). What is taught in school or university cannot be questioned, an assumption that runs contrary to the needs of a modern knowledge-based economy. Indeed, the modern university was founded "as *the site of critique*. As Fichte put it, the University exists not to teach information but to *inculcate the exercise of critical judgment* [emphasis added]" (Readings, 1996, p. 6).

The author's experiences of working in two private higher-education institutions in Saudi Arabia for 4 years have revealed that these universities have begun to implement programs that challenge the traditional educational status quo. Students are required to attend all classes and failure to comply results in a warning letter that they will be expelled from a course after missing four classes. They are also asked to participate in their learning, to argue, and to debate, in addition to giving attention to memorization and testing. However, both private and public universities have yet to develop fully as sites of critique. Those who promote progress and reform believe that higher education is lagging behind because it still follows an instrumental, teacher-focused pedagogy. They are motivated to improve higher education (access, achievement and global competitiveness), and to that end they advocate that critical thinking be embedded in every aspect of students' programs. Such development is impeded by many administrators' preference for maintaining the top-down status quo. Those who are striving to maintain the status quo are likely to judge a critical approach to teaching, program design or policies as inappropriate, thus jeopardizing those who are promoting progress or even a moderate revision of old ways and traditional thinking (AlMunajjed, 2009). This

extends to the role of women in the new knowledge-based economy. Women generally have limited access to post-secondary education. Policies regarding access and opportunity are based on a strictly conservative interpretation of the Islamic faith and cultural practices that seeks to define the role of women. Improved equality of access and opportunity will help to expand the impact of universities in terms of building a knowledge-based economy.

Many expatriate teachers in private universities have become reform-oriented leaders in higher education. While some critique these reforms as an empty gesture toward progress (AlKhazim, 2003), I believe that these efforts are likely to be the next best step toward modernizing higher education.

Higher education in Saudi Arabia and the use of Western curricula and professors

Saudi Arabia's post-secondary institutions are aspiring toward international accreditation from agencies in North America and Europe that would allow more university graduates to gain acceptance in world-class universities (e.g., Columbia, Harvard, Oxford, etc.) for graduate studies and professional programs in business and medicine. The drive of the newly created private higher-education institutions toward national and international prominence clearly manifests itself in their importation of Western curricula and professors. Most, if not all, private institutions adopt curricula from the West with only a few adaptations.

Many of these imported "packaged" curricula — which include textbooks and teacher resources — overlook the contexts, knowledge, skills and needs that students bring to university and that must form one of the foundations for post-secondary education in a knowledge-based economy. Private institutions have overlooked the suitability of textbooks, and to scrutinize the hiring of teachers to ensure that they are sensitive to the Saudi Arabian culture and have a willingness to accommodate the students' cultures. Mohrman (2005) suggests that such imported curricula have made Saudi Arabian private higher education more "imitative than creative" (p. 23). Some educators counter this idea by claiming that such changes can beneficially widen students' horizons (Courchene, 1997; Thanasoulas, 2001).

Imported curricula are much less common in the public universities because curriculum committees are more likely to be chaired by and composed of Saudi faculty than expatriates. In these institutions, more care is invested into the selection of topics for students and into ensuring harmony with Saudi beliefs and values. As a result, the majority of textbooks and educational materials are culturally sensitive. The expansion of higher education has brought not only many academic programs based on Western models but also many academic staff who hold Western citizenship.

Before the emergence of private higher-education institutions, about two-thirds of university faculty and staff were foreign. Expatriates currently hold 90% of the teaching and administrative positions in private universities. The most recent report by the Saudi Ministry of Higher Education indicates that 40.2% of the faculty members at public universities are from outside Saudi Arabia (Mazzawi, 2005; Onsman, 2010). These faculty are of Western nationality (Europe, US, Canada, and Australia), and many are originally from Egypt, Iraq, Syria, Jordan, and Palestine but are now citizens of a Western country. The influx and prominence of expatriate faculty raise the issue of culturally relevant pedagogy (CRP); this poses a profound challenge to the goal of achieving a knowledge-based economy.

Culturally relevant pedagogy (CRP)

Culturally relevant pedagogy has been a part of important discourses in education for nearly two decades (Gutstein, 2007; Ladson-Billings, 1994). According to Klump and McNeir (2005),

> [CRP] recognizes, respects, and uses students' identities and backgrounds as meaningful sources for creating optimal learning environments... being [culturally relevant] is more than being respectful, emphatic, or sensitive. Accompanying actions, such as having high expectations for students and ensuring that these expectations are realized, are what make a difference. (p. 11)

CRP encompasses three teacher-student dimensions: social competence, academic success and critical consciousness (Ladson-Billings, 1995). Social competence is the ability to interact effectively with people of different cultures, which is a critical factor influencing the interpersonal dimension in effective multicultural learning environments (Moule, 2012). As Johnson (2011) emphasized,

> Academic success refers to teachers having high expectations for their students and learning is not at the expense of losing cultural identity.... Cultural competence is achieved through teachers helping students to develop positive ethnic and cultural identities.... Critical consciousness is the ability for students to identify, understand, and critique societal issues and inequities. (p. 172)

Leonard, Brooks, Barnes-Johnson, and Berry (2010) contend that for "CRP to be effective it requires teachers to carefully reflect on, and attend to, and pedagogically plan for nuances and complexities inherent in concepts such as culture" (p. 261). Teachers who embrace CRP require a certain degree of cultural competence, flexibility, and adaptability (Castagno & Brayboy, 2008). Teachers must exhibit three broad characteristics of teacher-enacted CRP: "teacher conceptions of self and others, teacher-structured social relations, and teacher conception of knowledge" (Johnson, 2011, p. 171). In the Saudi context, this refers to expatriate teacher understanding of self, the social context s/he is in and how is content and pedagogical knowledge being acquired. In saying this, Johnson defines three approaches whereby CRP teachers reflect an in-

depth appreciation of students' self and cultural identity in their approach to teaching. Mastering cultural competencies requires teachers "to master complex awarenesses and sensitivities, various bodies of knowledge, and a set of skills that, taken together, underlie effective cross-cultural teaching" (Diller & Moule, 2005, p. 5). In this regard Johnson (2011) argues that

> Teachers who espouse CRP believe that all students are capable of success, see their pedagogy as evolving, believe that they are part of the larger community, see teaching as a way to give back to the community and believe that instruction includes the mining of knowledge… encourage students to learn collaboratively with responsibility for others…. Teachers who are committed to CRP believe that culture is not static; rather it is shared, recycled, and actively constructed by the learner. (p. 12)

Castagno and Brayboy (2008) consider CRP to be "a promising strategy for improving the education and increasing the academic achievement of… students" (p. 941). The participants in the study are all expatriate university teachers (non-Saudi) immersed in the almost entirely homogenous cultural environment of all-male or all-female Saudi classrooms.

THE PRESENT STUDY

This study is based upon research relating to the role of the culture of teachers and students as well as to the context created between these cultures — that of the teachers and of the students. It attempts to document these cultural perceptions and to discuss both students' and teachers' perceptions and how to find mutual ground. The general absence of expatriate teachers' voices in the higher-education and teacher-education literature led the author to use a theoretical framework developed by Johnson (2011). Johnson conducted a middle-school inquiry, focusing on culturally relevant science and on how teachers can navigate changes in pedagogy. My study is focused on expatriate teachers' pedagogy and on the use of CRP in the Saudi Arabian context.

METHODS

Research questions

The main question of this study is as follows: How do diverse professorial teacher populations engage in culturally relevant pedagogy in Saudi Arabian higher education? This question is embedded in contemporary views of inquiry teaching and constructivist learning. Moore (2003) has indicated that

> teaching through inquiry is placing the voices of the learners at the heart of curriculum design by considering how and what students need to learn, which is the core of constructivist learning theory, and this in turn means that students construct their own learning while building on existing knowledge and experiences. (p. 33)

Teachers need to focus more on students' learning than on classroom procedures, which entails serious consideration of students' prior knowledge and their experiences, beliefs, values and aspirations. Such an approach requires insight into the students' worlds and into the use of teaching strategies that access and engage information about and from students. This pedagogical approach helps to ensure cultural relevance.

Setting

This research took place between 2006 and 2011 while I was teaching at two private institutions of higher education in Saudi Arabia. There I met and worked with many expatriate, non-Saudi teachers. Given the current thrust of Saudi Arabia towards a knowledge-based economy, given the power of culturally relevant learning, and given the predominance of non-Saudi educators, my work in this university setting inspired an interest in researching the extent to which and the ways in which these teachers embraced CRP and any potential misalignment between cultural and educational traditions on the one hand and 21st century goals on the other hand.

Research design

The case study used interviews, classroom observations, and instructional artefacts to document and explore expatriate teachers' pedagogies and the degree to which these were changed or modified as a result of teaching in the Saudi Arabian cultural context. The researcher employed various methods to document and explore possible answers to the research question, drawing on the triangulation of data sources.

A qualitative approach was chosen to address the research question as this allows for an in-depth examination of situations in which complex questions are posed. An interpretive stance best fit with the aim of gaining a "comprehensive understanding" of these teachers' use of CRP (Taleb, 2010, p. 292).

Data collection

While multiple methods of data collection were employed to produce a rich description of teachers' conceptions and practices, the primary method involved semi-structured interviews using open-ended questions. The interview responses were supported by the researcher's classroom observations, readings of teachers' documents and the teachers' self-reported practices, which were provided in the interviews. The 13 interview questions were designed to elicit information about the teachers' experiences and pedagogical practices in different contexts—see Appendix I. A particular focus was placed on the relationship between the teachers' perceptions of their students' learning cultures (i.e., their ways and methods of learning) and their own implementation of associated CRP, as well as on the extent to which any changes in perception resulted in changes in practice. The teachers were asked to reconstruct their

various teaching experiences and to situate them within the applicable cultural contexts, referring to their own experiences and how their pedagogical practices were changed or altered to fit the new context. The conversations focused on teaching methods and strategies, on any preconceptions that the teachers may have had regarding the Saudi Arabian culture, and on the teachers' views regarding the status of education in Saudi Arabia.

The validity of the interview questions was explored through consultation with a member of a prominent Faculty of Education in Saudi Arabia, a professor emerita whose research focus includes curriculum and instruction. She suggested some changes to the questions and asked in the Letter of Information and Informed Consent, which was required by the research ethics board, for clarifications on the meanings of CRP and culture. Following this, the questions were sent to Canada to two professors who confirmed that these were valid inquiries into CRP. These three peer validations strengthened the process and attested to the validity of the semi-structured interview protocol. The questions were then given to faculty members who were prospective participants to invite them to be part of the research project.

Individuals who volunteered and signed the consent form were informed of the goals and nature of the study and, depending on their availability, were interviewed either face to face or by telephone for between 1 and 2 hours. They were asked probing and elaboration questions to clarify responses where necessary. Three participants whose teaching contracts had expired and therefore had returned to their home country before they could be interviewed were sent the questions by email. They returned their responses in written form through several emails; any unclear points were clarified through telephone conversations. The face-to-face and telephone interviews were audio recorded with the consent of the participants and were transcribed into written text, which were then analyzed for themes.

Research participants

Of 67 faculty members, 7 faculty members who had been teaching in the Eastern Province of Saudi Arabia between 2006 and 2012 volunteered as participants. They were willing to share their experiences and ideas about teaching in Saudi Arabia, to be observed in their classrooms, and to provide a curriculum vitae and instructional artefacts (course outlines, plans, assignments and other assessments). Complete datasets were obtained from all seven teachers. Two qualitative research professors at two institutions who were consulted about the number of participants supported the researcher's decision to limit the case study to seven participants in similar contexts. The participants taught at two private institutions in an urban area. Their cultural backgrounds varied and were different from those of their students. Table 1 summarizes the pseudonyms given to the teachers, their highest degree, their gender, their nationality, their

years of teaching experience in higher education, the number of cultures in which they had taught, and their professional education.

TABLE 1. *Demographic profiles and backgrounds of the seven participants*

First name[a]	Highest degree/ gender	Nationality/ culture	Years of teaching	Cultures in which each had taught	Teacher training
Nadia	BA / F	U.S.	10	2	No
Haley	PhD / F	U.S.	20	4	Yes
Rick	ABD[b] / M	U.S.	20	2	Yes
Richard	BA / M	Canadian	10	3	No
Wendy	MA / F	Chinese / British	20	2	Yes
Tara	PhD / F	German	5	2	Yes
Emanuel	PhD / F	South African	20	3	No

NOTES. a. Pseudonyms assigned to participants; b. Denotes all but dissertation to complete PhD.

The participants represented a fairly diverse collection of advanced degrees (BA, MA, PhD), gender, and nationality with distinctive teaching experiences (length and setting) and professional preparation. Some participants had prior experience teaching in Arab cultures. Some participants had experience teaching Arab students in the United States, which may not be the same as teaching students in an Arab cultural setting. This subsample of 7 varied in their academic preparation and length of experience (5 to 20 years) and allowed consideration of how this range of experience influenced their CRP.

Data interpretation

The transcribed data were triangulated by cross-checking information derived from the participants' interview responses, classroom observations, instructional and professional artefacts (syllabi, assignments, assessments, curriculum vitae, publications, daybooks containing comments and reflections, email messages, etc.), as well as from the researcher's field notes and personal observations made while working at two private institutions in KSA.

Coding procedures

A reflective-responsive approach to data interpretation (Ryan & Bernard, 2000) was employed in the sense that the main research question was revisited during the preliminary process — that is, how do teachers change or modify their teaching pedagogy to one that is culturally responsive to the needs of students and the culture of learning in Saudi Arabian higher education? The CRP lens (academic success, social competence and, critical consciousness) was used primarily to guide the earlier coding of the open-ended interview responses in order to reveal tentative results that would speak directly to the experiences of teachers. Once the tentative results had been identified, the interviews, classroom observations, and instructional / professional artefacts were cross-checked to authenticate the preliminary themes and to elaborate or revise the themes. The subsequent data interpretation consisted of several iterative processes pursuant to a rigorous thematic analysis (Merriam, 2001; Guba & Lincolin, 2000). In other words, the data were interpreted after reading and re-reading the interview manuscripts in order to uncover themes and recurring themes. The resultant preliminary codes were sorted under themes (general phrases and words) which became the coding categories and subcategories.

