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INITIAL TEACHER EDUCATION

School Improvement and Teacher Education: Collaboration for Change

Edited by Carol Rolheiser

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editorial

SCHOOL IMPROVEMENT AND TEACHER DEVELOPMENT: COMPLEX, CHALLENGING, AND CONNECTED

Carol Rolheiser

Carol Rolheiser: Professor, Department of Curriculum, Teaching and Learning, OISE, and incoming Director of the Office of Teaching Advancement (July 2009), University of Toronto

School improvement is ultimately about the enhancement of student progress, development and achievements, so it not surprising that most research evidence points towards the importance of teacher development in school development. It has been shown that schools that are successful facilitate the learning of both students and teachers.

—Harris, *School Improvement: What's in it for Schools?*

School improvement is a complex and challenging process. Likewise, teacher development—the career-long continuum of teacher learning from pre-service through in-service—is complex and challenging. It takes substantial effort to ensure that approaches to school improvement enhance student learning and, at the same time, strengthen the school's capacity for change. It also takes substantial effort to create the appropriate conditions whereby teachers and school administrators have meaningful opportunities to concentrate on their own professional learning. While school improvement is grounded in the unique circumstances, environments, and needs of each school, teacher development is grounded in the unique needs and interests of individual adult learners and their learning communities. As Harris notes, “An essential component of successful school improvement interventions is the quality of professional development and learning. Collegial relations and collective learning are at the core of building the capacity for school improvement” (2002, p. 99).

When school and teacher education partners work together, they not only strengthen their relationships but also develop innovative approaches that support school improvement and teacher development simultaneously. This issue features collaborative projects that were designed with those goals in mind. The projects address the unique contexts, circumstances, and needs of all partners and reflect issues that are important not only in their particular environments but also for education in general. Ultimately, these collaborators are developing approaches intended to improve teaching and learning in schools and universities.

OISE School-University Partnership Projects: Principles in Action

Initial Teacher Education at OISE is guided by the following seven principles, each of which are demonstrated by one or more of the projects described in this publication:

- Teaching excellence
- Research-based and research-driven
- Cohort-based learning communities
- Coherence
- Faculty collaboration
- School/field/university partnerships
- Equity, diversity, and social justice

The School-University Partnerships: Research Into Practice initiative is one of many in OISE's Initial Teacher Education program; it is focused on enhancing learning experiences and strengthening partnerships between OISE's field partners and the university. First introduced during the 2002/2003 academic year, this initiative provides *research-based and research-driven* grants up to \$2000 to OISE initial teacher education instructors in recognition of exemplary projects intended to support and extend school-university relationships. The projects reap learning benefits for a range of stakeholders, including students in schools, teacher candidates, associate teachers, administrators, and teacher educators. The projects encourage inquiry, creativity, and knowledge building in the quest for *teaching excellence*, which I believe is at the heart of school improvement and teacher development.

This publication, *School Improvement and Teacher Education: Collaboration for Change*, is OISE's sixth in a professional learning series and features the most recent partnership projects. The articles in the issue describe research and

inquiry-based partnerships between OISE faculty and school-based educators who are working to be catalysts for change and advocates of effective practices that support both school improvement and teacher education.

As you read the articles in this publication you will see the application—in action—of the seven guiding principles of OISE's Initial Teacher Education program. The program faculty take pride in “walking the talk” of these seven principles, and they work with school-based partners to explore the opportunities and challenges of continual improvement. For example, several articles in this publication illustrate OISE's work in addressing issues of *equity, diversity and social justice*. The lead article by Jean-Paul Restoule focuses on the importance of fostering Aboriginal awareness, and the author shares some strategies that teachers and teacher candidates are using to bring indigenous cultural teachings into their classrooms in order to address the lack of awareness of Aboriginal issues. The following article by Antoinette Gagné and Stephanie Soto Gordon describes the authors' work with a group of secondary school English Language Learners and the resulting production of a two-part DVD entitled *Growing New Roots: Reflections of Immigrant Teenagers in Canada*. The article includes highlights of the students' testimonials regarding the positive impact their production work had on their sense of identity.

The next two articles also focus on issues of equity, diversity, and social justice by following a number of graduates of OISE's *cohort-based learning communities*. The article by Leslie Stewart Rose, Janet Markus, and Jeff Kugler, for example, examines the work and concerns of recent graduates of a cohort focused on inner

city education. The authors have interviewed these new teachers during their first year of teaching to explore the nature and scope of their transition into teaching, and to better understand the relationship between their understanding of anti-oppressive education theories and the enacted practice of teaching in a public school. As well, Jackie Eldridge, Terry Borczon, and Jo-Anne Wolfe follow some new teachers of another cohort into their schools and determine their feeling of preparedness in supporting students with exceptionalities. Special education—supporting the needs of diverse learners—has become increasingly important in schools and, therefore, a critical area of attention in teacher education.

The article by Judith Burt and Sue Wessinger, instructors in secondary education, focuses on the experiences of new teachers as they strive for *coherence* among the knowledge, skills, and competencies they developed during their pre-service program and later applied as in-service teachers. We learn about a network of new science and mathematics teachers and the mentoring by former OISE instructors who are interested in understanding how new teachers use the reform-based strategies that were introduced to them earlier in their OISE mathematics and science pre-service classes.

Two of the articles illustrate the principle of *faculty collaboration*. Cathi Gibson-Gates and John Duwyn collaborate to explore the infusion of interactive whiteboard technology into teacher education and curricular lessons in junior-intermediate classrooms. They work with teacher candidates and associate teacher partners to support collaborative learning between new and experienced teachers. Likewise, the article by Bathseba Opini and Carrie Chassels describes lesson study collaboration

and how this process supports improved teaching and learning in mathematics by building professional learning communities among teacher candidates and associate teachers.

As reflected by all the articles in this publication, the final project by Cathy Marks-Krpan and Rochelle Rabinowicz highlights the importance of *school/field/university partnerships*. The authors of this study examine ways that teacher educators can better support associate teachers in mentoring teacher candidates during their practicum experiences. They look at the challenges and benefits of effective mentorship, including the role of communication and provision of feedback.

All of the projects in this publication highlight OISE's commitment to the seven teacher education program principles, and reflect the enduring beliefs and actions that are aligned to them. The projects also demonstrate that by working together, OISE and school-based partners are strengthening relationships or building new ones that, over time, can contribute to the improvement of schools and the learning of educators across the teacher development continuum. While research does not provide one path or a blueprint for school improvement or teacher education, the knowledge base does provide "opportunities to learn from the work of others and strategies to consider in the effort to maintain cycles of improvement (Rolheiser, 2009, p. 2). We hope that the research projects highlighted in this issue will spark ideas for others engaged in similar cycles of improvement.

Acknowledgements

I wish to extend my deep gratitude to the many contributors to, and supporters of,

this publication—OISE instructors, teacher candidates, graduates, associate teachers, students in our partner schools, and school-university administrators. Your willingness to collaborate in school-university partnerships increases the chances that collectively we can better address the unique circumstances associated with school improvement while also supporting teacher learning across the continuum. Ultimately, both are essential in the improvement of student learning.

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project

FOSTERING ABORIGINAL AWARENESS IN SOCIAL STUDIES

Jean-Paul Restoule

Project Coordinator

- Jean-Paul Restoule: Assistant Professor of Aboriginal education in the Department of Adult Education and Counselling Psychology, OISE

Project Partners

- Toronto District School Board: Cathy Pawis, Aboriginal education principal
- Indigenous Education Network (IEN), OISE
- Graduate students: Conely de Leon, MA candidate, Department of Sociology and Equity Studies in Education, OISE; Nadia Salter, MEd candidate, Department of Adult Education and Counselling Psychology, OISE
- Undergraduate student: Carmen Teeple Hopkins, Aboriginal Studies, University of Toronto

Abstract

The aim of this project was to raise awareness of Aboriginal cultures among students in elementary and secondary schools, and teacher candidates at OISE. The process involved the administration of a student awareness survey that was created and initially distributed in 2000. The results of the survey in 2008 show that student awareness of Aboriginal issues remains low, with 80 per cent reporting they had inadequate opportunity to learn about these issues and 74 per cent reporting no understanding of current Aboriginal issues. A professional development symposium, *Kimaaciihtoomin e-Anishinaabe kikino'amaageyak* (Beginning to Teach in an Indigenous Way) was held in April 2008 to inspire teacher candidates to take action and to include Aboriginal examples and methods in their work. In this context, the project provided an opportunity for teachers to share best practices and advice. A resource kit produced for the conference is available from the Indigenous Education Network (IEN) and will continue to be updated by and for teacher candidates in future years.

Project Focus

- How does Aboriginal awareness among students in 2008 compare to that of students who took the Aboriginal awareness survey in 2000?
- How can the awareness of Aboriginal issues and their relative absence in schooling be increased among teacher candidates and their students?
- How can momentum and networks be developed with beginning teachers to address the lack of attention to and awareness of Aboriginal concerns?

Take a moment and try to answer the following questions that are part of the student survey on Aboriginal awareness.

1. List four First Nations and the approximate location of their traditional territory.
For example: The Mi'kmaq People were traditionally located in what is now known as New Brunswick and Nova Scotia.
2. How have Aboriginal cultures, histories, and perspectives contributed to shaping and defining Canada?
3. Are Aboriginal Treaty Rights recognized in Canada's Constitution?

During 2000 and 2001, members of the Coalition for the Advancement of Aboriginal Studies (CAAS) pulled together information on many of the key artists, events, politicians, issues, and cultural experiences that Aboriginal people know well and that a council of community members, including Elders, identified as important for all Canadians to know. From this information CAAS created the Student Awareness Survey (2007) and issued it to undergraduate students in mainstream universities and colleges across Canada, measuring awareness, attitudes, and knowledge of facts about Aboriginal peoples' histories, cultures, world-views, and current concerns. According to one of the disturbing findings, 67 per cent of undergraduate students who took the survey in 2001 may never have discussed in their elementary or secondary classrooms contemporary issues of concern to Aboriginal peoples in Canada. One goal of this project was to find out if there had been some increase in awareness between 2001 and 2008.

Stages of the Project

Presenting the survey at OISE

During the 2007/2008 school year, the Student Awareness Survey was presented in selected teacher education courses at OISE, and teacher candidates were encouraged to use the survey in their practicum placements. In two of my blended undergraduate and graduate courses at OISE, I invited students to participate in this research project for their final course assignments; if they were teachers or teacher candidates, they distributed the surveys in their classrooms and reported back on the response.

Administering the survey

Participating teacher candidates administered the survey during their practicum placements. After reading-level modifications were made, the survey was given to students (ages 8 to 18) in grades four, six, eight, ten, eleven, and twelve. As well, some practising teachers who were in OISE's graduate program distributed the survey to their classes and reported their findings. In all, seven teacher candidates, three associate teachers, and 12 participating teachers in 18 classes helped to administer the survey. The survey took about 90 to 120 minutes to complete. Half the time was allotted for students to take the survey, and the remaining time was used for debriefing. Since many of the open-ended questions were designed to be discussed, the debriefing consisted of answering and discussing the questions raised in the survey. It was important and ethical not only to provide the survey respondents with the correct answers to the factual questions raised in the survey but also to begin raising awareness in the classroom by provoking discussion about many of the issues deemed important by the Aboriginal community. According to one of the survey's goals, the debriefing served as a consciousness-raising tool; when it is done well, it can lead to transformative learning and social action.

Approximately 85 elementary students and 190 secondary students participated. In addition, 62 per cent of the students in both the elementary and secondary streams of OISE's Initial Teacher Education program were exposed informally to the survey when I visited their classes to talk about Aboriginal education. I used the survey questions to provoke discussion about colonialism in Canada, contemporary Aboriginal issues, and the rich teaching and learning opportunities Aboriginal cultures provide.

Reviewing the survey results

The research team was composed of IEN members who volunteered, as well as three BEd students, two graduate students at OISE, and one undergraduate Aboriginal studies student. One of the graduate students was selected from a pool of applicants in the competitive OISE Research and Development Graduate Assistantships. The team collected and inputted the current survey data into a web-based, descriptive, statistical analysis tool. The findings were compared to the relevant data reported by CAAS in their 2002 publication, *Learning about Walking in Beauty*.

Conference on Aboriginal issues

A special one-day symposium for teachers and teacher candidates was held at OISE in April 2008 with the aim to share the survey results and to inspire teachers and teacher candidates to bring indigenous cultural teachings into their classrooms. Close to 90 people attended the symposium. The symposium included presentations that provided creative ways to include Aboriginal issues, methods, and teachings in any classroom subject at any grade level. The purpose of the symposium, titled *Kimaacihoomin e-Anishinaabe kikino'amaageyak* (Beginning to Teach in an Indigenous Way) was to address the problem of the lack of awareness of Aboriginal issues in the Ontario curriculum. The symposium featured nine teachers and teacher candidates who had used innovative ways to bring indigenous issues into their

students' learning environments. The presentations included the following topics:

- Using indigenous stories and storytellers
- Understanding why Canadian students and teachers should learn about the Indian Act
- Learning how to incorporate indigenous social justice issues in the teaching of science, mathematics, business and accounting
- Teaching indigenous astronomy
- Introducing an indigenous perspective on bullying
- Navigating web resources, such as FourDirectionsTeachings.com and knet.ca
- Retaining student relevance and interest, with examples from a grade four teacher who infused methods of teaching and learning with indigenous approaches.

Seven of the nine speakers were non-Aboriginal, and most were new or beginning teachers who were committed to this work; their presentations demonstrated that everyone can be responsible for learning and teaching about indigenous issues.

Data Collection and Analysis

The survey included several true/false and multiple choice questions, as well as open-ended questions and Likert scales for degrees of agreement with statements such as "I have had opportunities to learn about Aboriginal people in school." Respondents were also asked to rate how much of their knowledge about Aboriginal people and issues came from different sources such as school, media, own reading, family, and others (from not at all to very much). The data were collected in 11 different classes. Four at the elementary level included a grade four class, two grade six classes, and a blended grade seven and eight class. The secondary school classes included five English courses from grades nine, ten, and eleven; a Native studies class; and a law class. Approximately 275 surveys were conducted.

General awareness of Aboriginal issues

A significant purpose of this project was to discover how much had changed in student awareness of Aboriginal issues since the CAAS administered the survey in 2000 and 2001. In general, students in 2008, as did students in 2000 and 2001, reported that they know little about Aboriginal people.

Among elementary students responding in 2008 to the question, “Name something you know about Aboriginal people or culture,” 45 out of 85 could not respond at all, and several responses contained misinformation. However, 70 per cent agreed with the statement, “I had a good opportunity to learn about Aboriginal/First Nations history and culture in school.” The issue, then, is why can so few name anything about Aboriginal culture? Responses of the secondary school students show that they realize there is a gap between their knowledge of the issues and what information is provided in school. In one class 13 of the 15 secondary students responding to the question, “Name something you know about Aboriginal people,” wrote, “don’t know” or provided misinformation, and, of these, four students were taking a Native studies course. Sixty-nine per cent of these secondary students reported that they did *not* have a good opportunity to learn about Aboriginal/First Nations history and culture in school.

The persistence of stereotypes

Ontario schools are significantly challenged when it comes to treating Aboriginal people, cultures, and concerns as an important part of contemporary Canada. The relevance of Aboriginal issues is still relegated to the past, as the subject of history, and the assumption remains that Aboriginal people have vanished. Ironically, many respondents could name the incidents at Caledonia as an example of Aboriginal concerns. One teacher candidate, who worked with elementary school

students, incorporated an additional exercise into the survey, asking students to draw images of Aboriginal communities and people. Although they were only nine or ten years old, the students drew tipis, bows and arrows, and wild food cooking on bonfires. Many of these students, when naming an Aboriginal community nearest to their school, stated Black Creek Pioneer Village; they had clearly not understood the interpretive nature of the site, nor its depiction of historical lifeways. On the other hand, it was encouraging that numerous respondents named “Toronto” as the nearest Aboriginal community, since those who produced the survey had intended that those who took the survey in Toronto would name Scugog, Mnjikaning (Rama), or Ohsweken (Six Nations). Respondents did well in answering questions about Nunavut and the Inuit. One teacher surmised the reason for this is that the Ontario curriculum actively promotes learning in this area because of changes to Canadian geography.

Native studies courses

Since the initial CAAS survey, the provision of Native studies courses has increased in secondary schools in Ontario. In 2000 there were only ten such courses offered across Ontario. A Native studies class in east Toronto that participated in the current survey in 2008, did better than the average survey respondent; however, they answered only about half of the content questions correctly. This finding suggests that when the Ontario curriculum attempts to address Aboriginal issues, it may not be doing so from an Aboriginal perspective, or by taking the Aboriginal community’s cues as the guide to what is important, which the survey does.

Challenges

The attempts to distribute the survey in many school boards were met with respectful reasons for declining. Although members of these school boards were supportive of the

survey and its goals, they could tell us without administering the survey that their students and teaching staff would have very low awareness of the material, at least from what was offered in their school. For instance, one of the IEN members who teaches in an eastern Ontario district approached several principals she had worked with recently and requested an opportunity to conduct the survey. In one town where the principal and the volunteer have met on numerous occasions to develop more Native studies material for use in secondary school classrooms, he declined to participate in the study. He said, “We already know that the students don’t know enough. I don’t think even the teachers could answer these questions.” Also, in one of the Toronto schools where a teacher candidate was placed, her associate teacher encouraged the distribution of the survey as a class lesson but asked us not to include the answers in our data. Her reason was that she “knew” the students wouldn’t know the answers and she didn’t want to “sway the findings in a negative way.” She clearly felt that her class answers would be outliers among all the classes participating. However, it was the lone Native studies class that participated that performed differently from the norm.

Impact

This research project provided an opportunity that encouraged growth and learning for everyone who participated. Many teachers and students reported that taking the survey is, in itself, a transformative experience.

The CAAS report (2002) indicates that many students felt ashamed and angered that they had not learned more about Aboriginal peoples in school, and their response moved them to do something about it. In fact, exposure to the survey did increase awareness of the issues and concerns of Aboriginal people, even

without further planned lessons or follow-up. The survey debriefing became a lesson or teaching in itself. This is because the answers to many of the questions are not just factual; they require discussion. This activity became a personal motivator for many students and teachers to strive to learn more.

One teacher shared the survey with other teachers in her staff room, and found that this piqued their interest and desire to address their lack of knowledge. Among the teachers and students participating in the survey, it was common to hear comments such as “I never knew this stuff before, and it’s a shame I didn’t learn it in school,” or “Every school should be including this material.” Although some students responded with indifference to the survey questions (e.g., “why is this important to my life?”), many were galvanized to learn more; some even pushed their teachers and schools to change. One teacher reported that her students, after taking the survey, demanded the teaching of indigenous perspectives alongside the explorers unit in grade six social studies. In a small high school class where the students and teacher negotiate the content of their studies, after taking the survey they agreed to spend two weeks looking at First Nations’ treaty relationships with Canada.

Kimaaciitooohmin, the daylong professional development workshop for teachers and teacher candidates, was a success. In post-workshop evaluation surveys, all respondents said the day was helpful; dozens of teachers requested the event be offered annually, or even once a term. They also suggested expanding the day into an Additional Qualifications course, or a mandatory workshop for all teacher candidates. A resource kit for teachers was created for the event, and all participants were asked to supplement it with resources such as a website, book, or video that other teachers would find helpful.

Implications for Teacher Education

Teachers' reasons for not addressing the issue of raising awareness of Aboriginal issues in their classrooms often include "I won't be teaching on reserve," "I won't have Aboriginal students in my classes," or "I'm not Aboriginal so I don't have the right to teach this stuff." During this project, these reasons were challenged, and instead of "guilting" teachers into action,

Kimaaciiitohmin provided clear and tested examples of positive activities that all teachers can try, no matter how much or how little they know about Aboriginal culture. This project demonstrated that teachers want to know more about Aboriginal issues and contributions; they realize that this area of concern is often neglected, misunderstood, and misrepresented, but they struggle with how to deal with it.

Teacher education programs have a responsibility to take on this neglected area, and one way to do this is to provide new teachers with the confidence to teach about Aboriginal peoples. Until educators foster a greater awareness, understanding, and education about Aboriginal issues among the Canadian public, relations between Aboriginal and non-Aboriginal people in Canada will not improve. Education has great potential to aid in resolving conflicts peacefully in the areas of land, resource access and use, and also race relations in general.

Next Steps

As this project clearly shows, Ontario's elementary and secondary school students are still not learning the material that Aboriginal people deem necessary for improving the relationship with Canadians. Only 20 per cent of the responding students said that they had adequate opportunity to learn about Aboriginal history and culture in school; 26 per cent of all survey

Practical Applications

The CAAS survey and its revised version for this project make an excellent introduction to Aboriginal studies, no matter the grade level or subject matter. The survey itself is a teaching tool. It raises awareness of important issues even if a teacher goes no further than introducing its questions.

Teachers can combine survey questions with several of the approaches shared at *Kimaaciiitohmin* to develop deeper understanding by students of Aboriginal issues:

- teach from indigenous texts written from indigenous perspectives;
- have the courage to admit to students what you don't know, so that you can learn together in a spirit of co-inquiry;
- make contact with members of the Aboriginal community and invite them to the class and bring the class to the community;
- try using circle-teaching approaches in your classes as a way of discussing the course material, and even more importantly, your students' emotions;
- give power to the students in setting class rules of conduct and engage in peer mediation;
- introduce students to web resources such as fourdirections.com, knet.on.ca, and the many portal sites that are available;
- provide documents like the Indian Act and treaties for classroom analysis and discussion, because all Canadians need to understand the basis of their relationship with Aboriginal peoples and the land;
- utilize indigenous social justice issues in the teaching of science, maths, business, and accounting.

respondents said that they understood current issues between Aboriginal and non-Aboriginal peoples in Canada. This indicates that there is much educational work to be done.

To this end, teachers can make changes and interpret the curriculum broadly, finding the spaces where indigenous issues and knowledge can be introduced and made a part of the learning of all.

The *Kimaaciitohmin* symposium demonstrated how teachers—even with very little experience in the subject—can bring indigenous issues and knowledge to students in urban areas who don't see their connection to Aboriginal people or concerns, and across a broad spectrum of subject areas and grade levels.

One presenter at the conference pointed out that content is important, but kids forget it as soon the test is over (if not sooner). He focused his presentation on how to create a lasting impact by making indigenous methods and knowledge the hidden implicit curriculum. He used circle-teaching approaches and taught geometry by integrating art and indigenous symbols. The result? Students looked forward to their Monday morning opening circle and Friday afternoon closing circle and really liked that part of each week. It is necessary for Canadians to realize that indigenous knowledge is important to everyone's contemporary life concerns and issues (not only important for Aboriginal people). Gaining this awareness might be one way to work toward restoring right relations among Canadians and indigenous peoples.

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Jean-Paul Restoule is an assistant professor of Aboriginal education in the Department of Adult Education and Counselling Psychology, OISE; he is Anishinaabe and French, and a member of the Dokis First Nation. Jean-Paul's research interests include access to post-secondary education for Aboriginal people and the development of Aboriginal cultural identities in urban areas.

Note: To obtain a resource kit, contact Jean-Paul Restoule: jrestoule@oise.utoronto.ca

project

GROWING NEW ROOTS: REFLECTIONS OF IMMIGRANT TEENAGERS IN CANADA

Antoinette Gagné and Stephanie Soto Gordon

Project Coordinators

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- Stephanie Soto Gordon: ESL teacher and Curriculum Leader of ESL and International Languages at William Lyon Mackenzie Collegiate Institute, Toronto District School Board

Project Partners

- William Lyon Mackenzie Collegiate Institute, Toronto District School Board: Helene Green, Principal
- English Language Learners from the ESL drama class and the drama club, William Lyon Mackenzie Collegiate Institute
- Several cohorts of teacher candidates at OISE

Abstract

Working in their English as a Second Language (ESL) drama class and drama club, a group of about 20 English Language Learners (ELLs) prepared short skits that focused on challenges they had faced either at school or beyond and that illustrate how they had worked through these challenges toward a positive outcome. Their stories are important because, on average, 17,000 ESL students come to Ontario each year. This project produced *Growing New Roots: Reflections of Immigrant Teenagers in Canada*, a DVD that has two parts. The first part relates the immigration and integration stories of a group of immigrant ELLs based on their struggles with food and family, friends, classroom, racism, parents, and endurance. The second part includes testimonials from students who contributed to the development of two of the DVDs in the *Growing New Roots Series*; these testimonials highlight how the making of the DVD had a positive impact on the ELLs' identity. The newly produced DVD has been used in workshops with several groups of teacher candidates at OISE to assist their learning about how to meet the needs of ELLs in their classrooms.

Project Focus

- What are the issues that challenge teenaged English Language Learners (ELLs) as newcomers?
- What are teenaged ELLs' coping strategies for these challenges?
- How does being an agent of change empower teenage ELLs?
- How can this up-to-date multimedia resource focused on ELLs be used most effectively in teacher education programs as well as in elementary and secondary schools?

The number of ELLs in K-12 schools continues to grow. While many of these students speak several other languages, they are learning English as an additional language. Newcomers move to host countries for a variety of reasons: to enhance their economic situation or education by choice, or as political and/or religious refugees (Trueba, Cheng & Ima, 1993). Regardless of the reasons for immigration, the process of adjustment is challenging for all. A Toronto-based study shows that ELLs must deal with far more than simply learning a language (Soto Gordon, 2009).

A study of high school ESL students in Calgary found that the term ESL embodies a stigma within the school. ELLs were perceived as lazy, unintelligent, and awkward (Derwing, Decorby, Ichikawa & Jamieson, 1999). In addition, ELLs are sometimes presented and perceived as inferior members by the dominant culture (Skutnabb-Kangas, 1981, cited by Spener, 1988). This labelling and sense of inferiority can shape how students feel about themselves when in school and in the community. Students' language proficiency seems to depend on their acceptance into the host culture (Kanno & Applebaum, 1995). As agents of socialization, teachers may be a student's first contact with their new culture (Wong-Fillmore & Snow, 2000) and they need to assume responsibility for creating a safe and caring learning environment for ELLs.

According to Darling-Hammond and Bransford (2005),

Most teachers do not have the same cultural frames of reference and points of views as their students ... [T]he importance of connecting new learning to prior experiences ... suggests that teachers will

need knowledge to understand students' backgrounds and experiences in order to structure meaningful learning experiences for all of them (p. 237).

However, when teachers convey a genuine respect for their students' experiences and treat their problems, interests, opinions, and views as important, they are helping their students see themselves as valuable contributors to school and society (Katz, 1993).

Teachers need to learn about the experiences of ELLs so they can foster language development and support the identity formation of ELLs in their new country. In the 2006 final report, *Preparing Teachers for Tomorrow*, the Ontario College of Teachers underlines the importance of teachers meeting the needs of ELLs and diverse students across all grades. In 2007 the Ontario Ministry of Education released *English Language Learners/ESL and ELD Programs and Services: Policies and Procedures for Ontario Elementary and Secondary Schools, Kindergarten to Grade 12*, a document that highlights the need for teachers to know how to work with all types of ELLs.

The students participating in this project are from a variety of countries: Armenia, Azerbaijan, Bulgaria, Costa Rica, Ecuador, Ghana, India, Iran, Israel, Romania, Russian, and Ukraine. They range in age from 15 to 20 years and are in grades nine to twelve. They are either landed immigrants or permanent residents.

Growing New Roots: Reflections of Immigrant Teenagers in Canada, the DVD and resource guide produced for this project, is the fourth in the *Growing New Roots Series*. In particular, it builds on the success of the DVD entitled *The Voices of Immigrant Teenagers in Canada*. The coordinators of this project collaborated on producing this second DVD focusing on the experiences of immigrant teens.

Stages of the Project

Determining what teachers need to learn about ELLs

The project coordinators worked together to identify the needs of pre-service and in-service teachers, in terms of their work with ELLs, as well as the possible topics and themes to be included in a new DVD for the *Growing New Roots Series*.