The responses were coded in a manner similar to those in Johnson's (2011) study. *The teachers' conception of self and others* included the Saudi students' learning habits and the weaknesses of the students' education culture — their methods and ways of learning, their strengths and their suggestions for improving teachers' CRP. Evidence of *teacher-structured social relations* included building student-teacher relationships, increasing connectedness with all students, developing a community of learners, and encouraging students to learn collaboratively and with responsibility for others. The codes for *teacher conceptions of knowledge* reflected the principle that knowledge is not static but rather is shared, recycled and actively constructed by the learner and the principle that knowledge must be viewed critically instead of passively (i.e., there is no single right answer).

The preliminary themes were used to search and interpret the other information sources such as researcher observation. Supportive and non-supportive evidence from the classroom observations and from instructional / professional artefacts was used to verify or refute and revise the preliminary themes. Samples of quotes and data that were aligned with CRP were used to demonstrate the extent to which and the ways in which these teachers had changed their pedagogies. Information on all themes that arose was entered into one electronic document. As additional pertinent significant categories arose, the themes were revised and cross-checked against other data sources such as researcher observation and discussions prior to the research data collection with participants.

RESULTS

Four themes were addressed consistently across all seven participants: (1) the challenges of constructivism in the Saudi Arabian context; (2) Linking pedagogy to the lives of Saudi students; (3) Alternating and adjusting teaching to address student needs, (4) connecting with students', (5). Discrepancies in teachers' beliefs, and (6). Teachers' assumptions and expectations about knowledge. Each theme and its associated evidence and elaboration are set out in the text below. Direct quotes from the interviews are indicated by quotation marks and the author's interpretations and elaborations are indicated in normal type.

Theme 1. The challenge of constructivism in the Saudi Arabian context

Most of the teachers found that Saudi students were not accustomed to university teaching that promoted higher-level thinking and self-directed learning and study. Wendy, who has prior teaching experience in China and England, found that Saudi students "are shocked at university... students are used to using their memory rather than to think, analyze, synthesize, and critique... students here should be independent learners and that's not what they are used to." John complained that "students in Saudi are used to [using] one function of their brain, which is to store information.... I feel for my Saudi students who have been taught to memorize for their entire K-12 education." Both of these comments point to the discrepancy between traditional, teacher-directed rote learning on the one hand and contemporary, interactive-constructive approaches and student-constructed understanding on the other hand.

University study is a personal choice that requires motivation, self-direction, and responsibility. These expatriate teachers found that many students did not realize that learning is something that they must do themselves (in the sense of making and, constructing understanding) and that it is not something that is done to them by external powers. Tara observed that "motivating students was one of the major challenges in Saudi Arabia.... For instance in Germany when I teach German, students are motivated to learn the language as they want to be granted the citizenship, but here students sometimes wonder. 'Why [do] I want to learn a foreign language?'" Motivation was also an issue for Haley. Even with 25 years of experience, she argued that she had "learned more about [herself] through teaching Saudi students.... Shifting the responsibility for their learning to them... and motivating them to focus on their learning." Nadia compared Saudi and American students in terms of motivation: "Unlike the students in the US, Saudi students rarely work having a part-time or full-time job. Telling Saudi students that they need to pass the course for a job has little or no effect."

Haley brought a different experience to bear: "I previously taught in a Soviet-designed system. Students [were] expected to work extremely hard for their education. Success was the motivation. In Saudi Arabia, students do not have the hard-work default thinking, so other forms of motivation need to be identified,

such as anchoring theory to dreams and ambition." Tara, however, struggled with directing students to have personal learning goals: "I ask my students what is your personal goal of learning? Sometimes I receive no responses... it seems too far for them and I can't tell them what goals to have."

Theme 2. Linking pedagogy to the lives of Saudi students

Most teachers realized that the Saudi Arabian cultural context is different from the other cultural contexts that they had experienced, and even from other Arab contexts. Tara suggested that at her institution there was a need for CRP to motivate Saudi students. As she wrote in her journal, "How can students learn when the textbooks are not culturally relevant?" She started a project in which students collected data about prominent Arab female figures. She contended that this created a greater degree of motivation for Saudi students to learn: "Motivation is [a] meaning-making process... some of my students had said that they don't feel education would make a big difference for them... education and learning needs time, consistency, and lots of dedication." Tara tried

> to find topics that are of interest to [my students] that would benefit them.... I choose my topics so they are relevant to students' lives. Otherwise no real learning occurs... a teacher can influence students' learning cultures heavily if she / he wants too... not just the learning project, the learning culture, but also the students' lifestyle.

Haley spoke enthusiastically about a novel method of teaching that she had initiated. As she explained, "I embed the lessons in the context of the lives they live. I use their family life as a platform to teach." Another interesting approach that she used was to engage "the student's dreams and life ambitions as part of the assignments. I get them to see how this theory or idea might help them achieve their goals." Wendy endorsed this view: "I can't just know my students but I have to know the culture... the society and the curriculum, and I need time [to understand] the perspectives and, most importantly, students' attitudes toward education." Tara cautioned expatriate teachers, for example, about infusing time-management strategies

> because we are trying to teach Saudi students to take on Westernized ways of knowing without trying to learn what are the ways in which Saudis can do research. I don't like to participate in what I call colonizing and degrading ways of knowing... there must be [a] Saudi research culture... and I as a foreign teacher need to know [it].

Theme 3. Alternating and adjusting teaching to address student needs

All of the teachers made adjustments to their instructional framework and strategies to address students' needs and prior knowledge and experiences, as well as to promote academic development and growth. John, an African American Muslim teacher who had lived and taught in Saudi Arabia for 28 years, stated:

> All one needs to do is to make adjustments in your teaching methods. [John said that he has been a co-learner in all Saudi private institutions in which he has worked.] I tell my students over and over again — you are learning from me and I am learning from you too.

Haley modified her teaching strategies: "I have made significant changes, most particularly in navigating serious cultural myopia on the part of textbook authors.... I think textbooks should be written by those who have had significant teaching experience in intercultural settings." Nadia confirmed that "I need to fundamentally change my perception of my role as a teacher as well as to adopt a new teaching framework." Both Richard and Rick explicitly stated that they changed their instructional framework and teaching strategies as they became more familiar with their students and the Saudi Arabian culture.

Cultural differences were encountered by these teachers as they engaged with the traditional values about education and with attitudes towards expatriate workers in KSA. Wendy highlighted that she and her students

> have something important in common.... After all, in the classroom we are all human beings... and to me the relationships between teachers and students have to be very good and open up to each other.... Coming from a Chinese culture, I expect students to be polite with me.... I feel that in Saudi Arabia and for some Saudi students I fit the criteria of "servant teacher" — and this is not positive — because I am Chinese British.

Theme 4. Connecting with students

Haley, on the other hand, argued that "one of the better characteristics of Saudi culture is the respect for teachers." She said that three aspects characterized her connection with students: "The excitement they express at learning new things... the hopefulness they express about their future careers... the respect and kindness they show me."

The teachers tried to maximize their connectedness with all students and with their cultural, social, and natural contexts and to promote communities of learners. Emanuel said that "after 5 years of being here, I have to say that I am amazed how students in Saudi are disengaged from their environment, the desert, which puzzles me." Haley felt that

> Saudi Arabia has gone through an extremely severe culture shock over the past 70 years. The current generation of students is disconnected from the traditions of their elders and is somewhat adrift in uncertainty. Many respond with passivity to the challenge of education in the absence of strong mentors to guide them in culturally appropriate ways to respond to unprecedented life changes.

This situation does not bode well for socializing students for the nuances of a knowledge-based economy.

Theme 5. Discrepancies in teachers' beliefs

The teachers were aware of discrepancies between the endorsed instruction and their pedagogical practices and of how they engaged with these differences. Tara felt that the university administration appeared to endorse a top-down, professor-directed model of teaching and learning rather than a supportive-interactive community of learners and teachers and that it wanted the "expatriate professors, to transfer knowledge and leave, and they forget that learning happens in a context and it has to be in a social construct — it does not happen in a vacuum." She also highlighted how learning is socially constructed:

> There are so many Saudis who are graduating from American and European countries. Why aren't they employed? Why am I employed to teach Saudi nationals? I feel that this is influencing the sense of confidence in a nation... that we Europeans know better and teach better.

The expatriate teachers encouraged students to learn collaboratively and with responsibility for others. Group work was a particular difficulty encountered by participants. Tara said that "although Saudi is a collective culture, I found that students do not enjoy group work." Haley identified a social cause for this: "a rather high degree of religious, political, and social intolerance blocks effective learning across a number of domains.... Religious and cultural divides create political roadblocks to group work and other class functions." These socio-cultural and socio-political factors produced separate groups in classrooms and had an impact on group work. This diversity and discomfort with team learning and collaboration present challenges for Saudi Arabia's goal of shifting to a knowledge-based economy. One might assume that that Saudi Arabia is a relatively homogenous society (Arab, Islamic, Sunni) yet diversity here refers to students' learning styles, cultural background, home and family values and traditions, etc.

These teachers knowingly adjusted their pedagogical framework and classroom practices to engage and use their students' resources, values, and beliefs in some situations. They sensed their students' lack of comfort and the discrepancies between their high-school and university experiences; in some cases, they engaged with the discrepancies in an attempt to change the system and the endorsed methods. Clearly, these strategies could lead to conflict with the traditional methods, but the teachers believed that this was necessary in order to produce educated persons for the 21st century and a knowledge-based economy.

Theme 6. Teachers' assumptions and expectations about knowledge

The major ontological and epistemological assumptions about knowledge and knowledge production should be reflected in what is taught and how it is taught. Inquiry-based instruction assumes that students need to be actively involved in constructing understandings about target ideas as this will introduce them to the disciplinary enterprise and to the fact that knowledge is a human

production. These teachers viewed knowledge as being dynamic, not static. Their modernist view of knowledge differed from their students' traditional absolutist view of knowledge, an issue that has large implications for the shift to a knowledge-based economy.

This discrepancy in views about knowledge caused difficulties in terms of the students' expectations of teachers delivering "truths" rather than establishing a situation where students could make meaning and construct their own "tentative truths" that would apply in their own context. As Wendy said,

> I want my students to appreciate that I don't want them to learn a language or a skill like writing or reading — that's not the end of it for me — but I want to see my lectures help them become useful in their society in the future.

Tara argued that both students and teachers are

> undergoing a steady change of their cultures when they interact.... I don't have [the] same culture I had when I came to Saudi.... I am a different person when I finish my contract and leave.... I am going through permanent dynamic change... a dynamic discursive process of negotiating identities.... When I am in class for 20 hours per week with the same group of students, something must have gone through them and me.... We are intentionally or unintentionally, consciously or unconsciously changing someone's culture.... It's a constant process of change and interaction.

These teachers believe that knowledge must be viewed critically and not passively. Tara emphasized that Saudis should question the presence of Western curricula and education in their country: "Isn't this a land of Islam and Islamic knowledge? Why are you not following Muslim ways of learning and knowing?"

Richard stated that "memorization dominates Saudi culture.... There is no focus on learning... students here are always looking for ways to pass a course instead of learning.... This disinterest reaches a point where a student would come to class with no pen or a notebook." He found their disengagement from reading puzzling:

> I am curious why Saudi students are not reading.... In Islamic Arabic history, [there are] so many poems and famous writers.... They have been much neglected in schools.... Students wonder "Why do I have to learn to read and write? I am a college student."

Emanuel concluded: "I need to adapt but make them adapt to learning — real learning not memorization.... I insist that they have to read and read and read... even if it's only their textbooks." The classroom observations indicated that the students focused on memorizing information so that they could pass courses, graduate and obtain jobs regardless of their knowledge content and changes in ways of thinking.

DISCUSSION

In considering the possible value of CRP for expatriate teachers working in KSA and for their students, one must also consider what students bring to school and what educators want them to leave with (Castagno & Brayboy, 2008). Johnson (2011) suggested that one of the driving CRP principles was the teacher's conception of self and others, a factor that becomes critical in a diverse context where different cultures, languages, beliefs, values, and practices exist. The differences do not need to be viewed as a potential source of conflict but instead can be viewed as a rich resource. These teachers viewed the challenges as opportunities for learning and teaching. The teachers in this study realized that their perception of self was not the same as their perception of the students and that these perceptions needed to be incorporated into their pedagogical framework and teaching strategies. John, for instance, felt that he was receiving as much as he was giving to his students. Wendy also felt that she was learning much about Saudi ways of living while she taught her students to live with and accept her as a facilitator instead of as knowledge transmitter. It is important for teachers to be aware of and to fully comprehend students' beliefs about learning and their established learning practices.

Students from the same cultural background tend to share the same learning styles (Almutairi, 2008; Alsafi, 2010). As discussed above, in Saudi Arabia there traditionally has been an emphasis on absolute knowledge, which entails a belief that truth is fixed and never changing, and an emphasis on learning by rote; this approach tends to differ from what expatriate teachers have encountered in their own culture and from what will be needed to ensure success in a knowledge-based economy. A knowledge-based economy will only emerge when students are global learners who are also comfortable with their own culture while also encompassing learning processes that will enhance creativity and innovation—two major aspects of a knowledge-based economy.