Developing themes and narratives

With the permission of the parents and the support of the principal, over the course of one term, Stephanie worked with a group of ELLs to develop their confidence and English language proficiency such that they would be able to participate in the development and production of the new DVD. Under Stephanie's supervision as the ESL drama teacher and drama club sponsor, a group of about 20 ELLs prepared short skits and narratives focusing on challenges they had faced and how they had worked toward a positive outcome. The ELLs drew confidence to voice their experiences in part from seeing the first DVD, *Growing New Roots: The Voices of Immigrant Teenagers in Canada*. Seeing the DVD prompted discussion about how their experiences were in alignment with their fellow ELLs in the DVD. Stephanie also highlighted that they are a part of a greater cause to educate others on their experience as newcomers and to motivate their ELL peers to feel empowered. Throughout the term students were required to reflect on their own immigration experiences, bring their reflections to class, and share their experiences with other ELLs. They each chose the themes that had impacted them the most, and then they joined with other ELLs who shared similar themes. Subsequently, they organized the points they wanted to highlight in their individual groups and decided on a logical order for presenting their views on a particular theme. Therefore, the DVD themes reflect the ELLs' feelings, ideas, and suggestions for the overall content of the DVD.

Filming and editing

Toward the end of the term students brought their experiences to life through a filmed performance. Kurt Visser, the videographer who was also involved with the other DVDs in the series, filmed the students at school over a four-to-five-day period and then worked with the project coordinators to edit the digital footage.

Viewing the product

A few months after the DVD had been produced, the ELLs who had contributed to the project had an opportunity to view the DVD with classmates and family members. In addition, teacher candidates in various cohorts of the Bachelor of Education and Master of Teaching programs at the University of Toronto viewed the DVD and provided feedback.

Challenges

Certain themes created challenges because the ELLs were anxious about offending the adults in their lives. For example, challenges in the classroom with teachers and difficulties with parents were the most sensitive issues. Regardless, these challenges served to teach students how to choose their words carefully while staying true to their feelings.

Data Collection and Analysis

The purpose of this project was to determine the nature of immigrant experiences and the way ELLs respond to various challenging situations.

The participating students wrote short narratives, in collaboration with their peers, to highlight the challenges they face inside and outside of school. They also highlighted the strategies they adopted and the contextual factors that helped them overcome complex situations. The resulting 25-minute DVD and resource guide for teachers contains a series of case studies inspired by the lives of the ELLs involved in the project.

The themes include relationships with parents, challenges of learning English, finding friends, unfamiliar food, different clothing, a colder climate in Canada, and experiences with racism as well as the importance of not giving up. The case studies discuss how the students' identity was impacted by their participation in this project, not only in the school but also in the community.

After working with the ELLs and then editing their narratives over a period of several months, it became apparent that the DVD development process had a profoundly positive effect on the ELLs. As Cummins explains, "Students whose schooling experiences reflect collaborative relations of power participate confidently in instruction as a result of the fact that their sense of identity is being affirmed and extended in their interactions with educators" (Cummins, 2000, p. 44).

The following excerpts from the film provide examples of the ELLs experiences of immigration and integration into a new society. The participants are of different ages, genders, and countries of origin, but they have in common the fact that they had lived in Canada for less than two years at the time of filming.

Wanting to return home

The only thing that I wanted to do was to go back to my country. Even one day I thought, I don't care if I don't have any profession in the future, I just wanted to go back to my country. The only reason why I never gave up was my mom. She used to work all the night to give us everything. Now I say thanks God, because most of my grief has gone. My family is always helping me, I got my friends in the school and I found a teacher who's always helping me, and she is just there when I need her.

Difficulties with adjustment and negative attitudes of others

Some of the difficulties that I had when I came to Canada was the language and making friends. It was very different for me because I did not understand my teacher, any words my teacher would say, and people that were trying to be my friends. The most challenging thing was getting over the negative attitude for many people. It was very hard for me. My self-esteem came down. My positive attitude was gone. I really wanted to go back to Bulgaria. I knew it was going to be hard, but I never knew I was going to be out of home. When I came here it was really hard. I was really shocked and surprised by many people. They were really negative and mean. I was trying to fit in by doing crazy stuff such as putting on make-up, wearing crazy clothes that I would never wear in my life. It was just very hard, and they would just look at me and laugh back. It was very hard for me. Again, my positive attitude was gone. I just wish that people would treat me the way that I deserve to be treated and have more positive attitude when newcomers come.

Silenced

When I came to Canada I faced struggles and fortunately found solutions to overcome these struggles ...[T]he most difficult problem for all immigrants to overcome is language. As for me I was afraid to express my point of view and my opinion because I didn't know how my classmates would accept it. Also, I was afraid to ask questions during the class because I thought that my classmates would think that I'm stupid.

Confidence, communication, racism

To overcome many problems you have to be self-confident, at least do not pay attention to other's reactions, and you have to also be involved into sports, um all people

respect power and strength, and also it is the fastest and easiest way to make friends. Also you have to sit with persons who speak your own language because this is really helpful, and um, unfortunately many teachers do not allow to speak in class in any other language except English. So, I think teachers must let newcomers to speak in their own language, so it will help them a lot in their studying. Also, you have to be aware that every problem is temporary and that it won't last forever. And last, and most important solution is be as you are. Unfortunately, some people find negative ways to overcome the problems, and these people began smoke and drinking and be part of bad companies. They do it because they want to gain some new status and to make friends. Also, we immigrants are afraid to express our own values of our culture because we don't know how Canadian society will accept it. But most of cultures, they have almost the same values as Canadian society has. And we do not behave in new place as we used to behave in homeland, because we don't know how our new society will accept our new behaviour. Discrimination and racism often happens to us. It is nothing for others, but we do feel it.

Relationship with parents

When family moves to different countries, children and their family suffer many problems; for example, children will lose their privacy because parents can't afford to buy a big house or apartment to rent because of um financial problems. In order to solve that problem, they can go to library, go to park, or somewhere else where they can get alone time. And the other example, children have trouble with the behaviour in the family. In school the teacher tell to be loud and speak up, and in house you get to be quiet and think about other people, and it will get

difficult for children to manage it. In order to solve that problem you can tell your parents that it's really hard to manage it, and if you are really afraid of them, just write a letter, and it will explain them. If you're really afraid of them, tell your teacher, and your teacher will talk for you. That will solve your problem, and thank you for listening to me.

Impact

Although the DVD that was produced is useful for pre-service and in-service teachers in expanding their understanding of the issues and experiences of ELLs, it was the ELLs involved in this project who benefited most. Seeing the project move from idea to product, these students gained a sense of what is possible and began to feel confident about their abilities to contribute to Canadian society in important ways.

It is noteworthy to see the changes in the students' comments over the course of making the DVD. Prior to participating in the DVD, students felt withdrawn, awkward, fearful, and isolated.

Before participating in the video, *Growing New Roots*, I remember myself being shy and depressed, most times in and outside of school. I was going through a variety of emotions before I finally made my choice to participate in the video.

Before doing this video, I was new to Canada, so I felt very different to my friends, because I felt that they had been here so many more years, so they were more developed than me.

Before this activity, I was afraid to talk to people, I didn't trust myself, and I didn't like to go out with anybody.

Before doing the video life was very hard. I didn't know enough English, and I didn't have friends at all. I didn't know anything about the culture.

During the process of making the DVD, students began to feel connected, proud, and aligned to other newcomers.

During the video, I began to connect with other people in the school. I made many friends and I felt I was bringing something useful to other people.

During the shooting of the video I was flattered for being chosen to represent such a great number of people, but at the same time it was this responsibility because of the importance of this video to so many actors, parents, teachers, but most importantly the new coming to Canada students.

After taking part in the DVD, students became empathic, happy, and confident.

After participating in the video, I became more understanding and sympathetic to other people for problems and hardships. Of course I was proud of myself because I knew I had contributed to a very good cause.

After doing the video, I feel good about it because I feel that people can help themselves too, the same way that I did.

After this activity, I will be very happy because I will make other people understand us and the way we feel. And the most important thing, is that now I believe in myself.

Growing New Roots: Reflections of Immigrant Teenagers in Canada also had a positive impact on the teacher candidates who viewed the new DVD: They learned what it is like to be an ELL in an Ontario school and the importance of the social and affective facets of learning.

Following are key themes illustrated by comments from the teacher candidates:

1. ELLs need a nurturing classroom environment as they struggle with many issues, including bullying and discrimination.

I have been so focused on presenting content and ensuring student comprehension that I had not realized how important it is to create a safe learning environment for my students and especially for the ELLs. I had no idea just how prevalent racism and bullying are. I was shocked to find out that so many ELLs had experienced discrimination of different kinds.

2. ELLs want educators to value their first language and culture as well as to recognize their challenges as newcomers.

I didn't know how important it was to an ELL that I know about their backgrounds and experiences as immigrants to Canada.

I learned about the frustration of some ELLs who feel silenced in their classes.

3. Teachers can play a role in helping ELLs overcome many challenges they face as newcomers.

It was great to hear the kids talking about strategies they have used to overcome their challenges as well as about what I can do as a teacher to help them.

Implications for Teacher Education

As a result of the growing number of newcomer youth in English-speaking, immigrant-receiving countries, the number of resources to support ELLs has dramatically increased in the past 10 years. However, there is still a need

for context-specific resources that contain both narratives and strategies, and are adapted to the Canadian school system and teacher preparation institutions.

Growing New Roots: Reflections of Immigrant Teenagers in Canada is available online at the ESL Infusion website (eslinfusion.oise.utoronto.ca). This enables teacher educators, teacher candidates, and practising teachers to easily access both the video clips and resource guides for use in professional development group sessions or on their own.

When the DVD is used at the beginning of a course or professional development session, it is an effective way to help teachers become aware of the need to develop skills and acquire knowledge to support ELLs as they navigate the school system in their new country. The true stories of the ELLs, written and performed by the students themselves, act as a powerful call to action for practising teachers and teacher candidates.

Next Steps

As ELLs are a very diverse group, it is important to continue to work collaboratively with them to develop new multimedia resources that will let their many stories be heard by educators. Through the production of the new DVD, we have seen that the ELLs who participated in the project benefited. In addition, we discovered that it is important not only to give students a voice, in terms of expressing their needs, but also to explain to teachers what teaching strategies are most effective for ELLs in different contexts, particularly because this type of information is generally not included in resources for teachers. In future we would like to develop new productions that explore in greater depth particular themes from the *Growing New Roots: Reflections of Immigrant Teenagers in Canada* DVD. These

Practical Applications

The DVD can serve as part of an orientation session for newcomer English language learners either in their ESL classes or through Student Services. By viewing this DVD, newly arrived ELLs may feel empowered and less alienated when they see that their peers share in their struggles and strive to overcome these challenges.

Also, teachers of classes with native-born Canadians can show this DVD to promote sensitivity toward the ELLs' struggles and to foster a more inclusive school culture.

Growing New Roots: Reflections of Immigrant Teenagers in Canada along with the first DVD, *Growing New Roots: The Voices of Immigrant Teenagers in Canada*, may be used as springboards for motivating ELLs to look for other creative ways to bring voice to their experiences, such as through art, music, theatre, and cultural festivals.

include building relationships with Canadian-born students, becoming Canadian while remaining true to one's roots, and dealing with discrimination of various kinds.

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group of teachers who has viewed the *Growing New Roots: Reflections of Immigrant Teenagers in Canada* DVD has confirmed the usefulness of the resource in supporting the development of their understanding of how to meet the needs of the ELLs in their classrooms.

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project

TRANSITION TO TEACHING: NEGOTIATING FIRST YEAR EXPERIENCES IN INNER CITY SCHOOL CONTEXTS

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Project Partners

- Graduates from the Inner City cohort, Elementary Teacher Education Program, OISE

Abstract

This research project investigated the experiences of OISE's Inner City cohort graduates during their first year of teaching in an inner city school. Research questions explored the nature and scope of their transitions from the initial teacher education experience to their first year of teaching, and the relationship between the foundational anti-oppressive education theories of the Inner City cohort curriculum and the enacted practice of teaching in a public school. This inquiry explored the ways new teachers develop their identities as teacher-activists in an inner city environment and how new teachers enact their understanding of teaching for equity, diversity, and social justice. This research tracked the experiences of four first year teachers working with students in elementary grades through a series of interviews and journal entries. The stories that the new teachers chose to tell reflect the challenges in constructing knowledge-of-practice and also in negotiating the socio-political structure of schools. Their stories express a call for effective mentoring that supports them in developing the confidence to take risks. The data reflect the ways that storytelling plays a role in identity production, which is an important process in the journey of activist-teacher development.

Project Focus

- What are the experiences and challenges for new teachers in their transition from their initial teacher education experience to their first year of teaching in inner city school contexts?
- What is the relationship between the foundational anti-oppressive education theories of the Inner City cohort curriculum and the enacted practice of teaching in public schools?

A body of educational research informs the understanding of inner city teacher education. It has examined the preparation of teacher candidates to teach within an anti-oppressive framework, as well how experienced teachers work within inner city classrooms. However, there is little documented anecdotal evidence that describes the transition made by graduates of a specialized inner city program into the field. This project builds on previous research that examined the experiences of teacher candidates preparing for careers in inner city contexts (Stewart Rose, 2008). The researchers for this project serve in a variety of roles in initial teacher education—instructors, administrators, and directors—and they have an interest in preparing teacher candidates for careers in inner city contexts.

The four participants in this project were recent graduates of the Inner City cohort of OISE's Initial Teacher Education elementary program, a cohort designed to “focus on social justice through an anti-oppression agenda which addresses the systemic power imbalances both in the educational system and society as a whole” (Stewart Rose, 2007). The project focused on the participants' experiences during their first year of teaching in an elementary inner city school in Toronto. The study was constructed to encourage new teachers to describe their experience as they tried to make sense of the events, situations, personalities, and structures around them.

Stages of the Project

Starting out

The new teacher participants were selected based on their school's ranking on the Toronto District School Board's Learning Opportunities Index. The Toronto District School

Board (TDSB) ranks its schools from most to least “needy” on their Learning Opportunities Index (LOI), which is generated using the following variables: neighbourhood family incomes, housing type, lone-parent composition, education of parents, immigration statistics, and family mobility (Toronto District School Board, 2004). An email was sent to all 63 of the Inner City cohort graduates describing the research and inviting them to participate. Only those who were employed in schools ranked from one to 100 were considered for participation.