Courses with such titles as Critical Thinking and Problem Solving, Professional Development and Competencies, Communication Skills (Written, Oral and Technical), and Leadership Skills are few and far between in Saudi Arabia. The courses that have been offered thus far seem to have done little or nothing to challenge the deeply embedded tradition of rote learning or to help foster a culture of innovation and research. Researchers in the field of CRP (Castagno & Brayboy, 2008; Ladson-Billings, 1995, 2006; Schmeichel, 2012) agree that teachers should adopt a teaching style that is aligned with their students' learning styles. Most often teachers teach based on their own learning style: if the teacher is a visual learner, then he or she teaches based on that method, and so on. If teachers are to teach from a CRP perspective, they need to change their priority to the students' perspective and to adopt several pedagogical techniques that are compatible with their students' resources, beliefs, values, and needs. Therefore, innovative courses (critical thinking, problem solving, communications, and leadership) need to start where the students

are and to scaffold their development and growth based on different ways of knowing and of dealing with unfamiliar epistemic domains. Supportive, low-risk learning activities need to be used to allow uncertain students to explore non-traditional skills and knowledge, to experience success, and to develop more positive identities.

The participants' scepticism about their students' performance could be related to the fact that these teachers have stepped outside their own cultural comfort zone. Despite their 10 to 20 years of teaching experience, some participants had never before experienced teaching in Saudi Arabia or even in an Arab culture. Saudi Arabia's culture is unique, and the students' learning culture was new to many and a source of apprehension. The students' focus on memorization rather than comprehension, their lack of interest in attending classes, their weak writing skills, and their lack of research skills were impediments. These characteristics may cause discomfort to teachers who are new to Saudi Arabia and who require knowledge of innovative pedagogical techniques to engage students to use their experiential resources and develop foundational abilities. Indeed, the teachers interviewed in this study — some of whom had been in the field for more than 15 years — showed some inadequacy in terms of their ability to embrace CRP.

Johnson (2011) identified teacher-structured social relations as another driving CRP principle for achieving academic success. CRP enables teachers to "have high expectations for their students and learning is not at the expense of losing cultural identity.... CRP further means modelling, scaffolding, clarification of challenging curriculum using students' strengths as starting points and teachers sharing responsibilities for students' success" (p. 172). The participants' feedback on their students' lack of engagement, along with the author's field notes, confirmed that, with a few exceptions, these teachers had difficulty understanding their students' learning culture (including their methods of learning) and the challenges that these students might face as a result of being taught by foreign teachers. Clearly, the students' reluctance to engage in social interactions and negotiations limits the effectiveness of inquiry-based and interactive-constructive teaching methods. These approaches to teaching require public dialogic interactions and shared responsibilities for knowledge construction and private reflection in order to integrate the public knowledge into their personal conceptual networks. Several teachers have used strategies and curricular and extracurricular activities to encourage interpersonal connections between teachers and students as well as among students.

Johnson (2011) identified the teachers' conceptions of knowledge as another CRP principle. In this study, it was apparent that the expatriates' modernist view of knowledge did not align with the traditional views of knowledge held by the Saudi students. Furthermore, their traditional view of knowledge dovetailed with teacher-directed delivery of knowledge. Therefore, the teachers faced many

challenges in attempting to fulfill their responsibility to systematically move students' views of knowledge closer to a modernist view in order for them to value the interactive-constructive approach to teaching.

Limitations

This case study was limited to seven male and female expatriate teachers working at two universities — one a private institution (with a male campus and a female campus) and the other a well-established public university (with a male campus only) — in an urban area in SA's Eastern Province. Like all qualitative studies, its generalizability is limited and the reader needs to consider the similarities between these contexts and the potential application context.

Issues of accessibility may have given rise to a gender bias in the results, as there were only two male respondents. As a female researcher in Saudi Arabia, it is a challenge to engage men in research studies because of local customs. The pervasiveness of gender segregation made it impossible to attract more men with a wider variety of backgrounds and disciplinary expertise.

The wider context: CRP in other cultures

The problems and concerns highlighted by these teachers are not particularly different from those that typically arise in other scenarios, such as white teachers teaching in black, indigenous or Latino contexts in the United States (Castagno & Brayboy, 2008; Schmeichel, 2012). Moore (2003) described how some teachers indicate that instructional decisions are based on existing cultural biases, including "mainstream expectations, dominant modes of thinking, and cultural values that come from experiencing and making meaning about the world" (p. 88). In the context of this study, the mainstream expectations were not the specific characteristics of the Saudi Arabian culture but rather the culture brought by the Western teachers — even those who had been teaching in SA for some time — along with the futuristic goals of a knowledge-based economy. These teachers generally expected students to abide by and conform to Western ways of knowing, overlooking Saudi Arabian learning styles. Schmeichel (2012) argued that teachers' cultural bias and the absence of race consciousness inhibits the implementation of CRP; this is echoed by the results presented in this study. Nevertheless, one participant, Tara, who was the most critical and most conscious of the importance of understanding the learning culture in the country in which one is teaching, did not try to force students to conform to a Western model. Indeed, "Validating the culture and language of students and allow[ing] them to become co-constructors of knowledge in the school setting" (Belgarde, Mitchell & Arquero, 2002, p. 22) is what defines the successful use of CRP. Yet, the lack of a training orientation for newly arrived teachers and the lack of mentorship led some of these teachers to overlook the importance of fully understanding students' needs and hindered them from following or attempting to teach using CRP.

Ladson-Billings's (2006) view, that CRP is not "what to do [but rather] how we think" (p. 30), clearly aligns with Tara's words regarding imposing the Western paradigm on Saudi students' learning. As Schmeichel (2012) puts it, "CRP is not only how teachers think about their students but how teachers think about their society... it's to improve students' lives" (p. 225). CRP is an ethical position — which is exactly how Tara phrased it. Indeed, a "firm grounding in the first language and culture is a prerequisite for the development of culturally healthy students" (Castagno & Brayboy, 2008, p. 942). After all, the aim of education is not to grow and raise students who are disengaged from their communities but rather people who are willing and able to fully participate as productive citizens. This requires a shift in educational approach and teaching methods, pedagogy, teacher preparation and school-community relations (Castagno & Brayboy, 2008).

Although the small sample of participants in this case study does not allow for generalization, it seems that some of the Western professors at private universities do not have the training required to teach from a multicultural perspective. Lee and Fradd (1998) suggest that successful teachers must have knowledge both of their discipline and of diversity, including the ability to mine the rich experiences that students bring to the classroom based upon their home languages and cultures. However, as some researchers (Castagno & Brayboy, 2008; Diller & Moule, 2005) have argued, the awareness, knowledge and skills required are not often the focus of typical teacher-education programs; moreover, most white, middle-class people who became teachers in the US have not grown up with such background knowledge and experience. Thus, becoming a CRP-oriented educator requires the investment of additional time and energy. Castagno and Brayboy (2008) have suggested various strategies, including teachers exploring the communities in which their students live, connecting learning to students' everyday lives, participating in community events, and collaborating with community members on projects both within and outside the school. In the Saudi Arabian context, this would mean that the expatriate teachers would have to engage with the local society and with the traditional communities where students live, as well as to become familiar with ways of knowing and learning that might be different from what they had read and learned about Saudi Arabia and its people prior to living in the culture.

CONCLUSION

The three most important aspects of implementing a CRP are "acknowledging and respecting students' ethnic identities, believing that all students can learn to acknowledge them as knowers and teachers, and structuring classroom social relationships that facilitate beliefs in first and second languages" (Feinauer & Curti, 2012, p. 713). This study has explored a new dimension of the significance of CRP in a context that has not previously been examined — Saudi Arabia. Over the last decade, Saudi Arabia has experienced a sharp

increase in the number of university teachers from abroad and especially from Western countries. This trend is largely a reflection of the Saudi government's desire to move from a resource-based economy to a knowledge-based economy.

Teaching in a foreign land requires a change in how teachers view students' resources, classroom interactions and expectations of students. A primary finding of this study is that expatriate teachers who are starting to teach in Saudi Arabia, where the cultural context likely differs greatly from their previous experiences, would benefit greatly from exposure to the concepts of CRP. Some teachers in this study showed an in-depth understanding of how students are asked to embrace pedagogies and concepts foreign to them, and of the process of shifting students from the margins to the centre of the learning process. This is the focus of the new paradigm shift in education and is in line with CRP. The best teaching practices, as demonstrated in this research study, are those that acknowledge the differences inherent in academic, cultural, linguistic, and socio-economic diversity (Santamaria, 2009). As Santamaria suggested, only teachers are able to determine "what is appropriate for particular groups of students in a particular classroom in a particular locale" (p. 24).

Criticisms about teacher preparation with regard to CRP have been fuelled by reports that indicate that many expatriate teachers in higher education have not been trained as teachers and have little awareness of the challenges of teaching in diverse settings. Recruiting departments in Saudi institutions need to consider CRP principles when selecting foreign English-speaking nationals. Regrettably, the recruitment of expatriate professors has contributed to excessive turnover rates. The high percentage of non-Saudis teaching at public universities and private institutions underlines the need for professional development. Public universities usually offer professional-development programs during the summer, but this is not the case at many private institutions.

While universities worldwide are obliged to engage in activities that promote lifelong learning and social transformation, this is not the case in Saudi Arabia and particularly not in its private institutions. This lack of community involvement can be explained by the fact that most expatriate faculty members prefer to leave the country for their 3 months of paid vacation (M. Alkhazim, 18th September 2013 personal communication).

It is hoped that the results of this study will encourage culturally relevant pedagogy, and initiate discussions about how Saudi Arabia might provide more effective teacher recruitment and professional development that would focus on appreciating and learning about the Saudi cultural context and priorities, as well as about the learning styles of Saudi Arabian students, for the benefit of teachers and students.

NOTES

1. Saudi Arabians commonly refer to themselves as "Saudis." This usage is followed in this article.

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APPENDIX 1. LETTER OF INFORMATION AND INFORMED CONSENT

This is a study questionnaire for teachers who have taught or are currently teaching in a culture or in cultures that differ from their own. This study aims to examine teachers' pedagogical structure, highlight teaching strategies and the extent to which these change in accordance with the cultural context. In other words, I would like to know if teachers change or modify their teaching pedagogies and if teachers reconstruct new teaching strategies either when moving from one culture to the other or as a result of teaching in various cultural contexts. I also aim to explore if and how teaching in a different cultural context affects teachers on both a personal and a professional level.

Dear Sir or Madam:

This is an invitation for you to participate in a research project that aims to explore your experiences teaching in one or more cultural contexts that differ from your own culture. The data from this project will be used to advance academic knowledge of teachers' pedagogy in different cultures, intercultural education and, in particular, will be used in the development of scholarly presentations and publications.

In this study, answers to the attached questionnaire and document analysis will be the primary method of data collection. If you agree to participate, your role will be to provide your response. I will ask you to answer the attached questions in detail, providing your narratives of teaching strategies and pedagogies in the various cultures you have lived in with a focus on the Saudi cultural context.

The interview will take a face-to-face approach whereby you will be asked to reconstruct your various teaching experiences and to situate them within the applicable cultural contexts, including your own. You will focus on your teaching methods and any preconceptions that you may have had regarding the cultures within which you have taught and are currently teaching and, second, on your views regarding the status of education in the cultures within which you have taught and are currently teaching.

In addition, I am also requesting documents—all of which are outside the public domain—such as letters, stories, journal entries, reflections, and any other forms that are relevant to your points, as well as your published works that are relevant to your teaching and scholarly practice.

Confidentiality of your identity and personal information will be maintained throughout the project and in any and all subsequent associated write-ups. This confidentiality applies to any and all elements of the data that might disclose your identity as well as to any and all documents that you might choose to share that are outside the public domain. This policy also applies to any and all written reflections submitted by you. The original or raw data will be securely stored under lock and key, and only I as sole researcher will have access to this data. Furthermore, all original or raw data will remain securely stored for two years after the completion of the research, whereupon all the original or raw data will be destroyed or returned to you as appropriate.

Your participation is voluntary, and you may at any time withdraw from the study or refuse to answer any question. As a participant in the study, you will at no time be judged, evaluated, or subjected to any risk of harm. You will have the opportunity to review your answers and to delete the entire interview or any part thereof. Neither your name nor that of your institution will be revealed in any written reports.

Please send me your interest in participating in this study. If and when I receive your consent to participate in this study, I will follow up to arrange a suitable time for the interview.

Thank you in advance for your consideration.

Sincerely,

Researcher

By signing below, you are indicating that you are willing to participate in the study, that you have received a copy of this letter, and that you are fully aware of the conditions set out above.

Name: _____ Affiliation: _____

Signature: _____ Date: _____

Please initial if you agree to the following:

a) To review the transcript(s) on request _____

b) To receive a summary copy of the findings of the full study on request _____

APPENDIX 2. INTERVIEW QUESTIONS

Demographic Information

1. Name:

2. Teaching/education degree? YES / NO

3. Degree(s) other than teaching/education and its/their level(s) (*i.e.* Do you hold a degree or degrees in English literature, history, mathematics, etc., in addition to or in lieu of a degree in teaching/education?):

4. Years of teaching experience:

5. Subject(s) taught:

6. Subject(s) you are teaching now:

7. Level(s) taught:

8. Level(s) you are teaching now:

9. Number of cultures within which you have taught including your own:

10. Number of countries within which you have taught including your own:

In-depth Questions

In your answers below, please focus specifically on the Saudi culture and please think of specific aspects of teaching and learning.

I define "culture" as Geertz (1973) defines it: "historically transmitted patterns embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which [people] communicate, perpetuate, and develop their knowledge about and attitudes toward life" (p. 89).

1. What are the challenges that you experience as a teacher with respect to the students themselves? Please give at least 3 aspects.

2. What are the joys that you experience as a teacher with respect to the students themselves? Please give at least 3 aspects.

3. In the different cultures within which you have taught, compared to your own, what teaching strategies and pedagogy have you used in your teaching? Please focus on the Saudi culture.

4. In the different cultures within which you have taught, including your own, how would you change or modify your teaching methods to reach students' academic levels?

5. Do you believe that there are specific cultural influences that affect students' learning and academic progression? Please explain.

6. Have you considered the differences in expectations between students and their respective education systems in different countries / demographic contexts?

7. Have you considered or reflected upon your own personal expectations/tendencies/biases that you bring to bear in your teaching? Do you believe any of these could influence your teaching methods? Please explain.

8. How have distinctive characteristics of the various cultures within which you have taught affected students' learning styles?

9. What are the most apparent differences between students' cultural competencies in the different contexts in which you have taught?

10. How do students' cultural differences impact your teaching?

11. How do cultural differences impact your personal and professional communications?

12. Has the experience of teaching in different cultural contexts caused you to fundamentally change your perception of your role as a teacher as well as to adopt a new teaching framework? Or has this experience prompted you to make relatively minor, *ad hoc* adjustments to your teaching approach?

13. Are there any further points that you would like to add with regard to your teaching experiences in different cultural contexts?

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NOTES FROM THE FIELD / NOTES DU TERRAIN

RESEARCH FROM THE GLOBAL SOUTH: THE IMPORTANT ROLE OF CONTEXT IN INTERNATIONAL RESEARCH ACTIVITIES

KATIE BRYANT *McGill University & The University of Botswana*

ABSTRACT. Researchers from various disciplines have become interested in the supposedly extreme differences in rates of research between academics situated in the Global North and South, specifically those on the African continent. Yet, having worked as a researcher and a writing coach in the context of one university in the southern African region for the past three years, I cannot identify with many of the explanations given for these differences in rates. So, by reflecting on two instances emerging from my own experiences as a researcher in this particular context, this Note from the Field discusses the important and critical role context needs to have in making sense of this phenomenon.

LA RECHERCHE DANS LES PAYS DU SUD : L'IMPORTANCE DU CONTEXTE DANS LES ACTIVITÉS DE RECHERCHE À L'INTERNATIONAL

RÉSUMÉ. Des chercheurs issus d'une variété de domaines ont commencé à démontrer un intérêt à l'égard de différences prétendument marquées dans les taux de production en recherche entre les pays du Nord et du Sud, particulièrement ceux du continent africain. Or, forte d'une expérience de trois ans en tant que chercheur et coach en écriture au sein d'une université située en Afrique australe, je ne peux souscrire aux multiples explications formulées pour donner un sens à ces différences. Suite à une réflexion portant sur deux cas tirés de mon expérience comme chercheur dans ce contexte particulier, j'explique, dans cette Note du terrain, le rôle important et fondamental du contexte lorsque vient le moment de donner un sens à ce phénomène.

As a researcher situated at an African university,[1] I want to reflect on some of my experiences studying and trying to participate in a social activity that has received a lot of attention over the past few years. This social activity involves researchers from only certain parts of the world being able to participate in research (Hofman, Kanyengo, Rapp & Kotzin, 2009; Lillis & Curry, 2010; Mouton, 2010; Tijssen, Mouton, van Leeuwen & Boshoff, 2006; Tijssen, 2007). It is an assertion that emerges from research and images, like the one below

(see Figure 1 below), which illustrate extreme differences in rates of journal article publication in international journals between researchers situated at universities and research institutes in the Global North and South.

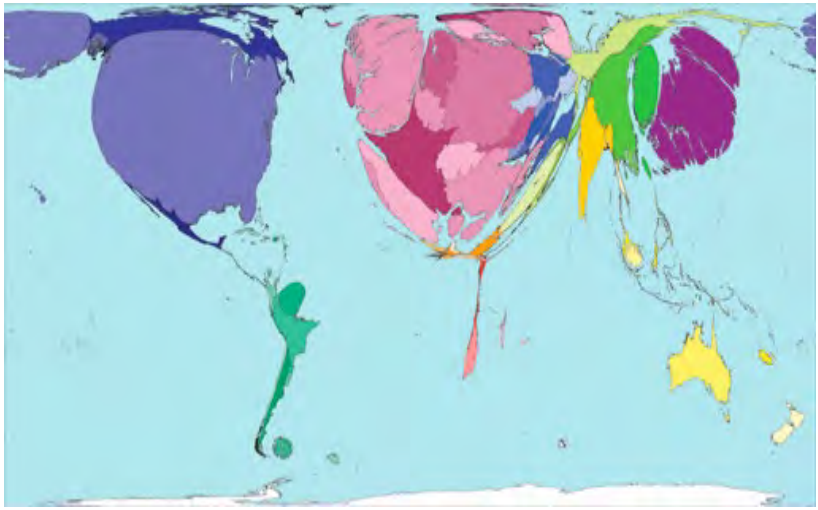

FIGURE 1. *Territory size shows the proportion of all scientific papers published in 2001 written by authors living there (Worldmapper, 2011, Copyright Sasi Group [University of Sheffield] and Mark Newman [University of Michigan])*

If we focus specifically on researchers working at universities in African countries, the differences become even more extreme with only 0.9% of international journal articles coming from this part of the world and 0.6% of these coming from South African researchers alone. This means that researchers in the 52[2] other African countries are responsible for only 0.3% of the continent's total outputs. In contrast, it is suggested that researchers in North America and Europe produce 32% and 30% of the world's research outputs, respectively (Lillis & Curry, 2010). Such extreme differences in global rates of publication, as well as their potential consequences,[3] have led to many studies in various disciplines. The following section discusses four reasons often cited to explain African researchers' supposed low rates of publication,[4] as well as their lack of relevance to my own research context in Southern Africa.

RESEARCH EXPLAINING REASONS FOR THESE DIFFERENT RATES

Emerging from the literature, the first reason typically given is that African researchers lack access to research funding since many of their governments do not have national research granting councils, and universities do not make funding available at the institutional level. Before being able to focus on

publishing, this lack of funding limits academics' abilities to even engage in research activities (Teferra, 2004). In my particular context, I have encountered some challenges related to accessing research funding; yet, the Government of Botswana has a national research funding policy through its Ministry of Science, Technology, and Infrastructure, although it is still being implemented (Bailey, Cloete & Pillay, 2011). In addition, research funding is available from our university to support academic staff in their research endeavours. Although the amount of financial support is relatively small (approximately 30,000 Canadian dollars), it offers a source of support for small scale studies or academics beginning their research careers (University of Botswana, n.d.). In my particular situation, too, research funding has not been an issue because our Batswana[5]-Canadian research team has thus far secured two years of research funding from the American government's Medical Education Partnership Initiative (MEPI),[6] which has provided us funding to investigate a particular medical education challenge we have observed at our school.

The next two explanations relate to issues of access. Firstly, African universities are often reported to have limited funding to pay for subscription fees to international journals. This then prevents their researchers from gaining access to their international disciplinary journals, further limiting their abilities to remain up-to-date with and draw from current thinking in their fields (Willinsky, 2006). Even though I am based at an African university, this is not my case. I find myself at a university with one of the best libraries in the Southern African region. The access I have to online journals is comparable to any Canadian institution at which I have worked or studied. If my library does not have the text (article, book, etc.), the librarians will order it from another one in the region via our well functioning interlibrary loan system. A second access issue that can be used to explain low publication rates is that many African countries have poor telecommunications infrastructure and policies. These then result in low internet bandwidth at universities and significantly limit their researchers' access to on-line journals as well as their abilities to connect both regionally and internationally with their colleagues (Esselaar, Gillwald & Stork, 2006; Valk & Fourati, 2013). In my particular context, bandwidth can, at times, be an issue, although I almost always have access to the internet at work and can access on-line journal articles, have Skype conversations, and access my email with relative ease.

While these explanations for African researchers' low publication rates are worth noting, it is the fourth reason suggested that concerns me most. As a researcher who studies the social activity of writing, I ask how writing does or doesn't make social activities happen, and how best to support writers with various writing tasks. Yet, there seems to be a growing trend of academics well outside the field of writing studies (often in fields related to development and research capacity building) suggesting that African researchers' supposed low rates of publication stem from their inabilities to communicate in English,

particularly their challenges with micro issues, such as grammar and sentence structure (see Adewuyi, 2008; Wight, 2005). This research[7] assumes a normative conceptualization of writing, that is, that writing is a skill and any writers' challenges with writing come from grammatical ones (see Bryant & Diga, 2013). It also ignores the important need to think about context in these discussions. For example, at our institution English is the language of instruction, and most, if not all, of my Batswana colleagues have been educated at universities in the UK, US, or Canada. In other words, most of my colleagues are extremely proficient in the English language. In fact, one of my colleagues regularly edits my writing (e.g., journal articles, grant proposals) prior to submission. Using a social activity conceptualization of writing enables researchers to gain a more complex understanding of writing and what is happening with a particular writing activity that this technical and normative focus does not allow.

Now, although some of these explanations may resonate with researchers situated in other African countries and university contexts than my own, my intention in discussing and analyzing them in the context of my own experiences is to illustrate the need for more contextual and complex investigations of this phenomenon. To do this, researchers need to ask different questions about this issue, questions that bring African researchers'[8] subjective experiences to the forefront, not only their challenges. In the remainder of this "Note from the Field," I will illustrate what happens when context and subjective research experiences are considered. I will do so by discussing two particular experiences I've had as a researcher working in my particular research context. By highlighting the complex role context plays in these two experiences, I intend to illustrate that Southern researchers experience very different challenges participating in the social activity of research than those discussed above.

REFLECTING ON THE ISSUE OF RESEARCH STUDY CONTEXT

Prior to discussing these two examples, though, I want to briefly reflect on the potential ways those of us in the academy (e.g., researchers, journals editors, and reviewers) value a research study because of the context in which it is situated. Specifically, I want to reflect on two possibilities: first, that editors and reviewers of international journals demand that findings from studies situated in the Global South and being done by Southern researchers must have greater global generalizability than findings coming from studies situated in the Global North; and second, that Southern researchers doing research in particular geographic locations in the Global South struggle more than their Northern counterparts to have their research questions and findings deemed important enough to contribute to the conversations taking place in their international research communities. These are two ideas I will explore in the next sections using examples from my experiences as a researcher situated in my particular research context.

QUESTION ONE: WILL MY CONTEXT ALLOW ME TO ASK INTERNATIONALLY RELEVANT QUESTIONS?

The first issue I want to explore arises from the medical education study our Batswana-Canadian research team are currently doing, namely, investigating our students' challenges with writing and learning for their programme. In 2009, our university opened the country's first medical school. Based on input from international partners, it was decided to implement a hybrid curriculum composed of a community-based, problem-based learning (PBL) curriculum. In 2011, as a researcher of writing and writing pedagogy, one of the School's new faculty members approached me to talk about the writing-related challenges he and his colleagues were observing in the weekly reflections they required their students to submit. These reflections had the students discuss what they had learned about and observed over the course of the week in their various learning contexts. Similar to most people outside of writing studies, the teaching staff assumed these challenges illustrated the students' lack of literacy (despite being some of the strongest students in Botswana). Encouragingly, this particular faculty member was open to my suggestion that perhaps the students were experiencing something other than literacy issues. Specifically, he was interested in my idea that they might be struggling with their transition from their first-year undergraduate programme in the sciences, which was extremely teacher-centred to their new problem-based self-directed, learner-centred curriculum at the School of Medicine. Also, perhaps they were struggling to participate in a genre that required them to reflect since they had most likely never been asked to use writing to reflect on their experiences during their entire academic careers. I thought that both of these things could be resulting in their writing-related challenges.

Armed with these possibilities, we co-wrote a grant application and successfully obtained funding to do a two-year qualitative study to investigate the students' experiences and what we could be done to enhance them. After doing participant observations in three of the six PBL learning groups over the course of an academic term, as well as interviewing half of the first-year 50 student cohort and six of the seven PBL facilitators, something very interesting has emerged from our study. It appears that our students are experiencing extreme learning challenges and require support to understand how to be self-directed learners within their medical school programme. Yet, this learning support doesn't necessarily need to focus on helping students with content issues; rather, it needs to help them learn how to learn, specifically for the context of medical school. Guided by this realization, we have set out to read everything that has been written on medical education and medical student remediation. Yet, I question, given my context of being situated in Botswana, a resource-constrained location in the Global South, will this question be of interest to the wider, international research community of medical educators? Can our team make any type of contribution larger than simply suggesting that for

a resource-constrained setting in the Global South, medical students need discipline specific learning support to become self-directed learners? I find interesting, however, that when I read the literature, namely, studies based at American and Canadian universities, these researchers don't seem to need to situate their studies in their contexts when they make claims about how best to remediate medical students or residents. For example, they don't need to say that in a non-resource constrained setting in the Global North, medical students need x, y, and z. And not only do they not have to make these types of statements, but we are also supposed to emulate the suggestions that emerge from their contexts and transpose them onto our own. So, from this experience, I'm left with two questions: 1) Are the questions we ask in the Global South not relevant to researchers in the Global North? 2) Why do the research findings coming from studies done in Global North seem to have universal applicability?

QUESTION TWO: WILL MY RESEARCH CONTEXT ALLOW MY FINDINGS TO GARNER INTERNATIONAL INTEREST?

The second example comes from my experiences as a researcher working on my doctoral study. When I first started working on my PhD, I was lucky to secure financial support to collect the data for my doctoral study from a large Canadian international development funder. A requirement of this support was to give an in-progress presentation about my research findings. This presentation happened after a very short analysis period that didn't give me much time to deeply reflect on my data. Yet, despite this, I realized that the typical reasons given for African researchers' supposedly low rates of publication (the ones discussed above) did not hold for researchers in my particular research context. Despite this realization though, at that particular point in time, I could not figure out what else I could say about my data. Finally though, only a day before the presentation, I realized that my findings could allow me to argue that how we were thinking about writing in this context was incorrect. We are assuming a normative understanding of writing whereas perhaps my study's findings are showing us that writing is a much more complex social activity.