Interviewing

During the project each of the four participating first year teachers were interviewed one to five times. These one-on-one interviews encouraged participants to speak at length about their experiences of being a new teacher in an inner city school setting. The process allowed for open-ended questions to encourage participants to “tell their story” using description leading to reflection.

Data Collection and Analysis

Guided by the phenomenological work of Max Van Manen (2003), this project was designed to capture and identify emerging trends through qualitative research analysis. Data were collected using one-on-one interviews, reflective writing, and telephone and email dialogue. The new teacher participants described the events, situations, challenges, and successes that they experienced in their classrooms, not only with their students but also with parents, other teachers, and school administrators. Their stories capture emerging and evolving perceptions of their experiences. Data analysis was guided by a conceptual framework of types of teachers' knowledge, and the significant themes that

emerged included the negotiation of a new professional identity, challenges encountered in the transition year, and the development of knowledge-of-practice.

Types of teacher knowledge

Cochran-Smith and Lytle (1999) developed a framework for exploring different conceptions of teacher learning. Their categories assist in differentiating the experiences and growing knowledge base for new teachers: knowledge-for-practice, knowledge-in-practice, and knowledge-of-practice. The first concept, *knowledge-for-practice*, refers to the traditional subject-content knowledge. This type of knowledge is conceptualized as predetermined, created by non-teachers (university researchers, for example) and received from outside the teacher's domain. It emphasizes notions of expert and novice teaching. In this project, new teachers identified this type of knowledge as it related to their administrative role within the school, and the type of knowledge they felt they were expected to know related to teacher-tasks such as test preparation, clerical functions, subject-content progression, and school rule enforcement.

Knowledge-in-practice is often referred to as "best practice." This view recognizes the wisdom teachers draw on when making decisions about their courses, curriculum, students, and classrooms. Knowledge-in-practice relates to action research and knowledge produced by teachers for teachers. In this view, teachers improve teaching by using the strategies, behaviours, and objectives of perceived expert teachers. New teachers identify the research-based theories and practices, which they learned in the OISE initial teacher education curriculum and instruction courses and practicum experiences, as their frame of reference for

best practices in the initial stages of developing a teacher identity.

The third concept, *knowledge-of-practice*, emphasizes that, through inquiry, "teachers make problematic their own knowledge and practice as well as the knowledge and practice of others and thus stand in a different relationship to knowledge" (Cochran-Smith & Lytle, 1999, p. 273). This conceptualization of teacher learning recognizes knowledge as emergent, situated, and as an ongoing process of social, constructivist, critical, and fluid dynamics that is negotiated between teachers, students, and the curriculum. Knowledge-of-practice does not distinguish between the expert and the novice, but rather recognizes the contributions and responsibilities of shared-knowledge building in professional learning communities. Learning knowledge-of-practice through a critical lens involves examination of social and political aspects of curriculum, teaching, and learning. Through critical pedagogies that challenge oppression, hidden curricula, hegemony, and the status quo, teachers disturb assumptions by agitating notions of self-determination, control, absolute truth, and expertise.

Analysis of the dialogue data for this project, through the lens of the three types of teacher knowledge, has led to two significant findings: (1) the stories almost entirely reflect the challenges in constructing knowledge-of-practice and the negotiation of the socio-political structure of schools; and (2) identity production, through reflection and storytelling, plays an important part in constructing knowledge-of-practice, which is highlighted by the questioning stance of the activist-teacher toward the curriculum, relationships, and "the system."

Negotiating a new professional identity

The participants described how they arrived on the first day of school with their social justice values firmly in place and eager to bring their ideals and ideas into the school to advocate for, and serve, students and families. However, they were unsure about how to navigate their role as a teacher-activist among a professional association of more experienced teachers, who, from their perspective, do not necessarily share their values or their vision for change. In a complex and demanding environment, they described this social justice work as “risky business,” and they experienced feelings of vulnerability, confusion, and isolation as activists at the beginning of the school year. They experienced challenges to find or create a safe, non-judgmental space for themselves. They discovered that the key to overcoming this emotional challenge is finding a connection to a “listening ear,” someone who not only supports their work but also encourages and supports their risk taking and their activist-teacher identities. They found the needed resources and supports from their school board’s equity committees, other “equity teachers,” an OISE professor, or friends and family; however, support from the person responsible for their re-employment (a principal, for example) appears to be instrumental in solidifying the courage to take risks.

Throughout the participants’ stories are the tensions of negotiating a new professional identity in a complex social network. Central to their struggles are their experiences in working toward change from their liminal position—a position of transition and limited power—within a school setting where structures, personalities, relationships, and roles are socially pre-negotiated. The participants’ stories reflect their strong sense of a novice professional status and their awareness of complex and established power relationships and protocols.

Without the status to renegotiate the power relationships, they reported difficulty in negotiating the established norms of the complex social and political school networks, and they had no immediate sense of belonging to the teaching staff.

The intersection of their personal and professional identities further added to the complex negotiations of positionality within established political networks. Marginally positioned identity markers within categories of race, class, and sexual orientation complicated their struggles to resist powerful pressures to conform to strong hegemonic images of the traditional teacher. Feelings of isolation, powerlessness, and frustration accompanied their early attempts to be themselves. One participant commented, “I didn’t know any of this stuff [school procedures] and there [are] policies and cultures in schools that teachers take for granted. I have found the environment very political.” As a result of feeling powerless and undervalued, another participant remarked, “I really closed myself off because I was feeling pretty awful about the way things were going.” A third new teacher said, “I felt sad, paranoid, judged and angry.”

Challenges in the transition

According to one participant, the emotional struggles are the biggest issue for a new teacher in an inner city school. She explained that it was through the experience of “listening to the stories of the students” that she understood what “needed to be done” and what role she would be able to play in their lives.

To explain the multiple demands emerging in her roles as teacher, administrator, mentor, and disciplinarian, she said, “It’s a whole bunch

of different expectations and different hats on you, and you have to change them quickly ... you have to be able to negotiate those boundaries.” After a period of intense emotional and psychological stress, one participant came to terms with feelings of defensiveness, frustration and isolation, “I started to listen to the student narratives and reflected on my own narrative.” Reflecting on her own needs of learning to teach, further developing her understanding of her role as a teacher, her feelings of powerlessness intensified because she could not “fix” the student’s problem.

Another participant said the biggest challenge to any new teacher is “seeing things you didn’t expect” and coming to terms with the idea that you don’t have all the answers. Another reflected that she needs to “calm down ... I need to learn the vocabulary to say the things I want to say in better ways ... I need to show respect for others’ (teachers/administrators) experience.” The stories highlight the significant challenge presented by the unpredictability of schools; yet, the new teachers have an ongoing desire to understand and move more effectively through the political channels and “the bureaucracy” to support student success in a stressful setting.

Development of knowledge-of-practice

A significant finding is the teachers’ development of knowledge-of-practice and their emerging identities as advocates for students and for change within a complex institution.

The participants described how they see the teacher’s role as a *change maker*, and the changes they identify are social, cultural, and political in nature. They emphasized school–community relationships and identified ways that students, parents, teachers, community partners, and

administrators might work together. They advocate an inclusive curriculum content, one in which they work within their own classrooms but also try to find ways to share the social justice curriculum with other teachers.

Many of the research participants noted that it would be difficult to prepare teacher candidates for the real experience of teaching in an inner city school. Two participants reflected that the real experience of a school is very political, and during a practicum the teacher candidate is not “privy to the behind-the-scenes activity.” According to the participants, initial teacher education is about being self-focused, getting a good summative practicum evaluation, and getting a job. The real teacher experience is about developing the relationships and experiences that are rewarding for both students and teachers.

One participant explained that the initial teacher education program helps them theorize and put teaching strategies in a context: “It was helpful to have the background material ... what it means to be a child in an inner city school, and the legal components of being a teacher.” However, she said in a later interview that the Inner City cohort “can’t tell you what your thoughts will be when you negotiate your own feelings about a situation, about your role, about how the student will understand what you do.” Another participant said that being in a practicum was all about preparing the lessons and the units, because that is the focus of the four-week experience: “When you are the [day-to-day] teacher, you have the flexibility to see the student where *they are*, and you develop a different relationship because you have the time.”

Impact

The responses of the new teachers in this study are entrenched in the social, political, and cultural processes that they encountered within their schools and how they perceived and understood what is going on around them. Rarely mentioned as part of their stories of learning to teach were subject-content knowledge and the actual “technologies of teaching.” The teachers shared their desire to teach an anti-oppression curriculum, but felt constrained by policies, curriculum, and current school practice. The dialogue between the teachers and the researchers provided a forum to discuss their frustrations with enacting their vision, rather than details of curriculum design. This observation suggests that teacher education would be well served to address issues of agency, identity, and the journey of transitioning to *teacher* as part of the curriculum.

Challenges and limitations

It was challenging to find Inner City cohort graduates who were eligible for the study, as few were hired to teach in inner city schools. Many were hired in French Immersion and middle-class community schools, or decided to work abroad. It was a constant challenge for the first year teachers to take time from the demands of teaching to talk with us. Phone conversations and emails were useful to stay in contact but did not provide the depth of reflection that the one or two hour face-to-face interviews provided.

Implications for Teacher Education

Providing a deeper understanding of new teachers’ experiences, this study can contribute to the development of teacher education courses and programs. The participants’ stories

illuminate the central role of the development of knowledge-of-practice and of identity production in the early experiences of teaching in inner city schools.

The stories highlight new teachers’ interests in learning about relationship building, conflict resolution, becoming a change-agent, and also the emotional challenges of learning to teach in inner city schools.

This study suggests that an analysis framework based on Cochran-Smith and Lytle’s *types of teacher learning* can be useful for metacognitive reflection in teacher education. This reflective work could highlight strategies to manage isolation and emotional crises and to facilitate network building and induction experiences in the traditional structures of schools.

A key to examining professional induction is to investigate the networks and resources that support new activist-teachers as they navigate the political worlds of schools and further develop their professional identities as members of a teaching team—but not in the image of isolated renegades.

This study confirms the need for new teachers to have ongoing support and opportunities for networking. The participants felt a sense of shared values during their initial teacher education and they look forward to finding ways to meet with supportive colleagues who share similar social justice goals during their initial teaching years.

Next Steps

The goals and agenda of this project will continue in further research that follows Inner City cohort graduates in their careers as inner city teachers. The primary questions remain: How does their development of knowledge-of-

practice and professional identity contribute to their teaching practice in their classrooms? What can school leadership do to support new teachers who question oppressive practices? How can the school boards and university partner to support Inner City cohort graduates?

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project

DEVELOPING TEACHER CONFIDENCE AND COMPETENCE TO MEET THE NEEDS OF LEARNERS WITH EXCEPTIONALITIES

Jackie Eldridge, Terry Borczon, and Jo-Anne Wolfe

Project Coordinators

- Jackie Eldridge: Coordinator of the Concurrent Teacher Education program at the University of Toronto, Mississauga
- Terry Borczon and Jo-Anne Wolfe: Co-coordinators of the Greater Toronto Area (GTA) Catholic cohort in the Elementary Teacher Education program, OISE

Project Partners

- Second year teachers from OISE's 2005/2006 GTA Catholic cohort and principals from GTA Catholic Schools who hired graduates from this program

Abstract

This research project extended a previous inquiry into teacher preparedness to teach learners with exceptionalities. OISE teacher candidates were provided with additional special education modules during their initial teacher education program, and the impact of this increased instruction was examined in terms of how it met the needs of six first year teachers. In addition, the project explored the transferability of instruction at OISE to the reality of today's diverse classrooms. The research findings demonstrate an increased need for additional special education programming during initial teacher education and in-service. Outcomes of this project include programming recommendations to faculties of education and suggestions to boards of education for ongoing new teacher support in meeting the needs of learners with exceptionalities.

Project Focus

- How effective is the addition of special education modules in the OISE Initial Teacher Education program?
- How can faculty of education instructors monitor the knowledge base of graduate teacher candidates to determine their feelings of preparedness for the realities of classroom life where students with exceptionalities are integrated?
- How can formative assessments of special education program practices inform teacher education instructors and assist future special education planning in teacher education programs?

This project is the second phase of research into ways that teachers can meet the needs of learners with exceptionalities. According to the Ontario Ministry of Education publication *Education for All* (2005),

Regular classroom teachers in Ontario serve a growing number of students with diverse abilities. According to school board statistics, most students with special needs spend at least 50 per cent of their instructional day in a regular classroom, being taught by regular classroom teachers. It is imperative that inclusion means not only the practice of placing students with special needs in the regular classroom but ensuring that teachers assist every student to prepare for the highest degree of independence possible (p. 2).

Our previous research found that the allotted 12 hours of special education instruction during the Teacher Education Seminar (TES) in OISE's Initial Teacher Education program is not enough to meet the needs of teachers who complete their first year of teaching (Eldridge, Borczon, & Wolfe, 2006). As such, the project coordinators developed this current project to further inquire into the ways that the faculty of education at OISE, and in particular, the GTA Catholic cohort, meets the needs of teachers who complete their first year of teaching. As educators, we consistently try to find creative ways to enhance and increase the time devoted to special education instruction.

Stages of the Project

Teaching the course

During 2005/2006 all of the primary-junior teacher candidates in the GTA Catholic cohort participated in six additional two-hour modules, over and above the norm of 12 hours.

These modules were taught by Jackie Eldridge and were focused on special education policies and practice. The modules included a more in-depth examination of the following practices: identification of students with exceptionalities, the Individual Placement Review Process, accommodations and modifications, preparation of an Individual Education Plan, and ongoing assessment and evaluation strategies of students.

Theory into practice

During 2006/2007 and 2007/2008, when the graduates began their careers as teachers, the project coordinators monitored and supported their teaching using an online conference to maintain regular communication. This forum provided graduates with frequent opportunities to confer and collaborate with cohort instructors and colleagues about special education practices encountered in their classroom settings.

Focus group and surveys

In the spring of 2008 four principals and six GTA Catholic cohort graduates voluntarily responded to a survey that was designed to help the researchers understand the needs and challenges faced by first year teachers in regards to special education. In May 2008 a focus group was convened with five of these teachers who volunteered to engage in a four-hour semi-structured interview and free-flowing dialogue describing their classroom experiences and the integration of learners with exceptionalities.