Going with this idea, I reformulated my slides and gave the presentation, although, in retrospect I'm not sure how well my argument was understood (both by myself and my audience). One thing I did accomplish in my presentation, though, was to offer an in-depth background about my research study context because I felt that some of its key aspects made it quite different from other contexts. Interestingly, I had two different reactions to my discussion of context. One came from my boss, who suggested that when I did come to write my PhD dissertation I could not ignore context and really needed to ensure that it had a least a chapter in my dissertation (interestingly, it is only now that I'm realizing how significant context is to my data). The second was the complete opposite, from a person who would later become my boss. He informed me

that my study's findings illustrate the inappropriateness of my study's context because it doesn't allow me to confirm the main ideas currently being used to explain African researchers' low rates of publication. He suggested that the context I chose to study has, as discussed above, more assets than universities in other African countries. This difference in context then makes it impossible for me to make claims about African researchers' low rates of publication.

As a novice researcher, I did not have much of a response at the time. But, at this stage of my research, I think my response would now be to ask why we want to maintain the same type of narrative for all countries / contexts on the African continent? This second response came from someone, who wanted me to maintain a simple narrative of disempowerment: Africans aren't publishing, they can't publish, because they do not have access to resources *x*, *y*, and *z*. But it was a narrative I didn't want to, and couldn't, maintain because the research context I chose (unknowingly, at the time) wouldn't allow me to continue to do so.

In contrast, I also wondered why my findings were not considered interesting. I believe they illustrate an instance of what all research should seek to do, which is to generate what sociologist Raewyn Connell (2007) calls "dirty theory". Her idea challenges the notion that data and theory have universal relevance, by instead suggesting the two should have a mutually informing relationship. She argues that theory and data should be used in two ways: "Not only do data criticise theory, theory also criticise data" (p. 207). "Dirty theory… is, theorising that is mixed up with specific situations", with "the goal… not to subsume, but to clarify; not to classify from outside, but to illuminate a situation in its concreteness" (p. 207). In constructing dirty theory then, the researcher no longer constructs universal generalizations about a social phenomenon, because although social scientists "produce generalisations… only the weak ones are universals. The power of social science generalisations is multiplied if they can be linked to the characteristics of a context within which they apply" (p. 207). So, if our goal in social science theorizing (and perhaps even outside this discipline), relies on Connell's notion, the value of theoretical generalizations comes from their specificity to a particular social and historical context (for studies situated in both the Global North and South), not erasing this relationship between theory and context of the study.

I end this Note from the Field by suggesting two ways forward: first, the need to do research that asks more critical, complex, and contextual questions about global rates of research publication; and second, the need for researchers and those of us engaged in peer review to critically reflect on how research context plays a role in the kind of questions we can ask and the findings we can arrive at in our research, and how these two things determine who is and isn't able to join international research conversations.

NOTES

1 I am a Canadian born and educated PhD candidate currently based at a university in Southern Africa. In this context, I do research for my doctoral study as well as work as a researcher in the fields of medical education and rhetorical capacity building. My PhD work explores assertions, like those above, by investigating African researchers' subjective experiences with the social activity of research. Although it is not the focus of this article, I would suggest I belong to a group of new or soon to be new PhD graduates participating in the emerging trend of reverse migration. These are individuals often from, and educated in the Global North, who are moving to the Global South to find academic positions. Various reasons can be given for this move, such as more exciting opportunities at Southern universities, increasing challenges finding stable, full-time academic positions in the Global North, and overly competitive and demanding working conditions of academic positions in the Global North.

2. At the time of Lillis & Curry's research, only 53 African countries were recognized as sovereign states. Currently though, 54 sovereign states are recognized since, in 2010, South Sudan attained its independence from Sudan.

3. Not much research has been done on the negative consequences of these supposed publication rates differences; yet, it can be assumed that many problems arise from only a fraction of the world's population currently being able to construct and share the vast majority of knowledge about all of the world's challenges.

4. A growing challenge is also emerging from researchers in the Global South for different metrics to be used to measure academic research contributions (see http://www.scaprogramme.org.za/participating-institutions/university-of-cape-town/). Although very important research, it's not the focus of this article.

5. Batswana is the term used to signify more than one person from Botswana.

6. Although there have been few to no issues for our particular study, numerous challenges can arise because of power imbalances within international research funding partnerships (see Obamba & Mwema, 2009).

7. I use the term "research" loosely to describe these individuals' work since neither have done any research on African researchers' writing practices to arrive at this suggestion.

8. Although not perfect, the term "African researcher" is used to describe a researcher based at a university in an African country for an extended period, though not necessarily originating from an African country.

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NOTES FROM THE FIELD / NOTES DU TERRAIN

DRAMA AND THEATRE EDUCATION IN CANADA: A SNAPSHOT

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ABSTRACT. This "Note from the Field" provides an overview of what is happening in K to University drama and theatre education across Canada. In addition to this snapshot I offer some considerations for extending this discipline and its potential impact on curriculum, policy and practice.

ENSEIGNEMENT DU THÉÂTRE ET DE L'ART DRAMATIQUE AU CANADA : UN PORTRAIT

RÉSUMÉ. Cette « Note du terrain » dresse un portrait du milieu de l'enseignement du théâtre et de l'art dramatique au Canada, du préscolaire à l'Université. En complément de ce portrait, je formule quelques suggestions pour enrichir cette discipline et augmenter son influence sur les programmes, les politiques et les pratiques.

As an art form, drama and theatre education has the potential to educate and foster a student's creative imagination and aesthetic sensibilities *as well as* to cultivate a socio-emotional, community, collaboratively- centered disposition. Because of the potential benefits that drama and theatre can have on the ongoing development and classroom experiences of Canadian teachers, teacher candidates and students, this "Note from the Field" will offer some background on what is happening in drama and theatre education in Canada. In this piece, drama education is referred to as a process- based subject. In drama education, students explore their bodies, minds and voices through a variety of games / activities. This work can lead to the development of self-awareness, creativity, imagination and community-mindedness. Theatre education is focused on preparing students for production or performance of some sort. This generally means that there is greater emphasis on the professional, aesthetic aspects of a theatrical production.

In a Canadian context, it is quite difficult, if not impossible, to describe one single and unified way that drama and theatre education (from Kindergarten to University) is prepared, taught and experienced. However, if one were to compare the curricular documents of the provinces on these subjects, then similarities and overarching objectives and outcomes between provinces might nevertheless be seen. The difficulty with compiling data based upon intended curricular outcomes is that this kind of analysis does not account for the importance of *currere* or the running of the educational course: where the lived experience of students and teacher(s) with the material to be learnt is considered. Thus, to make the assumption that simply "understanding what a soliloquy is" might be checked off someone's assessment criteria in two provinces, one cannot assume that each educational experience was / is the same.

However, because of the similar training that some theatre and drama instructors have received, and because of the common influences which Canada's albeit as yet young history in drama and theatre education has inherited, from countries such as Britain, some assumptions as to what common practices might go on in classrooms can be surmised. As a trained conservatory-style actor, a/r/tographer, Learning through the Arts teacher and drama / theatre methodology professor for pre-service teachers, I bring multiple perspectives and experiences to this "Note from the Field." After careful consideration as to how to begin this particular conversation, I have created the following chart, as a compilation of the information provided in *Canadian Drama Mosaic* (Burke, 2004) (See Appendix 1). *Canadian Drama Mosaic* was developed by drama and theatre education specialists from across Canada and highlights some of the similar and contrasting trends in drama and theatre education in each of the provinces except for Nova Scotia (as this province was not included in the document). The information foregrounds selected research and writings from theatre and drama workers across Canada. From the easy-to-understand format of this chart, in Appendix 1 we might arrive at some grounding as to what is and is not happening provincially in K-University level drama and theatre education.

If one is to compare the provincial programs for similarities and differences, one can see that generally:

- Drama as a methodology is supposed to be a part of most provinces' elementary programs and in fact some provinces such as Ontario, Quebec and BC have in place provincial documents with specific, measurable outcomes that teachers must cover. (However, the consensus seems to be that it is still up to the individual teacher and their level of comfort with this subject whether or not drama is offered).
- Elementary theatre appears to occur at the teacher's discretion (i.e. for Christmas plays or alongside work with community theatre artists).

- At the secondary level, it generally appears as though for grades 9-12, drama is offered as one of three electives (alongside music and art) that students must take in order to graduate. (These classes are often offered by English teachers).
- Theatre as an extra-curricular activity is generally offered on a school-to-school basis.
- Generally at Canadian universities, it appears as though drama / theatre for elementary teacher candidates is only sometimes offered.
- Theatre / drama courses are offered at some universities for teacher candidates wishing to specialize in high school drama / theatre as a teachable subject.

Based upon these generalizations derived from one compilation document, I would have to surmise that the reason drama and theatre are not always taught at the elementary levels has a lot to do with the training that teacher candidates receive when doing their BEds. I think that if drama / theatre were a required course for all elementary teachers (like Language Arts and Math are), the number of teachers who brought drama and theatre into their classes would increase simply because they would feel competent to teach this subject.

I also understand that at the high school level, drama / theatre is an elective that is sometimes offered as a choice alongside art and music. The problem with this is that oftentimes, the drama / theatre teacher is not specifically trained in this subject. This suggests that despite new curricular documents being created by the provinces that place drama and theatre in a more prominent position within the curriculum, teachers still appear to be the key to the implementation of such programs. When teachers are not comfortable with this subject, they are not likely to teach it.

NEXT STEPS

In *Against the Flow*, Peter Abbs (2003) makes an argument to establish a new arts paradigm that will help our culture and society to heal and recover from the media- and consumer-laden one that currently exists. He suggests that the arts provide the only way to do this since the arts are a vehicle for understanding and getting in touch with the spiritual and emotional springs which are currently untapped in each of us. Outlined below are three suggestions that outline potential pathways for the growth and development of drama and theatre education in Canada and generally.

1. Know ourselves

> Your problem is the world's problem. As the problem is new you must approach it anew; there must be a revolution in thinking. This revolution is not based on any formula but on self-knowledge, knowledge of the total process of your whole being. (Krishnamurti, 2008, pp.1-2)

> Conversation occurs both intersubjectively and intrasubjectively, in rooms of our own. There we turn away from the maelstrom of everyday life, and in solitude we can hear ourselves, including the otherness, the alterity within. (Pinar, 2004, p.251)

Krishnamurti suggests that in order to change the world we must change ourselves from the inside out starting with our own thoughts. William Pinar writes that in rooms of our own, we must spend time with our thoughts in order to find a way to quiet the noises of the world around us so as to listen to our inner silences. I believe that this deeply personal work is the only place from which to begin before venturing "out into the world" to share of oneself in an effective and truly engaged way. Arguably, some might suggest that reflective practitioners are the educational equivalent of critical self-awareness. But I am not convinced. When writing about the activated self, Arne Naess, the deep ecologist says:

> to do a great many things is not enough; what is important is what we do and how it happens. It is those of our actions which affect our whole nature that is called activeness... and it is this activeness that develops our essence and touches our soul. (Naess, 2002, p. 76)

We need to have space and time away from busy-ness to allow ourselves to be transformed. This is not often the case for a teacher in today's educational system. So how can critical self-reflection and awareness take place if distractions, deadlines, ambitions and the busy work of teaching fill our days? How can we cultivate a life that includes space and time for exploring meditation, yoga, art and the like unless we collectively value and set aside moments such as these? How can we move in new directions together until we consider the tensions that exist not only within our institutions and structures but which dwell within ourselves?

2. Build a community

Philip Bishop's (2010) synthesis of John Dewey's "great community" concept suggests that for a community to exist as something other than an association or organization that is based on people getting together around common needs or goals, a trust needs to be developed. This trust based on natural association occurs as a result of mutual respect and is suggested to occur organically. Dewey's second condition for a great community is mutual benefit. This means that everyone in a community is growing as a result of being in it (with an ideal benefit being an individual's experiencing freedom as a result of the trust they feel). This is a result of not only the possession and distribution of social knowledge (the third condition) but of this knowledge leading to active participation of all members being able to help direct the community with which they are a part (fourth condition). As one might guess, this would lead to the full integration of individuals in a community (fifth condition) and then subsequently, their ability to communicate through a series of signs and shared symbols (sixth condition).

Building a community in relation to the development of drama and theatre education is important because without a community, the potential for true change growing from tensions and disagreements filled with contradictions and concerns cannot exist.

It is often said that to work in the arts means that one is automatically assumed to be an advocate. However, sometimes taking on an advocacy role can connote trying to speak about a topic convincingly in order to garner support for your particular position. To me this is an inaccuracy because I think that when one is doing what they love, one speaks about it with pleasure and passion. In my experience as a K-University teacher and professor, I have most often met great support from colleagues for passionate conversations across the subject areas. What has been difficult for me is to connect with a community of other drama and theatre educators because there are often very few of them at one educational institution at one time. Luckily, new media technology has helped to overcome these hurdles and has allowed for greater collaboration and community building within the arts to occur across institutions. An exciting new undertaking that will extend and update the situation / information presented in this particular "Note from the Field" is an accepted-for-publication book I am co-editing with Dr. George Belliveau (Professor in Drama / Theatre Education at The University of British Columbia) and Dr. Monica Prendergast (Associate Professor in Drama / Theatre Education at The University of Victoria), *Canadian Perspectives in Drama and Theatre Education* (in press). This text will bring together voices of new and respected drama / theatre practitioners across the provinces in Canada as a way of highlighting the diverse and complimentary work being done in this country. We are working on creating a great(er) community!

3. Work on / in the edges

It is a long and complicated road to policy and curriculum changes at the public K-12 level in Canada. However, we must all continue to believe that our voices in these related matters are important and significant. Thus, after understanding oneself and then firmly becoming a part of a larger community, the next step is to work through curricular and policy changes so as to end the shaky relationship that drama and theatre have within various levels of the Canadian curriculum. Increasingly, there is an understanding of the way that knowledge generated from higher institutions can be mobilized and used across society.

Additionally, I think that Canadian BEd programs need to (minimally) require all elementary teacher candidates to take a drama and theatre education course at some point in time during their degree. There are several reasons for this suggestion:

- Increasingly, students are experiencing school violence such as bullying. The development of socio-emotional learning and the ability to put oneself in someone else's shoes that drama specifically fosters can positively create a classroom community that helps not only address issues of self-regulation and awareness but also can potentially prevent such concerns.
- Collaboration, innovation, imagination and creativity are increasingly seen as skills that the next generation is encouraged to develop in order to succeed in our increasingly fast-paced and ever- changing society. Drama and theatre classrooms create an environment where risk-taking, possibility and change are commonplace. This means that students can develop the abilities to respond to the unexpected and co-create meaning within a variety of contexts as preparation for future participation in society.
- Given the higher levels of stress and standardization that students currently face, engaging in drama and theatre allows students to "learn through play" while simultaneously having fun!

Turning inward to understand one's own views and positions, reaching out to be a part of a larger drama / theatre education community and then taking the risk to dwell on the unknown edges of policy change and advocacy roles for including drama and theatre in all levels of schooling are the next steps that I suggest Canadian educators begin to take to help and develop a more consistent and unified Canadian drama and theatre education scene.

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APPENDIX 1. DRAMA AND THEATRE EDUCATION IN CANADA (BURKE, 2004)

Province / Territory	Elementary Education	Secondary Education	University program(s)
British Columbia	- Not as much happening now as there was 25 years ago (when there was lobbying to firmly establish drama in the curriculum) - Elementary drama is often subsumed in language arts curriculum - Focus on performance	- 1939: Drama and Oral Expression is created by the provincial Department of Education - By 1951, 855 students (34 classes) were taking drama in grades 11-12 & a new course was being offered to Jr. High students - 1960's saw greater drama enrollment & new courses added but, NOT an increase in trained drama/theatre teachers - 1980's-1990's saw increased Asian immigration to BC and this is thought to have led to a decline in interest in drama classes - 2004, new curriculum introduced	U of Vic: - Drama education is required for all elementary B-ed students - Required drama education for secondary drama specialists SFU: - 1 elementary drama class (not required) UBC: - Drama education is offered for all levels of BEd students
Alberta	- 1985: first drama curriculum in gr.1-6 was published	- 1936: drama became a high school course (but, teachers could not be certified to teach it until after WW 2) - 1959: British creative drama educator Brian Way conducted workshops throughout the province - 1970: grade 7-12 curriculum guide was released - Currently not a core subject, but offered in some schools as an elective (program dependent on teacher)	- Community theatre led to the University of Alberta's fine arts program in theatre - Banff Centre for the Arts has a dramatic affect on the province's theatre - University of Alberta, Calgary and Lethbridge offer combined BFA/BEd degrees in drama education

APPENDIX 1. DRAMA AND THEATRE EDUCATION IN CANADA (BURKE, 2004) CONT.

Saskatchewan	- 1980-90's: K-12 arts curricula implemented in Saskatchewan schools - 2004: currently a core component of provincial curriculum (K-9, students are supposed to have 50 min. of drama/week)	- 1936: drama/theatre first appears in curricular documents (as an option for gr. 9 & 10) - High school play festivals are a focus from 1950's-1990's - Collective play building is a large focus in the 1970's & 1980's in Northern Sask. - Collaborative work based on Augusto Boal is popular (1990's-2000) - 2004: Theatre is currently an option for grades 10-12	Not stated

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NOTES FROM THE FIELD / NOTES DU TERRAIN

ON WRITING NOTES IN THE FIELD: INTERROGATING POSITIONALITY, EMOTION, PARTICIPATION AND ETHICS

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ABSTRACT. Fieldnotes help researchers document research activities and position themselves in the field, invariably constructing the research, the researcher and the knowledges produced. Yet the process of how fieldnotes are produced often remains invisible. These "Notes from the Field" explore one doctoral student's experiences writing fieldnotes. Interrogated here are some of the tensions that emerged writing fieldnotes in relation to positionality and emotion, as well as regarding participation and ethics.

PRENDRE DES NOTES SUR LE TERRAIN: S'INTERROGER SUR LE POSITIONNEMENT, LES ÉMOTIONS, LA PARTICIPATION ET L'ÉTHIQUE

RÉSUMÉ. Les notes provenant du terrain permettent aux chercheurs de documenter leurs activités de recherche et de se positionner dans le milieu, influençant inévitablement la recherche, le chercheur et le savoir généré. Or, le processus de production de notes écrites sur le terrain demeure invisible. Ces «Notes du terrain» explorent l'expérience de rédaction de notes d'une doctorante dans ce contexte. Certaines des tensions qui émergent lors de la rédaction de notes sur le terrain sont soulevées dans ce texte, dont le positionnement et les émotions du chercheur, ainsi que la participation et l'éthique.

In these "Notes from the Field," I explore the process and experience of writing fieldnotes for my doctoral research. During my graduate coursework, I developed a keen interest in how subjectivities produce different types of knowledges in research. Studying ethnographic, interpretive, feminist, participatory and textual methodologies, I was always encouraged to write fieldnotes, research journals, and reflective memos. Here, I share some of the tensions I encountered in writing fieldnotes. First, I contextualize "the field" and "fieldnotes." I then complicate this celebrated yet elusive practice by interrogating the writing of fieldnotes in relation to positionality and emotion, as well as participation and ethics.

WRITING FIELDNOTES IN CAMEROON

For me, the field is southwestern Cameroon where I am working with women to study water management using participatory visual methodologies. I trouble conventional definitions of the field as a far-off place, "out there," somehow exoticized from my everyday life. Reflecting boundary concerns such as "where does the field begin and end?" (Clifford, 1990, p. 64) and "I am a fieldnote" (Jackson cited in Sanjek, 1990, p. 95), I am always constructing the research, no matter where I am. However for me, doing fieldwork did involve relocating to a different country. I defended my comprehensive exams and promptly boarded a plane for six months of fieldwork in Cameroon. Collaborating with a local professor and NGO, I facilitated photovoice and participatory video workshops, community exhibitions, and a decision-maker forum. While currently back in Cameroon writing, volunteering and doing some follow-up research, I focus here on the fieldnotes I produced during my first visit. These constituted my initial reactions to being in a new place, the bulk of my "data collection" activities, and my first concerted foray into writing fieldnotes.

During those six months, I wrote almost 250 single-spaced typed pages (213,000 words) of fieldnotes. These are not "jottings" or "scratch notes" taken *in situ* (Clifford, 1990). Often actively engaged as a workshop facilitator, I did not quietly write observations in the corner. While a little notepad in my pocket helped for quick jottings to later jog my memory, I mainly wrote fieldnotes on my laptop, alone in my room. In that sense, the notes constitute memory work, where I remembered to document and reflect on the research. My fieldnotes describe interactions and conversations, senses and spaces, my on-going decision-making and interpretations. I elaborated both on the everyday and more dramatic "crisis events" (Emerson, Fretz, & Shaw, 1995). Adopting reflexivity to situate the knowledges produced (Rose, 1997), I questioned my reactions and assumptions, desperately wanting to recognize and deconstruct essentialist constructions. I also wrote about how others reacted, such that my notes also consider participant concerns (Emerson et al., 1995). As I fumbled through, I did not know if I was "any good" at writing fieldnotes. I rarely reported about them or asked for feedback; they remained a relatively private process. Despite the integral role of fieldnotes in constructing myself as a researcher and the knowledges produced in my work, I tackled them alone. By exploring my emerging uncertainties regarding positionality and emotion, as well as participation and ethics, I hope to counter the general invisibility of the fieldnote process.

POSITIONALITY AND EMOTION

All too aware of my position as an "outsider" and "researcher" in Cameroon, I considered the structural aspects of my identity. Regularly called *white man*, the general Pidgin term for white people, my outsider status was overt. Indeed,

my intersecting whiteness, gender, sexuality, age, ability to speak Pidgin, and funded doctoral student status all construct the research in complex and specific ways. In my fieldnotes, I attempted to address how these structural aspects of my positionality situate the research and knowledges produced; this will be a central analytical piece informing my dissertation. Explored here however are aspects of positionality that I was not initially thinking about but that emerged as I wrote, namely, the deeply emotional dimensions of writing fieldnotes. The common "do what works best for you" fieldnote advice implies emotional dimensions, as individuals seek what "feels" right. This section illustrates the role of emotion in writing fieldnotes, firstly through writing fieldnotes as diary and secondly regarding my embodied emotional relationship with this genre of writing.

Fieldnotes as diary

My fieldnotes in Cameroon became my personal diary. Overwhelmed by trying to separate my observations and running record of activities (fieldnotes), abstract thinking and analysis (memos) and personal reactions (diary) (see Birks, Chapman, & Francis, 2008; Emerson et al., 1995; Sanjek, 1990), I kept just one Microsoft Word document. Having tried in my master's fieldwork to separate these writings, the thoughts and stories I was trying to tell always leaked into each other. Wait, should I write about this in my fieldnotes, a memo or my diary? This confusion reflects perhaps a blurred distinction between them, and my feminist-inspired beliefs that thinking is feeling is doing. Confiding with my friend April Mandrona that I could not silo my thoughts, feelings and actions, she laughed, "You can't separate JT the person from JT the researcher!" (personal communication, November 14, 2013). In throwing myself, my thinking and my work into the same file, I wrote this messy interconnected subjectivity into my fieldnotes.

Consequently, my fieldnotes recount confused and frustrated or excited and gushing moments. These reactions span both the research activities and my life events more generally, such as how I spent my weekends. This is all part of how I positioned myself in the field. Initially feeling anxious, lonely and socially isolated in Cameroon, writing provided a coping strategy. Emailing my supervisor, I wrote: "Am writing pages and pages of fieldnotes. I keep thinking how not having very many friends is helpful for producing a lot of fieldnotes. Call me loopy, but I just talk to myself on paper" (November 24, 2012). Writing fieldnotes also helped me through struggles. Entering one challenging encounter, I prepped myself by writing: "This is why I'm writing now — to try to talk sense into my head, to orient myself before heading into this" (December 21, 2012). Not always wanting to email and with phone and Skype limitations, my fieldnotes served as a confidant. I put everything in there. Every so often, I would panic; maybe I shouldn't write this stuff in my fieldnotes? But, I needed a safe place to work through things. Even as I

developed relationships in Cameroon, my fieldnotes remained a significant non-judgmental sounding board.

Emotion seems essential to what happens in field *and* how the field is written about in fieldnotes. Yet the limited scholarship about fieldnotes under-acknowledges this. Drawing on traditional ethnographers, Sanjek (1990) portrayed diaries as a cathartic outlet, lifeline or checking point. That he drew mostly on women ethnographer's diaries highlights the gendered nature of his accounts. In one assessment of Malinowski's infamous diary, it was argued that the diary was "never intended for publication.... [Diaries] are a partial record of the struggle that affects every anthropologist in the field.... The negative side of fieldwork... predominates in the diaries... a place to spew up one's spleen" (Forge cited in Sanjek, 1990, p. 109). Such accounts imply emotion as integral yet somehow separate from, interfering with, or even tainting fieldnotes.

Alternatively, emerging scholarship values emotion in research and fieldwork. Holland (2007) argued "emotions are important in the production of knowledge and add power in understanding, analysis and interpretation" (p. 195). Despite the possibilities for diaries to expose fieldwork's "hidden struggles" (Punch, 2012), emotion seems under-valued in fieldnotes. Attempting to be reflexive and position myself, how can I write fieldnotes *without* emotion? My diary weaves itself through my fieldnotes such that I am left wondering, how personal is too personal? When is it appropriate or useful to share? I am conscious of my need for privacy and feel vulnerable about being exposed:

> The curious eye of the printshop guy wandered over the pages, and I found my privacy violated as I thought about how openly I had written about sex, loneliness and desire. "I would prefer if you didn't read the document," I said, insulting the man I think, who immediately said he wasn't reading, just skimming the document to make sure it would print well. As the last page printed, he giggled and apologized, but that he thought it funny I ended the document with "Bla bla blaaaa." (December 22, 2012)

Quite comfortable writing to myself, there are risks I hadn't considered.

Writing my diary into my fieldnotes also created an ethical dilemma. Despite my feminist intentions to consider the personal as political, I was guilt-stricken to realize the implications — that in writing about my life, I was also writing about the people around me: "This should probably not be shared. I don't have those people's permission to include them in my fieldnotes. They have no idea that I am writing about them" (December 31, 2012). On the one hand, I felt I had a right to react to my life privately in writing. On the other hand, with reactions so intertwined with the research, I felt frozen in ethical peril. Eventually refining my approach, I learned to dialogue more with participants, facilitators and collaborators about my position as a researcher who is writing fieldnotes. But that did not completely solve this ethical dilemma of consent when merging journal with fieldnotes. Perhaps I should have been more careful.

Would talking through things have been more ethical than writing about them? I wonder who is written about in other researchers' fieldnotes and how they address the corresponding ethical questions and compromises involved.