Data Collection and Analysis

Qualitative data for this project were obtained from the surveys completed by the principals and OISE graduates, and from taped responses to questions discussed during the focus group session. The following themes emerged:

Overloaded and overwhelmed

The research participants described that they were inundated with information during their year of initial teacher education and during their first years of teaching. Although they had learned theory and completed assignments during the teacher education program, they had very few opportunities to put what they learned into practice. During the first years of teaching, these graduates became overwhelmed with the diverse student needs represented in their classrooms, and they felt unprepared to work successfully with their students in the area of special education. For example, one teacher said, “I had 29 students and 13 were identified [as exceptional]... I expected a whole spectrum, but not that wide and I am still finding that is the toughest for me.” The six teachers who completed the survey reported that in the initial stage of their career they experienced feelings of frustration, lack of confidence, and the need for more experience.

Classroom realities

Each of the teachers reported that their classrooms consisted of a wide range of pupils, including students with exceptionalities and English language learners. This classroom reality was made more difficult because of the number of curriculum subjects that needed to be taught, the existence of combined grades, and the increasing social, emotional, and societal demands. One teacher said, “You know, you have special education students, standardized test preparations, a combined grade, extra-curricular responsibilities, and you have to take them on trips. It is very hard.” The daily realities of classroom life are challenging enough for new teachers, and providing differentiated instruction for those with exceptionalities increases the challenge.

The importance of mentors

Each of the participants talked about the importance of support through their school board’s

induction process, which included one-to-one mentoring. All appreciated their mentors: “I found myself being a little more confident this year [his second year] because I had an experienced colleague with 25 years experience; so I felt that I could work with her, plus I had a mentor. I had two people that I could bounce ideas off, and that helped me out a lot.” Another teacher described the concrete suggestions that her mentor provided. Her mentor advised trying different seating arrangements, making environmental accommodations, using visuals and manipulatives, and she shared her resources. One of the four principals who responded to the survey strongly supported the need for mentors in the induction years, especially with reference to special education practices.

The value of experience

While the new teachers expressed a lack of knowledge and confidence in their first year of teaching, they all shared that they felt more comfortable in their second year. This comfort level was related to greater clarity regarding school policies and procedural expectations such as reporting, interviewing, and parent interactions. While most felt more comfortable with subject materials, this was not the case for those who were assigned to a new grade. The paperwork and identification process with regard to students with special needs became easier: “I was a little more prepared this year, just knowing the practical application of some of the terms related to special education.” However, instructional practices remained a challenge. For example, one participant reflected that she was accommodating more than modifying, even though she knew that her students were functioning at a much lower grade level. She had been teaching a combined grade six and seven and did not feel that she was reaching those students who were working at a grade two level. She said, “Even though I am in my second year, I still feel like I don’t trust myself.”

Impact

In the first phase of this research, during 2005–06, teacher candidates gained confidence and a sense that they were more prepared to meet the challenges of dealing with students with exceptionalities after they had received an additional 12 hours of special education instruction. Based on this outcome, we speculated that the confidence level expressed by these participants would transfer into their first year of teaching and therefore positively impact their practice. However, contrary to our expectations, the current project demonstrates that the additional 12 hours of a stand-alone special education course did not provide enough preparation for the six new teacher participants. This leads us to believe that more in-depth instruction is required at the faculty of education and throughout a teacher's induction years. One of the participating principals noted that teacher candidates need to understand that “theory must be put into action and that when it is put into action consistently, students with exceptionalities benefit greatly in a regular class.” All of the principals commented that ongoing experience and mentorship increased awareness of how to work with students with exceptionalities in regular classroom settings.

This inquiry also impacts the hiring, retention, and mentoring practices of boards of education. O'Connor (2004) writes, “As teachers deepen their understanding, they change their practice, and as they improve their practice, students' learning improves commensurately” (p. 228). All stakeholders in education need to work together to provide the best possible teacher education along the continuum from pre-service through to in-service. We concur with the recommendation of the Ontario Ministry of Education's expert panel: “Ontario university programs leading to a [Bachelor of Education] degree should contain mandatory course

hours on special education ... every Ontario teacher needs to be prepared to provide instruction for all students” (Ontario Ministry of Education, 2005, p. 147). Although a mandatory course may be a good first step, new teachers need additional job-embedded support in their early years of teaching to help them plan for and teach their specific students.

Implications for Teacher Education

This project has reconfirmed that a considerable amount of attention needs to be given to special education programming at faculties of education. Specifically, participants clearly stated that effective special education instructional practices must be infused in a transparent way into every aspect of the initial teacher education program. According to one participant, it would be a lot more helpful if special education were “in each different lesson that we learned rather than on one day.”

Stand-alone courses in special education are insufficient in providing the depth of knowledge that teacher candidates need to acquire in order to meet the needs of their students and to feel successful as teachers.

Beck & Kosnik (2006) concur that teacher inquiry related to specific topics (such as special education), “should not be done in separate courses, but rather infused throughout the program” (p. 106). According to Clements, Sarama, and DiBiase (2004), learners “benefit from a thoughtful combination of carefully planned sequences of activities and of integrated approaches” (p. 60). Furthermore, the beginning teachers in this project strongly recommend that a special education focus be included in practica experiences; the practicum “is the only place where you actually learn to put these things into place.”

Learning related to special education needs to continue into teachers' induction years. According to the Ontario Ministry of Education (2005), "classroom teachers should receive ... specific professional development around instructional strategies in literacy, numeracy and assessment for students with special needs" (p. 145). Having a mentor with some special education experience is also essential. Frykholm and Meyer (1999) explain that mentors provide the support and learning experiences that teachers need in their development of belief structures and habits of practice that can lead to continued powerful teaching and learning. By supporting the mentorship process, faculties of education can assist in the induction and retention of new teachers (Walford, 2007).

Practical Ideas for Faculties of Education

- Incorporate a special education course as part of the BEd program
- Infuse special education in all areas of the BEd program, such as the core curriculum and foundations courses
- Provide opportunities for teacher candidates to complete a practicum in the area of special education
- Support faculty, teacher candidates, associate teachers, and mentors in developing expertise in effective instructional strategies that support the needs of all learners

Next Steps

As a result of this research, the project coordinators are committed to changing the face of special education instruction, beginning with

the GTA Catholic cohort. We propose to do this in a number of ways: collaborate with curriculum and instruction colleagues at OISE in an effort to raise awareness and take action regarding special education infusion into all subject areas; design programming activities for use in faculty discussions and workshops; develop a reciprocal relationship with associate teachers and mentors in order to share expertise in special education strategies; encourage teacher candidates to become more directly involved with students with exceptionalities; and advocate for an additional practicum with a special education focus. In order to address the realities of today's classrooms, it is imperative that new teachers have opportunities to engage in practical experiences that include the education of diverse learners. As Darling-Hammond and Bransford (2005) write, "To meet the expectations they now face, teachers need a new kind of preparation—one that enables them to go beyond covering the curriculum to actually enable learning for students who learn in different ways" (p. 2).

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project

BUILDING REFLECTIVE PRACTICE AMONG BEGINNING SECONDARY SCHOOL MATHEMATICS AND SCIENCE TEACHERS

Judith Burt and Sue Wessenger

Project Coordinators

- Judith Burt and Sue Wessenger: Science education instructors, Initial Teacher Education secondary program, OISE

Project Partners

- Four recent graduates from OISE's Initial Teacher Education program who are currently teaching at the secondary level: two in public schools and two in independent schools.

Abstract

This research project followed four beginning mathematics and science teachers as they implemented instructional innovations in their high school classrooms. The new strategies employed the use of SMART Boards, Veritech, Moodle, Tribes, and other cooperative group activities. The participants gauged the success of the new strategies through formative and summative assessment. They reflected on the supports and barriers they experienced during the planning and implementation of the new instructional approaches and on how well their initial teacher education had prepared them for being innovative. The project culminated in the four new teachers presenting the strategies and technologies they had used and sharing their instructional experiences with their peers in a larger group called OISE Mentoring of New Teachers in Science and Mathematics (OMNISM).

Project Focus

- How can beginning secondary school teachers in mathematics and science be supported and provided instruction to increase their use of reform-based strategies, such as manipulatives, models, and cooperative learning?
- How can the effects of these instructional strategies be monitored and examined with respect to increased student engagement and success?
- How can OISE's initial teacher education curriculum in mathematics and science better reflect specific instructional strategies?
- What supports do new teachers in the field need?

OISE's induction initiative, OMNISM, provides support to initial teacher education secondary graduates who are already employed in the field. Since its inception in 2004, this initiative has promoted OISE's principles of teaching excellence, program coherence, faculty collaboration, and school/field/university partnerships. Over the past decade researchers and policy makers have echoed the importance of these principles, which Feiman-Nemser (2001) summarized in reference to recommendations for teacher induction programs: "Most call for a multiyear, integrated approach to new teacher support, development and assessment based around high standards for teaching and learning, built on school/university partnerships, and featuring a strong mentoring component" (p. 1035).

OMNISM is able to serve these principles through a joint venture between a local school board and OISE. Recent OISE grads come together about four times a year to share their successes and challenges and to be mentored by their previous OISE instructors in the familiar setting of their OISE classrooms.

Calderhead (1996) identified a continuum of teacher development from novice to advanced beginner, to competent, to proficient, to expert. As teachers move along this continuum they benefit from a supportive mentoring program such as OMNISM. Simultaneously, stronger partnerships are fostered between the university and the schools, and programmatic practices at the faculty level are informed.

This research project was designed to build upon the OMNISM initiative, achieve the objectives as stated above, and implement an additional year of support for new teachers.

Four participants from the OMNISM group expressed interest in becoming part of an action research subgroup. These four new teachers were keen to explore the use of reform-based teaching and learning strategies and communication methods, including manipulatives and computer-based formats. Each of the four participating new teachers chose one or two classes from their current teaching load in secondary mathematics and science to focus on for this project. Then they chose from the course curriculum a topic or concept that had traditionally been difficult for students and selected a particular teaching strategy to introduce the concept. The students ranged in age from 14 to 16 and were in grades nine to eleven at applied, academic, and enriched levels. The intent was to help students develop a strong conceptual understanding. The following strategies and technologies were used:

- Moodle: an innovative web-based course management system
- SMART Board: an interactive whiteboard system that encourages student participation
- Tribes: a classroom community building approach that involves cooperative learning
- Veritech: a series of tiles that supports review questioning and student responses in a group work format
- Teams Games Tournament (TGT): a cooperative small group learning strategy that enables both strong and weak students to support each other in learning

After implementing the new strategies, the participating teachers met, shared results for their individual classes, and discussed the implications of what they had observed and learned. Members of this small research group considered themselves to be like-minded with respect to putting their ideas into action in their classrooms. The four were highly energetic individuals who were not afraid of taking risks.

Stages of the Project

Initiating the project

New teachers from the larger OMNISM group were invited by letter to be participants in the project, and those who were interested were asked to fill out a consent letter and also give one to the principal of the school where they were teaching. Participants then engaged in a short discussion regarding specific teaching and learning strategies they might apply, with an emphasis on innovation and cooperative learning in the classroom. The participants then prepared the activity or strategy and implemented it in their respective classes. For example, one beginning teacher developed lesson plans on fractions, using the SMART Board, to make the concept of fractions more viable and, ultimately, more visual and meaningful to her learners. Another beginning teacher used Moodle to provide a platform for formative learning and self-assessment for his biology students. All participants reflected on their practice in terms of the implementation of selected strategies and also on how the learning of their students was enhanced.

First focus group interview

Soon after implementation of these instructional approaches in their classrooms, the participants came together as a focus group to discuss their experiences. They discussed their methods and reflected on their findings. The project coordinators took notes on participants' responses to the following questions, which were provided to guide the first group discussion:

- Reflect on the implementation of the teaching/learning strategy you used. How did you know if the students learned what was expected? What was their reaction to the activity?
- To what extent, and in what specific ways, did your learning during your Initial Teacher Education program at OISE impact how you are now teaching mathematics and/or science?
- In comparison to other teachers (new and veteran) in your school department, what ways do you think your teaching is similar or different?
- To what extent does your school's culture (school personnel, students, parents, course expectations) support or constrain your efforts to implement new ideas?

Sharing experiences

A full-day OMNISM workshop for new teacher mentoring was held at OISE about one month after the first group interview. The participants made oral presentations to the whole OMNISM group, sharing their experiences of preparing and then implementing their teaching and learning strategies in their classrooms.

Second focus group interview

Two weeks following the OMNISM workshop, a second focus group interview was held where the project coordinators asked participants the following questions:

- As a beginning teacher, what do you look for as indicators of student success with respect to certain teaching/learning strategies?
- How did your experiences during your program at OISE affect your use of your chosen teaching and learning strategies? Why?
- How do specific parts of your school's culture affect the implementation of your chosen teaching and learning strategies? Why?
- What recommendations do you have for OISE's Initial Teacher Education program that could be added or strengthened in support of the teaching of mathematics or science?
- As a new teacher in the OMNISM group, what have you learned from the experiences of your peers in this group?

Data Collection and Analysis

The four participants made observations and comments regarding their classroom experiences during two focus group interviews where specific questions were asked. The project coordinators recorded their comments in writing. Four main themes related to effectiveness of new teaching and learning strategies emerged from the data analysis and are discussed below.

Improvement in student learning

To judge the effectiveness of new teaching and learning strategies, participants needed to become more conscious of the formative and summative methods of assessment used daily. In reflecting on the effectiveness of their new strategies with respect to student learning, they found several markers to indicate improvement. Generally, students' behaviour improved, as did their attention during class. They observed better listening and increased respect for others. Student involvement, independence, and interactivity increased, while the overall noise level decreased. The beginning teachers looked for their students' ability to demonstrate understanding through class discussion, blackboard work, and quiz/test scores.

Foundation for being innovative

Participants reflected on the effect of the OISE curriculum on their ability to innovate and also on recommendations for improvements to OISE courses. The four new teachers recognized that the OISE curriculum and experience had been helpful in providing them a foundation for being innovative. The practicum experience allowed them to take risks and to deal with challenges. They were keen to revisit specific teaching and learning strategies and methodologies (such as computer probes for science and Tribes), originally introduced at OISE, once they had some teaching experience under their belts and the confidence to experiment.