Writing and emotion

The second emotional dimension I observed in writing fieldnotes was my relationship with this genre of writing. Fieldnotes are typically best written as close to the event as possible, preferably that night, while everything is fresh and before you talk away the details (Emerson et al., 1995). However I quickly realized that I was often tired and grumpy at night:

> I was so utterly exhausted last night that by the time I downloaded all the footage, bathed, made spaghetti, figured out the cash handouts for Day 2 and did the dishes, I was in bed asleep by 9. The whole "writing fieldnotes at the end of the day" just doesn't work for me. Or, I don't like doing it at the end of the day when I'm so tired. (March 27, 2013)

My emotions also intersected with my body: "I'm tired and hot and sweaty and sunburnt and stinky and blah. I want to write more now because I have to [get up early tomorrow], but I'm just feeling so blah …" (November 19, 2012). I negotiated this embodied emotional fatigue by suspending my observations and thoughts until my fresh body and perspective could write in the mornings. But sometimes that wasn't possible, so I plugged away in a more tired and cynical way in the evenings, producing curt, more judgmental, and less detailed accounts. Sometimes I complained, was less willing to explore multiple meanings or lacked the energy to even care. Understanding how my fatigue influenced my writing, I preferred writing in the mornings: "Feeling much more optimistic today than last night. Again, evenings really aren't the best time for me to write" (November 10, 2012). This enabled me to construct more open-minded, thoughtful, inquisitive, lengthy and descriptive fieldnotes. Perhaps these different types of writing deepen reflexivity. However, choosing when to write based on mood and body certainly affects the accounts produced, underscoring how emotional subjectivities construct writing.

Another emotional dimension to writing fieldnotes is how one feels about writing them. I loved writing fieldnotes! Writing in my pyjamas with a coffee and the sun streaming in to the sound of birds and roosters (or my neighbor's Nigerian hip-hop) was a gratifying activity for me. My notes repeatedly comment, "I so enjoy these daily writing sessions, trying to make sense of my day, to locate myself in this place, to work through the things I am noticing and feeling" (November 17, 2012). Whereas fellow students have complained about writing fieldnotes, some opting out altogether, I absolutely thrived, relishing the routine and solitary space to reflect. Maybe this is because I kept a diary growing up, or because I am more reflective and introverted; a discreet locked file on my computer offers a safe space for me to explore. Or, maybe fieldnotes helped me process and consider carefully the flood of details and emotion I

was encountering. Complicating this is the privilege of having the time. Some colleagues are doing research while also working as full-time mothers or with full-time paid employment (or both) and have much less time to write long detailed fieldnotes.

Nonetheless, it is significant that writing fieldnotes can bring joy. Crafting these rough sketches fulfilled me:

> I find comfort in doing thorough, detailed description. I used to feel that way when I was doing fieldwork at my engineering job. I loved the part of my job where I had to make a map, and write everything down. There was so much satisfaction in that, I felt good about it. (December 31, 2012)

Admittedly not "writing everything down" but constructing particular versions of selected events, I genuinely liked the process. Writing fieldnotes evades the daunting revision inherent to thesis or publication writing. With an intended audience of one, I didn't worry about coherence, succinctness or word limits. I explored in volumes because I enjoyed it so much. Conversely, if writing fieldnotes feels more like a chore, wouldn't that mean avoiding it, spending less time on it, or devoting less of oneself just to get it over with? For me, writing fieldnotes has certainly moved through moments of joy, struggle and perfunctory obligation. I wonder about the different types of fieldnotes that are produced (or not) in these emotional spaces.

PARTICIPATION, ETHICS AND WRITING FIELDNOTES

Confounding the rich possibilities of fieldnotes, I question how the practice risks contradicting my research methodology. I adopt participation as a way to broaden the knowledge production process, to open access to it and the issues identified, to expand how issues are interpreted as meaningful with the potential for transformation through research, thus shifting who research benefits. Power and ethics are central concerns. Heeding critiques of participation as a form of social control, my work incorporates ongoing tensions about the nature of participation. Therefore, it dawned on me that writing fieldnotes risks being one of the least participatory things a researcher can do. My singular voice constructed a private running narrative of the research.

I note the particular oral and visual nature of participation in my project. At various stages, participants produced and interpreted images and films, writing captions and reflecting publicly on their experiences. Participants took "process" photos and films during activities and in some instances wrote short reflections. I frequently debriefed activities with facilitators and collaborators to account for diverse perspectives. But most participant involvement was oral and visual. While these photo and video accounts constitute the data more broadly, ultimately, *I* wrote the fieldnotes. I am still writing the fieldnotes. Would anybody else *want* or have the time to write every day for six months? With over 120 participants involved, many for just two-day workshops at a time,

I'm not even sure if or how that would be feasible. Certainly alternative forms of note-taking exist, such as video diaries. But how invested might participants be in creating such detailed running accounts? Should I have written my notes to be shared? These questions are laden with power. My decision to write fieldnotes (underscoring my responsibility to produce written products) altered my intentions.

Noticing how my fieldnotes were impacting the research, I questioned my methodology: "I think I have come to be resolved that, in addition to using participatory arts-based methods, I am also using ethnographic methods through my fieldnotes" (December 31, 2012). I realized that in writing fieldnotes, I was relying on the cornerstone of ethnography. This led to a sinking fear about what I might be replicating. Although now studying different ways of doing ethnography (critical, feminist, autoethnographic), at the time, I felt embroiled in ethnography's uncomfortable colonial legacy. My friend Katie MacEntee and I have an on-going joke about writing that sounds "Geertzy" in its authoritative descriptive stance. This stems from our disgust hearing Geertz read aloud in a seminar by an older white man who relished in Geertz's description of the beautiful sway of the African woman's hips. This was all too symbolic of how many cultures continue to be exoticized, objectified and othered in research. Each of us now doing research in different African contexts, Katie reminds me: "Our joke really acts as a thin veil to mask how horrified we really are about our own work sounding or being interpreted the same" (K. MacEntee, personal communication, February 19, 2014). Am I constructing the same problematic representations? Despite my commitment to participatory principles, I worry about how writing fieldnotes departs from them. While reflexivity can help disrupt this, what happens when reflexivity fails (Rose, 1997)? Would I even know?

CONCLUSION

Writing fieldnotes provided me a safe space to document and question my work. I advocate writing fieldnotes as a critical tool for doing reflexive and ethical research. But the practice has also left me unsettled, with complicating questions: How can researchers ethically position themselves emotionally? How does one's relationship with this writing genre affect the fieldnotes produced? How do fieldnotes intersect with participation? Are there different *ways* to write fieldnotes? Or is the process too inherently individual (an interesting thought in and of itself)? Many more ethical questions surface beyond the space allowed here, such as: What of doing research in Pidgin and writing fieldnotes in English? Reflecting broader methodological and ethical issues, writing fieldnotes offers a valuable site to interrogate research practice. I hope these "Notes from the Field" help make this complicated and complicating practice more visible. Producing a growing body of fieldnotes that both tickle and trouble me, I welcome finding ethical and meaningful ways to integrate them into my next big writing project, my dissertation.

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BONNY NORTON. *Identity and Language Learning: Extending the Conversation* (2nd ed.). Bristol, UK: Multilingual Matters. (2013). 216 pp. $24.95 (paperback). (ISBN 978-1-78309-054-9).

This second edition of Bonny Norton's (2000) now classic book offers a comprehensive perspective on identity and language learning scholarship over the past decade. *Extending the Conversation* has an Introduction and seven chapters, as well as an Afterword written by esteemed applied linguist, Claire Kramsch. Norton makes it clear in the Introduction that her aim in the second edition is not to re-write the book, as "it has its own logic and coherence" (p. 1). The bulk of the book, therefore, is the same as the first edition, which details the qualitative study Norton conducted in the 1990s with five immigrant women in Canada who were learning English as a second language. The study explores the women's exposure to and uses of English outside of the language classroom. Norton found that the women were negotiating a contradictory position of needing access to English-speaking social networks in order to improve their English, yet entry into those networks was limited until they learned English. Drawing on her data and on the work of theorists Pierre Bourdieu, Chris Weedon, and Benedict Anderson, Norton articulated what have become highly influential and interconnected constructs in the fields of language education and applied linguistics: investment, identity as multiple and as a site of struggle, and imagined communities. Investment explains why language learners who are highly motivated may not necessarily be good language learners in a given social context. For instance, the women in Norton's study were highly motivated to learn English, but were not always invested in participating in the language practices of their classroom or community, especially if they felt marginalized by target language speakers. Investment is founded on a conception of identity as discursively constructed, multiple, and social and historically embedded, which gives agency to the women to resist marginalized positionings (e.g., as unskilled immigrants). The women's investment in learning English was also shaped by the communities they imagined they might participate in, often linked to hopes of increasing economic mobility.

For scholars in the field of language education or second language acquisition (SLA), the seven core chapters of the book will be familiar. The significance of *Extending the Conversation* lies in the Introduction and Afterword, which reframe the original study in light of developments in identity research and language education since the publication of the first edition. *Extending the Conversation* does just that. The Introduction provides readers with a clearly-written, accessible, and comprehensive synthesis of a decade of identity research. The Introduction closes with an overview of current themes and suggestions for future directions, which will be invaluable for emerging scholars. In particular, Norton highlights research that has addressed how identity intersects with socially constructed categories of race, class, gender, and sexual orientation. She also makes a strong case for using qualitative methodologies for examining issues of identity in language education, especially for considering how individuals negotiate power relations both within language classrooms and in their lives outside the classroom. Norton emphasizes the importance of developing pedagogical practices that enable learners to access powerful identities. The Introduction demonstrates that identity has become a research area in its own right, one that emerged in full force with the publication of the first edition, and one that will continue to address the complexities that learners face as they navigate their identities in globalized, sociocultural contexts, where power relations are always present.

In addition to the Introduction and Afterword, there are seven chapters in the book, which detail the theoretical framework of the study, the methodology and methods, findings, and implications of the study for SLA. Although some of the literature is now dated, the questions Norton addressed in the study regarding how social interactions are structured, and how learners act upon or resist these structures, are still relevant today. In Chapters 1 to 7, Norton is motivated by a desire to reframe language learning in SLA. The main argument is that SLA theories have not accounted for relationships between language learners and their social worlds, especially with regards to relations of power. She calls into question SLA assumptions of ideal language learners and ideal opportunities to practice the target language both inside and outside of class. Reading these chapters in light of the Introduction and Afterword provide the reader with a sense of how far the study of language learning and identity has come since 2000. However, for a second edition of a text that details so closely the experiences of immigrant women in their first few years in Canada, I found myself wondering how the women were doing now, almost two decades later. It would have been interesting, though perhaps not feasible, to have included a brief update on the five women and to re-visit the constructs of investment, identity, and imagined communities vis-à-vis the women's lives.

In the Afterword, Claire Kramsch contrasts the 1990s, when the first edition was written, as a period that was characterized by the "promise of freedom,

democracy and equal opportunity", to the 2000s, and the decade's "deregulated fast capitalism" (p. 199), which has put into serious question the ideals of the 1990s. Yet, she argues that despite social and political events of the past decade (e.g., 9/11; the 2008 financial crisis; increasing global terrorism), the constructs that Norton defined in the first edition still have purchase today because they draw on theorists (Pierre Bourdieu, Chris Weedon, and Benedict Anderson), who sought ways to capture that "the real world is messy and contradictory" (p. 198). Kramsch closes the book with a warning not to lose sight of Norton's deep committment to social justice and equality, and not to allow identity to be redefined in structuralist terms by those in positions of power. This Afterword leaves the reader with a sense of the utility of Norton's work for interdisciplinary scholarship on language education and identity.

As Kramsch wrote in the Afterword, Norton's 2000 book "provided a platform to talk about issues of identity in a new, narrative way.... Identity acquired a face and a heart" (p. 193). *Extending the Conversation* clearly demonstrates that Norton's constructs of investment, and imagined communities and identities have been resilient and productive even in light of significant sociopoliticial and economic shifts in the past decade. This edition is an essential read for applied linguists, SLA researchers, and graduate students interested in identity and language learning. It is clearly written and terms are well-defined. In addition, the reasonable price tag and the option of purchasing this edition as an e-book make this an accessible resource for students. The importance of this book for language learning research is inarguable, and the book is an important contribution for learners, who are not always readily visible in SLA theories. Overall, I would highly recommend this text.

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ANTHONY DI MASCIO. *The Idea of Popular Schooling in Upper Canada: Print Culture, Public Discourse, and the Demand for Education.* Montreal, QC: McGill-Queen's University Press. (2012). 243 pp. $32.95 (paperback). (ISBN 978-0-7735-4046-0).

In *The Idea of Popular Schooling in Upper Canada: Print Culture, Public Discourse, and the Demand for Education,* Anthony Di Mascio shows us how the concept of popular schooling — broadly defined by the author as "a common system of schooling available to all inhabitants" (p. 3) — was burgeoning in the public discourse of Upper Canada long before and between the School Acts of 1807, 1816 and 1846. His rigorous analysis of print culture from 1784 to 1832 paints a vivid portrait of the debate circling popular schooling at a time when Upper Canadian inhabitants faced the political, economic and ideological influences of both the British Empire and the United States. Di Mascio achieves his aim to reflect the progress of an idea outside the legislative world in Upper Canada, immersing readers in the divergent voices of political leaders, religious figures and journalists who participated in the creation of a philosophical foundation for Canada's schooling system.

The book stands out with its frequent use of non-governmental documents as primary sources, including newspapers, pamphlets and reports. Di Mascio quotes from newspapers such as William Lyon Mackenzie's *The Colonial Advocate*, known for its radical views, and the conservative *Kingston Gazette*, to engage readers with the people's concerns about schooling. Unfortunately, as the author states in his introduction, numerous populations were excluded from, or rarely present in print discourse, including Aboriginal people and women. Thus, he presents the question; to what extent did the newspapers reflect "public" discourse? Di Mascio tries to overcome this challenge by using a variety of sources, but it remains a contentious issue throughout the book. Chapter 1 explores how the Upper Canada elite sought to address the need for "government-aided schooling [which was] increasingly considered central to the colony's development and ability to survive on its own" (p. 28). In Chapter 2, Di Mascio focuses on the print literature surrounding school acts and demands for reform before addressing the relationship between the war

of 1812 and the Common School Act of 1816, Upper Canada's "first legislated universal school act" (p. 6). The latter was designed to provide accessible, government-funded schooling to all children in Upper Canada. The act and the subsequent amendments received some criticism from inhabitants of Upper Canada regarding the lack of financial support from the government and the American influence in schools. Di Mascio discusses the eventual demise of the Common School Act of 1816 in Chapters 3 and 4. Major shifts in educational discourse in the 1820s, spearheaded by personalities such William Mackenzie and the bishop John Strachan, are explored in Chapters 5 and 6. Di Mascio investigates the reforms in popular schooling that occurred between 1828 and 1832 in the final two chapters.

Di Mascio's work is strategically structured as a linear narrative, drawing readers to see connections between the events in Upper Canada and the winds of change sweeping the education system. He uses a conversational style to present the back-and-forth dialogues on education. Readers get a good sense of the diversity of opinions shared in the public forum; however, due to the sheer density of sources, it becomes easy to lose track of the arguments. Di Mascio frequently employs questions to lead his readers through the chapters. While this tactic did clarify the author's intent at times, I found the sheer number of questions in the text excessive, and it was often unclear whether they were rhetorical or not.

This book is ideal for academics looking into the history of education or politics in Upper Canada, and contributions of the press to the development of education legislation. In addition to addressing how public discourse helped shape public schooling in Upper Canada, Di Mascio points out that his work fills another gap in the literature by focusing on education in early Upper Canada (pre-1846). He also claims that the lack of state records between 1784 and 1832 left little information about the progress of the idea of popular schooling. Yet, the newspapers he uncovers offer valuable insight on the latter. What is missing from Di Mascio's work, however, is a better idea of his sources' backgrounds. He refers to some newspapers as 'moderate', and others as 'radical', but he fails to give these terms meaning. I was often left with questions such as, what readership did this source have? How recognized were its journalists? Giving the readers a better sense of the newspapers' influence and power would have emphasized their relevance in print discourse.

A major strength in the book is how Di Mascio connects the political and social contexts of Britain and the USA with the discourse of education. He argues that the War of 1812 brought on new ways of thinking, due to the influx of Americans into Upper Canada and to the Loyalists' growing fear that a similar conflict would arise in the north. His analysis of the effects of the war on education in Upper Canada builds on existing theories that "the pattern of settlement in the colony, the comparative poverty of colonial

society, and the failure of traditional institutions to carry the burdens they were expected to bear in England" (Gidney, 1980, p. 103) contributed to the numerous changes in the school system. Surprisingly, Di Mascio does not delve into the state of schooling in Lower Canada, although there was also a growing public discourse about education emerging in the newspapers between 1814 and 1823. Curtis (2011) claims that "issues of pedagogy, class and market relations were at the fore in the press debate" (p. 617) in Lower Canada at that time. An interesting aspect of his work is Di Mascio's critique of the recognition attributed to Ryerson and Strachan for their contributions to educational legislation. In his introduction and conclusion, he argues that the credit for popular schooling should include the print discourse in which the idea was developed, and throughout his book, successfully proves this point.

To summarize, *The Idea of Popular Schooling in Upper Canada: Print Culture, Public Discourse, and the Demand for Education* makes the compelling case that our education system today is not just the product of a few well-developed school acts from the hands of a few reformers. The adoption of public schooling in Upper Canada resulted from complex and ongoing conversations between the press, political groups, and religious authorities in the public arena regarding education, accessibility and the needs of the inhabitants. Overall, the book provides readers with a good sense of how Upper Canada was progressing as a nation in the process of developing its own identity and structure.

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LAYLA ABDELRAHIM. *Wild Children — Domesticated Dreams: Civilization and the Birth of Education.* Halifax, NS: Fernwood. (2013). 130 pp. $21.95 (paperback). (ISBN: 9781552665488)

Layla AbdelRahim's *Wild Children–Domesticated Dreams* is an engaging, critical examination of civilization and knowledge production. Distinguishing between cultures of wildness and cultures of domestication, the author demonstrates how civilization involves the latter, with mandatory education as the means for socializing children into civilized human beings. AbdelRahim is a proponent of anarcho-primitivism, an anarchist theory based on a critique of industrial civilization and its "hierarchical and parasitic political and socio-environmental economic systems" (AbdelRahim & Anonymous, 2013, "Do you think that AP is real," para. 1). Rooted in this orientation, *Wild Children* builds on anarchist theories and radical critiques of education (such as in the work of Peter Kropotkin, John Holt, John Taylor Gatto and John Zerzan) while offering a truly interdisciplinary study that draws from anthropology, ethology, philosophy, sociology and various areas of cultural and ethnic studies. The primary context of the book is Canadian, with transnational and cross-cultural comparisons made with various other perspectives and practices.

Wild Children is brief in length, consisting of an introduction, three distinct sections of no more than thirty pages each, and concluding thoughts. It is written in accessible language with the author's voice present throughout, including personal anecdotes describing interactions with and disarming observations by her daughter Ljuba when she was between the ages of three and nine years. However, despite its length and accessible language, *Wild Children* cannot be described as an *easy* read: the issues with which AbdelRahim grapples are anything but simplistic. The author offers a powerfully developed critique of civilized epistemology — the system of knowledge supporting industrial civilization — and of the institutionalized cruelty and apathy towards other human and nonhuman beings that civilization entails.

Throughout my reading of the book I was reminded of Ashanti Alston's (2011) observation that the desire to be free and to learn requires that we be daring with the material we read, knowing that what we read can indeed change our lives. *Wild Children* is this kind of challenging material, exposing and calling into question assumptions about what we think we know about civilization, education and ourselves. AbdelRahim accomplishes this, partly by using what many readers will likely consider provocative language, which considers human and nonhuman beings in ways that refuse customary anthropocentrism.

For example, AbdelRahim argues that, in civilization, a minority of people control and consume material capital and resources, while the majority of beings are considered as human and nonhuman resources to be consumed. She notes how we are taught to accept that "cows, chicken and pigs are incarcerated in concentration camps and locked in stalls for slaughter" (p. 29) as well as "taught to know how to breed ourselves and other animals in captivity or to know the rape of bovine or turkey women as 'artificial insemination'"(p. 56). Through practicing a culture of domestication, humans alter the *raison d'être* of other beings, redefining them in terms of our own perceived benefit. And by learning to ignore the suffering and moral implications of this treatment of animals, we condition ourselves to ignore the suffering of others perceived as different and denied of personhood.

AbdelRahim insists that this indifference to the suffering of others does not come naturally to humans. Rather, it is the result of systematic socialization: "civilized knowledge has to educate its 'resources' into accepting its perspective by destroying their systems of livelihood, relationships and self-knowledge, and replacing these with civilized monoculturalism" (p. 22). Parents begin this indoctrination of children through coercion, modeling and deference to institutional authority, and teachers continue the process in "artificial 'educational' settings" (p. 41). Conditioning occurs through the threat of violence "be it through grades, spanking, getting sent outside or locked inside, the withholding of candy or retraction of scholarships, the promise of future joblessness, homelessness and starvation or whatever other form of punishment," thus creating a "logic of endangerment" (p. 47). We are fearfully socialized to defer to institutional authority to the extent that we "think and live through it and on behalf of it at the expense of personal instincts" (p. 82).

Both a strength, and an unresolved tension of the author's rigorous critique of education, is how her own extensive education has clearly facilitated her ability to construct such an interdisciplinary and extensive argument. In this sense, to use Audre Lorde's (2000) terms, AbdelRahim uses the master's tools to deconstruct the master's house. She does not place herself outside of her critique and seems to engage critically and self-reflexively with her experiences as a learner and teacher, actively seeking to expose and correct her own socialization into civilization. Issues and concerns raised by her (un-

schooled) daughter Ljuba play an important role in this process, pointing to the valuable knowledge that develops naturally in wild children as they explore the world. Thus, while AbdelRahim makes little distinction between education that happens within standardized school systems and various alternative forms of education, the book does point to important alternatives to the violence of mainstream school systems. If we are critical of education that "depends on literacy and verbosity having substituted the natural learning patterns of introspection, action and motion... with inaction, overstimulation and verbal abstraction" (p. 102), for example, it follows that programs of learning that reverse this substitution are a step in the right direction. Free skool, de-schooling and unschooling approaches prioritize self-directed learning through doing, allowing children a much greater freedom of movement and exploration than in mainstream schools. Such approaches offer students the opportunity to design and pursue projects based on their curiosity and imaginations, teaching them to take responsibility for their own learning (Meza-Wilson, 2012; Taylor, 2014).

Ultimately, the challenging critique put forward by AbdelRahim in *Wild Children* invites us to engage in more complex and holistic ways of thinking about ourselves and societies: ways that wrestle the notion of love from the confines of consumerism and predation; ways that promote empathy, healing, cooperation, mutual aid and our interconnectedness with the world with / in which we live.

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GRAHAM P. MCDONOUGH, NADEEM A. MEMON, & AVI I. MINTZ (Eds.). *Discipline, Devotion, and Dissent: Jewish, Catholic, and Islamic Schooling in Canada*. Waterloo, ON: Wilfrid Laurier University Press. (2012). 208 pp. $39.99 (paperback). (ISBN 13: 978-1-55458-841-1).

The compatibility of faith-based schooling with interculturalism, multiculturalism, and secularism is constantly questioned in plural societies such as the Canadian one. Such schooling is often labeled as being divisive, indoctrinating, and less inclusive in terms of civic and citizenry values. *Discipline, Devotion and Dissent* presents an examination of Canadian Jewish, Catholic and Islamic schools by offering perspectives on some of their experiences. The contributors seek to cover three main themes: (1) What aims and practices characterize Canada's faith-based schools? (2) How faith-based schools reconcile the demands of their faith with the expectations of the larger society? And (3) how do these schools respond to internal dissent? By dissent, the authors refer to the act of internal criticism and differences within faith-based schools' classrooms. This volume, which is organized in ten chapters, covers a huge range of issues such as the history of faith-based education in Canada, the sacred-secular relationship, and the diversity of faith schools.

The editors, McDonough, Memon and Mintz, are, respectively, university professors at Victoria University, Wilfred-Lauried University, and Tulsa University. They offer a collection of scholarly articles arranged in three parts, covering reflections and fieldwork on Canadian Jewish, Catholic, and Islamic schools. The first part "explores how Jewish, Catholic, and Muslim communities have conceived of the aims of their schools and how these aims are manifested in their curricula and teaching methods" (p. 10). In chapter one, Epstein draws our attention to the complexity and diversity of Jewish day schools. The second chapter, by D'Souza, argues for the distinction of Catholic education based on the universal ethos of Catholicism. Finally, Memon explores the history surrounding the establishment of the first Canadian Islamic School.

The second part addresses the question of how faith-based schools respond to the challenges of citizenship. It explains how these schools take citizenship education seriously in order to prepare their students to be functional citizens. The first chapter, by Beiles, argues for a plurality of liberal values, which is modeled in a case study of the Toronto Heschel School. In the second chapter, Donlevy discusses the values of "respect for the Other, fairness, the common good, and democracy" (p. 121) and their importance to Catholic education. In the third chapter, Ahmed borrows Tariq Ramadan's model of "Integration and Post-Integration" to look at the standing of London (Ontario) Islamic School.

The third part examines the ways in which faith schools may view and respond to internal dissent, which refers to internal tensions and critics within these schools. It also explores questions that "elicit internal differences and point to questions at the core of the school's mission" (p. 10). Firstly, Pomson and Schnoor, argue for the interdenominational status of the Downtown Jewish Day School. This claim is based on the fact that this school is populated by students coming from a broader spectrum of Jewish denominations. Secondly, McDonough presents the Catholic Church's position on birth control and homosexuality. Finally, Ahmad argues for the role of Islamic schooling in promoting critical thinking and open-mindedness. Nonetheless, the final chapter, by Mintz, provides a summary and an analysis of the previous chapters; it draws our attention to the fact that faith-based schools are enormously diverse and should not be treated as a single entity.

This book is one of the few works to address Catholic, Islamic, and Jewish Canadian schools in one volume and to draw comparisons and conclusions from the work presented. Concurrently, the book demonstrates how these schools can and should function in a democratic plural society. It indicates that the key is in cultivating "an identity that is at once grounded in their own traditions and oriented toward the requirements of democratic agreement" (p. 103).

While acknowledging faith-based schools' challenges and their complex relationship with the Canadian society, the contributors look at the appropriate approach that these schools should embrace to deal with their internal dissent. The book as a whole is an advocate for religious schooling. Likewise, most of the articles, in particular Ahmad's and D'Souza's, seem to approach the subject from, what Zine (2008) calls, a *critical faith-centered epistemology*, which challenges the privileging of secular knowledge as the exclusive vantage point for teaching and learning. According to this epistemology, secular knowledge is no less dogmatic than religious-based knowledge and should be viewed as an ideological position rather than an unbiased assumption.

Besides McDonough's and Mintz's articles, this book does not include an *actual* opponent's view of faith-based education. It also restricts the focus to Catholic schools, which, unlike Jewish and Islamic schools, lend themselves to the scholarly scrutiny of the Church as a single entity. While suggesting

that faith-based schools are contributing to the evolving Canadian identity, the book does not directly address popular claims against religious schools such as divisiveness, indoctrination, intolerance, and the state's rights in education. The latter is addressed in Thiessen's book: *In Defence of Religious Schools and Colleges*, which provides a strong defense of faith-based institutions. Furthermore, in chapter six by Asmaa Ahmed, a statement such as "society would be diminished in the absence of well-operated schools dedicated to educating the young into their parents' religion" (p. 164) may seem as a strong claim that overemphasize the "undeniable" role of faith schools but, nonetheless, needs to be supported by more academic research on other Canadian faith-based schools. Regardless, the purpose of the book's components is not only to contextualize faith-based schools, but also to provide immense critique and analysis. That said, the issues covered in this collection make it a precious and valuable source for scholars and young researchers in the field of religious education in the Canadian Diaspora and elsewhere.

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