Based on their new experience in the classroom, participants also had recommendations for OISE, although many of these did not relate to the use of innovative ideas. Their suggestions included giving more instructional time to linking the reality of the classroom to theory, dealing with Ministry expectations, creating and discussing exemplars of assessment and evaluation, and modifying a given lesson plan.

Role of school culture

They examined their school cultures and evaluated whether or not these situations supported the implementation of new strategies. Concerning their roles and situations in each of their schools, the comments were enlightening. Barriers to innovation were not huge. Some were as minor as having to change the arrangement of the desks at the beginning and end of each period to facilitate group work. Some department members were not supportive of the use of the new methodologies, but no peers or department heads were actively discouraging. As long as the test scores were not in jeopardy, the new teachers were allowed to "experiment." In most cases the school administrators were very supportive as they saw an opportunity for strategies to be modelled, and hopefully adopted more widely, and this would benefit more students.

Impact on participants' professional development

The four participants reflected on their involvement in this project and how it affected their own development as teachers. On a concrete level, they were pleased to have learned about the strategies and technologies that they and their peers utilized. They were more likely to try them out themselves, having heard first-hand anecdotes about successes and hurdles. The group discussions enabled the participants to put their own experiences in context and learn more about the education system in

general. They were made more aware of available resources and opportunities for professional development for themselves and enrichment for their students. All four were very happy to have had the opportunity to prepare and carry out presentations for the larger OMNISM group as a vehicle for their ongoing professional learning.

In general terms, the observations revealed that innovations in teaching and learning strategies depend on positive school cultures and available technology. As well, they need fertile foundations during initial teacher education and ongoing professional development opportunities during their early in-service years.

Impact

Two kinds of impact were seen in this research: (1) “spreading the word” about new classroom strategies to improve student engagement and learning, and (2) the professional development of beginner teachers who tried out the new activities. First, the new teaching and learning techniques worked in a variety of situations, and many new teachers at the OMNISM seminar were introduced to the possibilities for further applications. Therefore, the experiences and results of the four new teachers in this project may spread to other classrooms and schools. Members of the OMNISM community initially benefited when they learned about new strategies and heard the presenters’ reflections. They identified with common experiences in the Initial Teacher Education program at OISE, and some felt encouraged to take more risks in trying new things. Although all schools do not have access to every strategy presented (i.e., SMART Board and Veritech), OMNISM participants were aware of the need to use innovative and different strategies to support student learning. They felt that if a new idea or innovation was an option, the administration could and should be approached to provide support and funding. Second, the

four beginning teachers who tried out new activities and were able to share their experiences with other new teachers took important steps on the road to teacher leadership within the educational community, and their capacity for future growth became well established. Such leadership included taking on the role of presenter at the OMNISM meeting as well as providing other successful lesson strategies in mathematics and science to OMNISM members on other occasions. The project participants also felt they became more confident as leaders in the existing group as well as in their schools. They talked about becoming associate teachers, curriculum leaders, and expanding their knowledge base by considering a master of education program. Each of the four teachers reported that student learning improved. Participants felt this was related to creating a better learning environment in the classroom (Veritech, Tribes, Teams Games Tournament, and SMART Board); increasing individual students accountability for learning (Moodle); and enhancing respect for individual class members (SMART Board and Tribes). Also, classroom performance as determined by assessment and evaluations universally improved.

There were no major challenges or obstacles that participants overcame. However, some felt they had to master the new technology or strategy prior to its implementation in their classes. This of course took time away from other aspects of teaching. The project participants did not have any difficulty accessing the given technology or strategy for their individual classes, but they realized that not all schools have the funding or the physical plant situation to facilitate easy access to some of the required materials. At the school level participants found that the administration was highly motivated to have them try out new things. This came in the form of funding and encouragement. However, they realized that not all schools have the backing of the administration.

In part because of the nature of the participants themselves, their experiences in this project strengthened their foundation for even more risk taking, which had been established during their initial teacher education and practica experiences while at OISE. They also appreciated the quality of their associate teachers. During the project, they felt if they failed at something, they knew how to recover, move on, and continue to try new things. They found that some teachers in their home schools were aware of the existence of these innovative techniques but continued to use more traditional approaches to teaching. These teachers were not inclined to personally engage with the support offered by the project participants to implement some of these innovative strategies in a wider range of classrooms.

Implications for Teacher Education

The participants felt that the environment at OISE was supportive and innovative in encouraging beginner teachers to build capacity for taking risks in their classroom teaching. Both teacher candidates and associate teachers need to become more aware that the practicum is an opportunity for teacher candidates to try out novel ideas that might differ from previously established classroom practices.

The feedback from project participants and members of the OMNISM community has generated specific recommendations for those who instruct in OISE's math and science curriculum and instruction courses.

- Create additional opportunities (assignments, classroom discussions, etc.) for teacher candidates to link the reality of the classroom to theory, work with the Ministry expectations, and design assessment and evaluation instruments.

- Help teacher candidates take a given lesson plan (from another source) and modify it for their students.
- Support mathematics and science learners in foundation courses. Science and mathematics teachers do not have the same background experiences as teachers with a degree in the arts or humanities. As such, many have less experience in regularly writing their reflections, reading longer educational articles, and formulating lengthy thoughtful responses that are required in some of the foundation courses. Instructors in these courses need to be aware of the needs of the mathematics and science teacher candidates and support their concerns.
- Continue to model the use of innovative technologies in all courses.

The project participants expressed an overwhelming appreciation of the OMNISM structure, which allows beginner teachers to connect both physically (by returning to OISE) and virtually (through the district-wide beginning teacher conference) on a regular basis in a safe and subject-specific environment.

OISE can play a critical, ongoing role in supporting the continual development of new teachers. OISE's Initial Teacher Education program supports teacher candidate learning in a variety of ways, and what is most appreciated is the modelling of what should go on in a real classroom. Although a variety of teaching strategies are used in courses, the use of innovations in technology is often limited. Instructors need enough time and access to these to become familiar with them and also take some of the risks that the teacher candidates are asked to make. All classes should encourage teacher candidates to use innovative strategies in their teaching and also provide opportunity for them to try to incorporate these strategies into their assignments, presentations, and practicum experiences. In addition, funding needs to be

available to purchase the newer technologies, such as SMART Boards, which are already used in some boards of education. If the OISE environment continues to be supportive of teacher candidates in these ways, the teacher candidates can continue to feel comfortable taking risks both within OISE's classes and out in the practicum schools.

Next Steps

The recommendations noted in the previous section will be brought to course planning meetings and will be shared with the OISE community, perhaps through a forum. In addition, we will promote the formation of support communities for new teachers, similar to OMNISM, both within the OISE community (for different subject areas) and in other educational institutions.

With respect to OMNISM, there are several areas to explore. Currently, there is a partnership with one local board of education, but we would like to pursue involvement with other nearby boards, particularly where many OISE graduates get teaching positions. OMNISM members will be encouraged to increase their leadership role by asking them to deliver small presentations that reflect their successful attempts at innovation. Other OISE instructors will be asked to become involved, and more senior members of the OMNISM group will be encouraged to become mentors to first year teachers, as well as becoming OISE associate teachers.

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project

INFUSING INTERACTIVE WHITEBOARD TECHNOLOGY INTO INITIAL TEACHER EDUCATION

Nobuko Fujita, Cathi Gibson-Gates, and John Duwyn

Project Coordinators

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Project Partners

- Runnymede Public School in the Toronto District School Board

Abstract

This project examined the impact of collaboration between associate teachers and teacher candidates on the infusion of technology into the elementary classroom. Specifically, the research focused on the use of interactive whiteboard technology. Six teacher candidate–associate teacher pairs were brought together for training on the use of interactive whiteboards. Together they worked to design and implement classroom lessons using this technology. Data were collected from interviews with teacher candidates and associate teachers. Participants commented on the positive effects that collaboration had on the successful integration of technology in their junior–intermediate classrooms and the high level of student engagement. This project illustrates the importance of professional learning, community, and collaboration in successful technology infusion efforts.

Project Focus

- What impact do teacher candidate–associate teacher collaborative pairs have on infusing interactive whiteboard technology into curricular lessons in junior–intermediate classrooms?
 - How do opportunities for collaboration contribute to professional learning for teacher candidates?
 - What challenges are there to incorporating interactive whiteboard technology into classrooms?
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There is a contemporary emphasis on preparing beginning teachers to become professionals who not only understand how students learn, can teach subject-specific content to diverse students, manage the classroom, and assess student performance, but also can use new technologies effectively (Darling-Hammond & Bransford, 2005).

In a one-year teacher education program, it is challenging for teacher candidates to find time and situated opportunities to develop the skills, beliefs, and multiple kinds of knowledge—technological, pedagogical, and content knowledge (Mishra & Koehler, 2006)—to integrate information communication technology (ICT) effectively into their classroom teaching.

Ideally, teacher candidates will be able to observe members of their own professional community, both at the university and in the field, while the teachers collaboratively design curricular lessons and participate in continual improvement of best practices (Brett & Fujita, 2006).

A core principle of the Midtown cohort is “building a community of inquirers.” There is an explicit focus on professional community and teacher inquiry. In the Midtown cohort we want to support teacher candidates’ efforts in infusing interactive whiteboard technology effectively into their teaching. Therefore, the project coordinators modelled the use of interactive whiteboard technology in our university classes and fostered collaboration between associate teachers and teacher candidates for the use of this technology in OISE’s partnership schools. As Robin Kay (2004) notes, “Without collaboration involving the mentor teacher, it seems unlikely that gains in attitude and ability will translate to the meaningful use of technology” (p. 394).

Despite increased numbers of elementary and secondary schools with computers and internet connectivity (e.g., Plante & Beattie, 2004), research reveals that relatively few practising teachers actually use technology for instructional purposes. Those that do tend to do so infrequently or at the lower level of drill-and-practice, rather than to enhance the quality of student learning (Becker & Riel, 2000; Bracewell, Sicilia, Park, & Tung, 2007; Cuban, Kirkpatrick, & Peck, 2001; Ertmer, 2005). While the existing literature on interactive whiteboards is overwhelmingly positive, more research is needed to understand how this technology impacts learning (Smith, Higgins, Wall, & Miller, 2005).

The focus of this article is on the efforts of six teacher candidate-associate teacher pairs as they planned and implemented curricular lessons integrating interactive whiteboard technology. The teacher candidates were different for each of the fall and winter practica, but two of the associate teachers were the same for both practica. The six teacher candidates were among the 63 initial teacher education students enrolled in the Midtown cohort during the 2007/2008 school year. The project took place in the classrooms of four associate teachers at Runnymede Public School; the students were in grade five gifted, grade seven French Immersion, and grade eight core.

Stages of the Project

Modelling

The research team collaboratively planned a lesson to introduce the interactive whiteboard to the Midtown cohort. We modelled many of the features of the interactive whiteboard during a Teacher Education Seminar class. The teacher candidates were given an opportunity during the class to interact with the interactive whiteboard, individually and in small groups.

Preparation

At the beginning of the school year, we surveyed teacher candidates around their experiences and attitudes related to a variety of technologies. After the modelled lesson, we invited teacher candidates to indicate their interest in participating in our research project. The invitation resulted in six teacher candidate–associate teacher pairs who consented to participate during practicum placements. These pairs attended two sessions to learn how to use the interactive whiteboard technology and collaboratively design curricular lessons incorporating the whiteboard. The pairs were responsible for choosing the content and context for the lessons, and the teacher candidate was responsible for teaching the lesson in the practicum classroom. The training sessions were three hours in length. At the beginning of each session, we asked the participants what they already knew about interactive whiteboard technology. From here, we explained the parameters of the research project and highlighted basic features of interactive whiteboard technology. Two interactive whiteboards were set up in the training room, and teacher candidate–associate teacher pairs began to talk about and plan the lesson. The researchers took observation notes at these sessions.

Implementation

During the teacher candidates' practica, one or two researchers visited the participating classrooms to observe classes in science, math, and French, each approximately 40 minutes long. The researchers took observation notes on the interactive whiteboard lessons delivered by the teacher candidates. After the practicum, the teacher candidates and the associate teachers were individually interviewed. Several associate teacher participants were interviewed by email, answering a series of open-ended questions. The program assistant conducted face-to-face interviews with other associate teachers and teacher candidates individually.

Data Collection and Analysis

Interview transcripts and observation notes formed the basis of the data that were collected for this project. Through the data analysis, we found that all six pairs were able to collaboratively plan and implement lessons that incorporated interactive whiteboard technology into their respective classrooms. Each pair took a slightly different approach to technology integration, with the teacher candidate and associate teacher enacting different roles. Three kinds of collaborative partnerships emerged from the qualitative analysis of the interview and observation data.

First, for half of the pairs, the teacher candidate came up with the subject lesson content, and the associate teacher offered suggestions to improve it. For example, in one classroom the teacher candidate located existing lesson plans and websites that were developed to teach transformational geometry using an interactive whiteboard. The associate teacher recommended the pedagogical strategy of using the interactive whiteboard as a learning centre to enhance student participation.

Second, in two of the pairs, the teacher candidate and the associate teacher come up with the subject lesson idea together. Through much discussion, they both came up with different subject lessons and invested considerable time in problem solving various software applications to use in combination with the interactive whiteboard. One teacher candidate described her relationship with her associate teacher as one involving dialogue about using technology in lessons and the classroom: "We were in a constant state of conversation and bouncing ideas back and forth off of each other." This pair also demonstrated remarkable critical dialogue about integrating the interactive whiteboard technology, and technology in general, into constructive classroom teaching and learning.

Third, the associate teacher suggested the subject lesson area, and the teacher candidate took the lead on the technological aspect. The pair collaborated in the initial planning of the lesson design—what content they were going to cover and how they were going to present the material, but the teacher candidate shouldered the responsibility for creating and presenting the lesson.

The researchers observed that students were actively engaged in the interactive whiteboard lessons. Many students in the classrooms raised their hands, eager to have a turn to interact with the whiteboard. One associate teacher commented, “Students were excited about the class. Participation increased especially from students who normally don’t participate readily in class. Students performed extremely well on the quiz that followed the lesson.”

Impact

As teacher educators and researchers, the project coordinators expected that collaboration between teacher candidates and associate teachers would, (1) develop strong ICT-infused lessons; (2) create a structure that encourages dialogue about the use of technology in lessons and the classroom; (3) promote a motivating environment for student engagement through interactive lesson plans; (4) demonstrate to other teachers the use of technology and its applications for students; (5) and support teacher candidates and associate teachers in the learning and implementing of something new. As a result of this project several of these assumptions were confirmed. The dialogue between teacher candidates and associate teachers led to strong ICT-infused lessons, with a high level of student engagement.

Effectiveness of the collaborations

Collaborations between the associate teachers and teacher candidates resulted in a positive learning experience for everyone involved.

One associate teacher said, “A wonderful opportunity and the lessons were more effective.” One of the teacher candidates, when asked about the role of her associate teacher during this process, remarked, “He has all this great technology knowledge ... but he was more like, ‘I’m going to help you, and we’re going to do this together.’ So he was really supportive, I guess, and a good sounding board. We bounced ideas off each other.”

Challenges

Although all six teacher candidate–associate teacher pairs in the current study were able to design and implement engaging lessons that infused interactive whiteboard technology for their junior and intermediate classroom contexts, several challenges in sustaining interactive whiteboard technology use were identified: First, it became clear that easy and frequent access to the interactive whiteboard and associated computer hardware and software within the school is an issue. Although there were two interactive whiteboards in the partnership school, only one of the four associate teachers had an interactive whiteboard located in her own classroom. Second, the pairs were pressed for time to plan and teach the interactive whiteboard lessons during the teacher candidate’s practicum. In addition to the learning curve associated with learning to teach with the technology, there were contextual time constraints as well as the practicum context.

Most importantly, teacher candidates and associate teachers faced the challenge of understanding the specific advantages of the interactive whiteboard as distinct from the broader benefits in infusing technology into their teaching. One teacher candidate articulated that it was a “challenge to think about how to use the interactive whiteboard in a way that would give the students a different experience than simply using manipulatives or diagrams on a chalk board.” One pair tried to avoid using the interactive whiteboard, as the teacher candidate

said, “[It’s] just like an overhead. It could be a computer screen that’s blown up, which isn’t neat. So we wanted to make sure it was interactive, that the kids could play with it.”

Implications for Teacher Education

The six teacher candidates willingly shared their lessons with the larger Midtown cohort. This provided a repertoire of strategies that others can use in the future. Through the modelling and the collaborative environment, the teacher candidates were motivated to seek out additional opportunities for infusing interactive whiteboard technology into their own classrooms, and a number of them chose to do so during their internship. The coordinators have also shared strategies for infusing interactive whiteboard technology with other faculty at OISE. This project has reinforced the importance of collaboration when learning something new: for the associate teachers, the teacher candidates, and the research team.

Practical Ideas for Integrating Technology

- Provide collaborative planning time for teachers involved in integrating technology
- Allocate technology resources to existing partnerships, such as team-teaching structures, grade teams, or subject departments
- Provide opportunities for teachers to dialogue about the potential use of the technology prior to its adoption in their programs, because multiple perspectives are helpful for problem solving when issues arise
- Provide ongoing support after implementing the new technology to encourage continued use

Next Steps

It is essential to provide teacher candidates with the understanding of how to integrate technology effectively into their teaching. We share the belief of one of our associate teachers who commented,

“My hope is that the teacher candidate goes on to embrace new technology with a critical eye, using it when it is advantageous and letting it go when other strategies are more effective.”

The next steps are to (a) collaborate with other faculty to develop lessons at OISE modelling the effective use of the interactive whiteboard for implementation by teacher candidates; (b) continue the intentional collaboration around the use of interactive whiteboards with OISE’s partnership schools; (c) look for opportunities to dialogue about infusing technology into initial teacher education (e.g., using clickers to have teacher candidates interact during whole class discussions); and (d) provide opportunities for teacher candidates to explore the use of a broad range of technologies in their coursework at OISE.

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project

BUILDING PROFESSIONAL LEARNING COMMUNITIES TO IMPROVE TEACHING AND LEARNING: A LESSON STUDY COLLABORATION

Bathseba Opini and Carrie Chassels

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- Carrie Chassels: Co-coordinator of the North elementary cohort, OISE, and PhD candidate in the Department of Theory and Policy Studies in Education, OISE

Project Partners

- Elmlea Junior School: Gayle Finless-Hall, principal; Nancy Hart, vice-principal; Nancy Kowcur, grade three teacher; Mariela Perez, grade one teacher
- Dixon Grove Junior Middle School: Neil Quimby, principal; Nardaya Dipchand, vice-principal; Anne McIlroy, guidance counselor; Kris Blake, grade six teacher; Hilary Foley, grade six teacher
- OISE's North cohort teacher candidates: Kaleen Balliram, Jovina Da Costa, Simrat Kapoor, Shelby Martelluzzi, Manju Sati, Victoria Wappel

Abstract

This research project identified the benefits and challenges of lesson study collaboration within a professional learning community consisting of associate teachers and teacher candidates. The aim of the collaboration was to examine and improve teaching and learning in mathematics. Teacher candidates and associate teachers from OISE's North elementary cohort (2007/2008) worked together to research and plan a lesson. One experienced teacher then delivered the lesson to a class, and the remaining school-based lesson study group members—associate teachers and teacher candidates—observed and made notes on student engagement and learning. Following each lesson, focus groups were held, during which the school-based lesson study group debriefed, reflected on successes and challenges, and shared ideas for revising the lesson to enhance student learning. Findings from this study suggest that lesson study is an important collaborative approach to improving teaching and learning and enhancing professional development among associate teachers and teacher candidates. Challenges experienced by the lesson study groups were related to time limitations and power imbalances between associate teachers and teacher candidates.

Project Focus

- To support improved teaching and learning by creating a structured opportunity to build professional learning communities among teacher candidates and associate teachers
- To examine the benefits and challenges of lesson study collaboration among teacher candidates and associate teachers
- To provide an opportunity for teacher candidates to find possibilities for lesson study beyond their experiences in OISE's Initial Teacher Education program.

Research on the subjects of education and school improvement shows that “good teaching” plays a crucial role in determining students’ academic success (Darling-Hammond, 2000). Darling-Hammond argues that for good teaching to happen “good teachers”—those who are committed to ongoing learning and professional development—are essential.

Increasingly, teacher education programs and schools across North America focus on providing learning opportunities that foster professional learning communities and build upon a shared commitment to deepening and extending collective knowledge and skills.

The superior achievement in mathematics among Japanese students when compared to students in North America and Europe has been attributed to the commitment to lesson study as a form of professional development (Stigler & Hiebert, 1999).

Lesson study is a purposeful process of teaching and learning that enables teachers to systematically examine their practice in order to become more effective instructors (Audette, 2004; Davies & Dunnill, 2008; Fernandez & Chokshi, 2002).

During the lesson study process, teachers work collaboratively in small groups to identify learning objectives based on their own classroom experiences or the mandated curriculum. They then meet and prepare a detailed plan for a single lesson with a specific goal, or a set of goals, and a research question to provide focus for their efforts (Alvine, Judson, Schein, & Yoshida, 2007; Lewis & Tsuchida, 1998; Stigler & Hiebert, 1999). The lesson study team chooses one teacher to deliver the lesson, and the other team members observe student engagement and learning during the lesson. After the lesson has been taught, the teachers meet to share their observations and to discuss what worked and what did not work. The lesson is then revised, re-taught, and observed again (Kieff, 2002/2003; Stigler & Hiebert, 1999).

Lesson study is becoming widely adopted in North American contexts (Lewis, Perry, Hurd, & O’Connell, 2006; Rock & Wilson, 2005; Stigler & Hiebert, 1999). Advocates of lesson study assert that the approach has the potential to improve everyday teaching and learning by turning teachers into researchers who seek fresh approaches, ideas, and knowledge which enhance teaching and learning (Fernandez & Chokshi, 2002; Lewis, 2002).

This current project provided space, structure, and support to foster meaningful reflection on teaching and learning within a professional learning community of associate teachers and teacher candidates in the North cohort. The project sought to answer the question: What are the benefits and challenges of lesson study collaboration among a professional learning community of teachers and teacher candidates aiming to improve teaching and learning in mathematics?

Stages of the Project

Introducing lesson study to teacher candidates of the North cohort

To begin their studies in September 2008, all elementary teacher candidates in the North cohort were asked to read *The Teaching Gap* (Stigler & Hiebert, 1999), which is credited with introducing lesson study to North American educators. Following a general discussion of the book and its main findings, the teacher candidates were introduced to the practice of lesson study and the process by which they would engage in a lesson study activity during their first practicum.

Study participants and study overview

When the teacher candidates were becoming familiar with their practicum schools during their first four-week practicum placement, teacher candidates and the associate teachers hosting them were invited to participate in this project. Four associate teachers and six teacher candidates from two North cohort partnership schools (Elmlea Elementary School and Dixon Grove Middle School) agreed to participate. The participants were then asked to attend an introductory meeting at Dixon Grove school, where the project coordinators offered a workshop on lesson study, its history in Japan,

and research describing lesson study efforts in North America.

At the end of this introductory meeting, participants met in school-based lesson study groups (the Elmlea group comprised two associate teachers and two teacher candidates, and the Dixon Grove group comprised two associate teachers and four teacher candidates), to think about the learning needs of their students, to identify a topic of focus for their mathematics lesson, and to discuss relevant research and resources that the participants would bring to the lesson planning meeting that was scheduled to take place the following week. The Elmlea group chose to focus on conservation of numbers in a grade one classroom, and the Dixon Grove group chose fractions as their area of study for a grade six class.

Lesson planning

Project participants met in their school-based lesson study groups for two hours of focused conversation around the goal for mathematics learning and the focus for their lesson. They discussed possible approaches to the lesson and worked together to develop the lesson plan. Before choosing and planning the lesson, the group members discussed the relative ability levels of their students. They then considered relevant research, lesson content, learning materials to be used, learning goals (academic and social), and students' activities to promote learning, and they determined who would deliver the lesson.

Delivery of the research lesson and debrief

One associate teacher from each of the school-based lesson study groups taught the collaboratively planned lesson to the class; other members of the group observed and noted student engagement and learning. The grade

one lesson study group articulated the learning expectation of their planned lesson as follows: “Students will demonstrate, using concrete materials, the concept of conservation of number (focus on number 5)” (Ministry of Education, 2005, p. 33). The delivering teacher introduced the lesson concept to the students by placing three objects on an overhead projector. The teacher asked the grade one students to describe the set of objects and to consider if the quantity of objects changes when the objects are arranged in different configurations. The delivering teacher then sent the students in pairs to their desks and provided the groups with various concrete objects and a template strip of three boxes. The students were asked to solve the problem, “How many different ways can you show the number 5?” The students worked in pairs and formed groups of five in different configurations. To bring the lesson to a close, the deliver-

ing teacher invited several groups of students to demonstrate their groupings of five for the class using the overhead projector.

The lesson study group for the grade six class articulated the learning expectation of the lesson as follows: Students will demonstrate an understanding of fractions and how to apply them to real-life situations by using their problem-solving skills (Ministry of Education, 2005). The grade six lesson was introduced to the students in the class through the reading of a picture book that told the story of a child who likes to share with others. Following the reading of the story, the lesson delivery teacher engaged the students in a discussion of graffiti and then asked the students to work with a partner to make a graffiti art poster displaying what they know about fractions (see Figure 1).

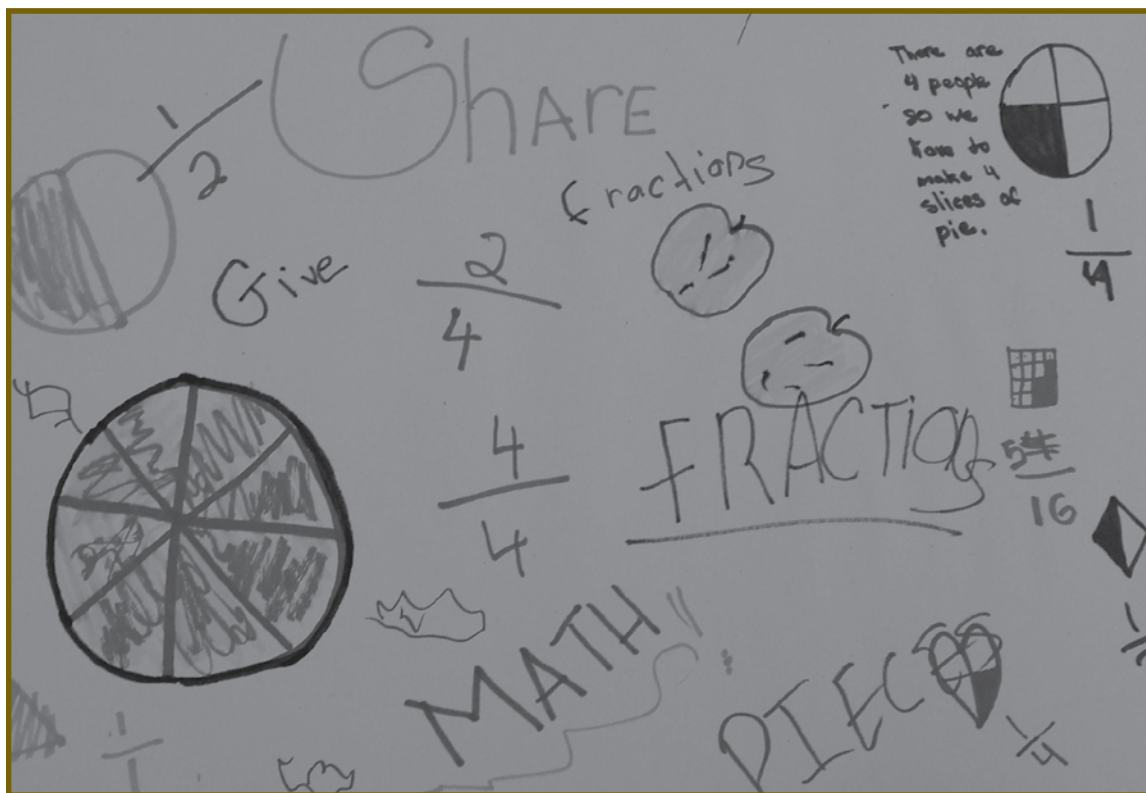


Figure 1. Graffiti Art

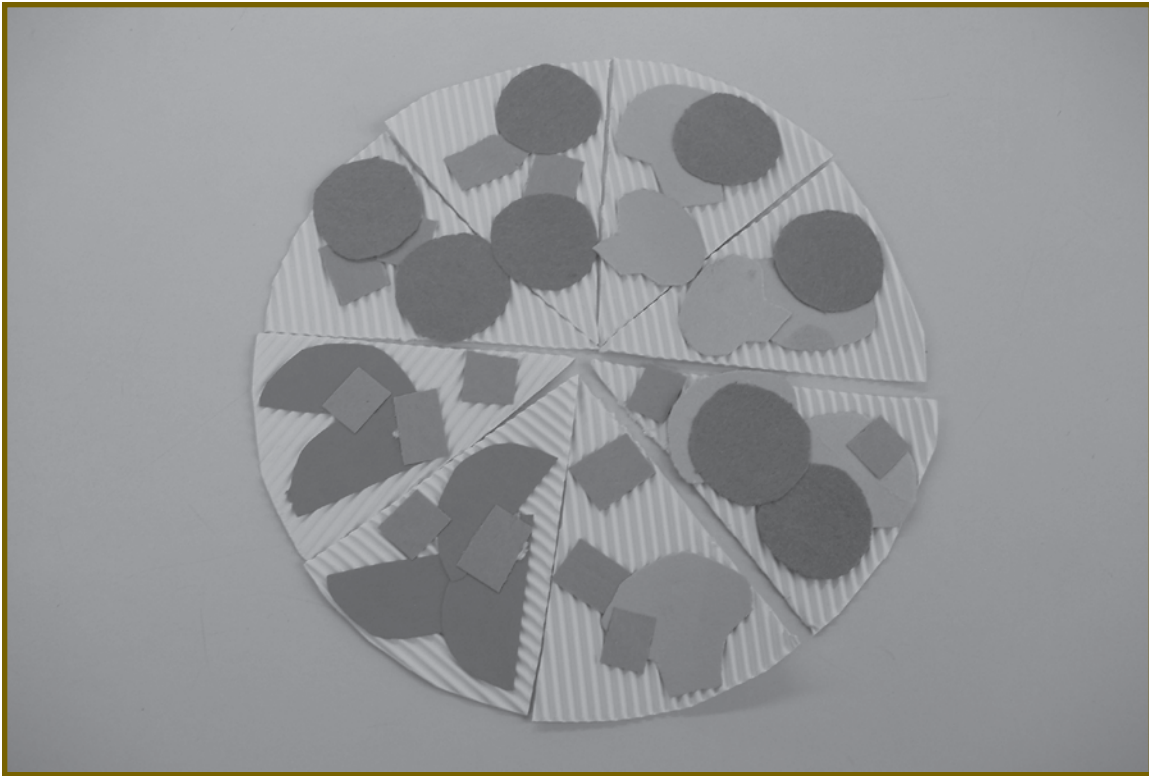


Figure 2. Pizza Toppings

The students presented their graffiti art, and hence their understanding of fractions, to their classmates. After all the groups had presented, the lesson delivery teacher distributed pizza materials made from coloured construction paper to the students. The students were asked to place toppings on their pizzas according to information they could infer from a word problem that described the likes and dislikes of the eight people planning to share the pizza (e.g., Ravi and Arpita like green peppers but not mushrooms; five-eighths of the people sharing the pizza like pepperoni). When the students completed their pizzas (see Figure 2), several groups were asked to share their results with the class, and the teacher used this presentation period as an opportunity to consolidate student learning, check for understanding, and frame closure of the lesson.

Immediately after each lesson delivery, the school-based lesson study group met to debrief the lesson, focusing on their observations and assessment of what worked and what didn't work. They also shared recommendations for improvements to the lesson plan that could deepen student engagement and learning.

Whole group focus group discussions

The two lesson study groups met at Elmlea for a focus group discussion about their experiences with the lesson study process. The following questions guided the focus group discussion:

- What are your general impressions of lesson study?
- What are the benefits of lesson study for teacher candidates? Associate teachers? For students?

- What are the challenges of lesson study?
- How can lesson study contribute to the development of a professional learning community of teachers?
- What, if any, role might lesson study play in your future work as a teacher?

Data Collection and Analysis

Data were collected and analyzed using qualitative research techniques: audio-recorded group collaboration, participant observation, focus group discussion, and participants' reflective writing. Conversation and collaboration among the research participants were audiotaped during all phases of the project: introducing the lesson study process, setting the learning goals, and debriefing the lessons after delivery. At the conclusion of the project, a focus group discussion to debrief the lesson study process was also audiotaped. All audio-recordings were made with the informed consent of the participants. The audiotaped data were transcribed, analyzed, and organized into themes.

The researchers and the project participants were involved in the observation process throughout the project. The researchers observed and recorded events at every stage of the lesson study process. While the associate teachers delivered the lessons, the school-based lesson study group members made observation notes of student engagement and learning in the classroom. Although the lesson deliveries were not audiotaped, the observation notes were useful supplements during the lesson study debriefings.

Each participant wrote a two-page reflective paper to share their experiences and perceptions of lesson study and its future utility. Six teacher candidates and two associate teachers

submitted reflections. Information from the reflective writings was corroborated with the findings from the focus group interviews and observation notes to gain insight into the benefits and challenges of lesson study collaboration between the associate teachers and teacher candidates.

Benefits of lesson study

Data analysis shows that in spite of the challenges experienced in implementing lesson study the practice can be beneficial to associate teachers, teacher candidates, and students. Study participants agreed collectively that lesson study is a valuable strategy for improving teaching and learning in elementary schools. They suggested that associate teachers, teacher candidates, and students could benefit from lesson study in different ways, as discussed below.

Strengthening content knowledge and teaching practice

Associate teachers and teacher candidates suggest that collaboration among colleagues provides an opportunity to strengthen content knowledge and teaching practice. Their reflections on the lesson study project indicate that experienced and novice teachers do not feel completely confident in their knowledge and teaching skills in some subject areas. While mathematics was the subject area for this project, one associate teacher argued that lesson study collaboration might provide an opportunity for her to develop her skills in teaching science, an area of professional development that she self-identified:

For a teacher such as myself, who is not strong in teaching science, lesson study would strengthen my skills and abilities to teach the subject. Not only would we have created a lesson, it would be an extremely

strong lesson as it has come from the ideas of many different teachers.

A comment by a teacher candidate describes a similar appreciation for the capacity of lesson study collaboration to build teaching confidence and competence: “I feel that it can be beneficial especially to teachers who are not comfortable teaching the specific topic.”

Several associate teachers spoke more broadly about the benefits of lesson study, particularly as an opportunity to strengthen professional learning communities in schools, thereby building camaraderie among teachers and creating a forum for sharing different professional perspectives and practices. Following are comments by two of the associate teachers:

As a teacher, it has provided an opportunity to work more closely in collaboration with my colleagues, which in turn has improved the camaraderie among the staff as they work together as a team. Through this collective process of planning and problem solving there is a synergy that develops through contributing best practices and allowing the opportunity to learn from others. Working as a group allowed us to view our planning from different perspectives, and, in turn, I found that I became more analytical in all aspects of lesson preparation.

For teacher candidates, it enabled them to see team members working collaboratively and the sharing of great ideas among a team of teachers. Lesson study allows teachers to make stronger connections with their colleagues, and it improves the quality of lessons. We look beyond teaching the topic, but look at what the key ideas and goals are.

Applying research to inform practice

The teacher candidates found that the lesson study project provided an opportunity to apply the theory and research that had been introduced in their initial teacher education courses. Working together with their associate teachers, they were able to deepen their understanding and application of the research by collaborating and sharing their perspectives on how research and theory might be applied in the classroom. The notion of creating inquiry-based, constructivist, learning environments was most applicable to the task of developing a mathematics lesson, and the teacher candidates worked together with their associate teachers to incorporate problem-solving activities in their lessons. Two of the teacher candidates explained as follows:

The teacher candidates were using what they had learned in reading the NCTM [National Council of Teachers of Mathematics] principles and *The Teaching Gap* to inform their decisions on what kind of tasks and activities should be implemented in the lesson ... Key ideas were that the activities should allow the students to use their problem-solving skills and involve group work and individual work.

In *The Teaching Gap*, the problem-solving-centred math lessons that the Japanese use challenge their students to think independent from their teacher. With our lesson, it was interesting to see the difference it made in letting the students try to solve the math problems.

Observing student engagement and learning to assess lesson effectiveness

The activity of observing student learning during the delivery of a lesson had a powerful impact on the teacher candidates.

They appreciated the opportunity to focus their observations on student engagement and understanding of the concepts, and they indicated an interest in continuing their participation in professional learning communities. One teacher candidate commented:

In my understanding of the lesson study model, our role as teachers is not just to collaborate with colleagues for professional growth but also to measure the effectiveness of our lessons in terms of how much the students are benefiting from them. It is about using problem-solving strategies in class as is done by the Japanese model on lesson study. I wouldn't hesitate from saying that our lesson study experience was just an eye-opener to the world of learning communities.

Developing effective collaborative activities for students is often challenging for experienced and novice teachers. Several participants noted that the students were engaged in the lesson and interacted appropriately and productively with their learning partners. According to one teacher candidate,

This math lesson allowed the students to work in pairs and use each others' strategies and knowledge to solve the problems at hand. It was interesting to watch the students use their own techniques in solving the math problems addressed to them, and it seemed that they were motivated to complete the tasks.

Modelling collaboration and developing effective learning opportunities for students

Teachers often ask students to work collaboratively, and some of the associate teachers in this

project noted that lesson study collaboration provided an opportunity for teachers to show their students that collaboration is also an important skill and activity for adults. One associate teacher stated,

As teachers we must continually be modelling for our students, and there is no better way to model cooperation and problem solving than to work together with our colleagues, to share ideas, to listen to each other and to take responsibility as a productive contributor to the process. Students also benefit from well-planned and thought-out lessons that are likely to be more effective having been developed from several minds as opposed to trial and error and planning of one teacher, who may or may not go back to the drawing board when they have a miss.

Challenges of lesson study

The two main challenges confronted during this project related to time constraints and to the power imbalance experienced by the teacher candidates. Time was a major challenge in the lesson study process. In particular, bringing the associate teachers together for all of the focus group discussions was difficult due to the many in-class and out-of-class commitments they already had. Because of the number of focus group meetings, and other school improvement initiatives for which they had to withdraw from their classrooms, some associate teachers were reluctant to be released from their classrooms for lesson study purposes. They felt that the teacher candidates were not getting the expected experience and mentoring because of such withdrawals, and their students were lacking consistency and continuity in their academic program. Audette (2004) also reported teacher concerns for the

amount of time spent out of their classrooms to engage in lesson study and argued that lesson study requires that teachers have flexible and creative timetables to facilitate their engagement in lesson study. One associate teacher commented,

While teachers appreciate the professional development time that is granted, there is also the problem of being out of their own classroom too frequently, which results in teachers feeling frustrated about accomplishing all that is set out for them to do within the classroom.

Power imbalance and dynamics among members of the lesson study teams also posed challenges, particularly for the teacher candidates who were to have their practicum performance evaluated by their associate teachers. One teacher candidate stated, “I saw some power dynamics taking place between the associate teachers and teacher candidates in terms of who had the control over the process.” Another expressed concern as follows:

I found the whole exercise to be a little superficial, as I did not really feel that I was contributing to the shaping of the lesson. I was more like a passive observer on the sides. Also, the dynamics of planning a lesson, with two experienced teachers who were confident and vocal about their teaching styles and my being in the capacity of a student teacher who was there to learn, were important for me, and as such, the two associate teachers dominated the preliminary planning process. At the back of our minds we knew we were eventually to be assessed by our associate and we might benefit from not rocking the boat.

While the power imbalance between associate teachers and teacher candidates may endure as a challenge to authentic collaboration among members of the two groups, the challenge of finding time in an already busy school schedule may not be insurmountable. Many schools now provide scheduled time each week for teachers to engage in professional learning community activities. Generally, teachers use this time to meet in grade-level groups to develop long-range plans, share resources, and moderate evaluation and report card preparation. School administrators interested in engaging their teachers in lesson study groups might provide training in lesson study and recommend that such activity take place during the scheduled professional learning community sessions in the timetable.

Impact

This project was beneficial for teacher candidates as it provided them with opportunities to be mentored closely and collaboratively by a group of experienced teachers and by their fellow teacher candidates. These professional exchanges enabled teacher candidates to learn teaching and planning strategies that they may not have had a chance to experience yet in their teaching practice and also to benefit from the collective knowledge and skills of the group. Another benefit was that participation in lesson study enabled teacher candidates to consider and apply research during their work as teachers.

The project was beneficial for associate teachers in that it introduced them to lesson study as a unique professional development process in which they were active participants in improving teaching and their students' learning.

Lesson study allowed associate teachers and teacher candidates to exchange ideas, a practice that strengthened their lessons and teaching techniques. Also, by working cooperatively, the lesson study teams were able to model collaboration for their students.

In addition, associate teachers had the opportunity to share knowledge and skills with their colleagues and interact on a deeper level as professionals, which, they argued, doesn't happen enough. They were also able to learn from the teacher candidates who had more information about what lesson study entails.

Implications for Teacher Education

This study contributes to literature on the applicability of lesson study in teacher education programs and in school settings. Findings from the study provide educators in teacher education programs, administrators in schools, and teachers in classroom settings with additional methods to strengthen teacher collaboration within a school, between schools, and between schools and teacher education programs. The study shows that through engaging in lesson study teacher candidates are likely to experience more meaningful mentorship and feel part of the teaching team early in their careers. The positive response from associate teachers and teacher candidates suggests that lesson study as part of a teacher education program can prove beneficial as a means of building professional learning communities, capitalizing on cumulative strengths, and fostering the development of “good teachers” who are committed to improving student learning.

What this project has shown is consistent with other research findings in North America: lesson study makes the aspiration to improve teaching and learning a collective responsibility. The process also helps the participants identify and investigate challenging areas of instruction and work collaboratively towards a solution (Audette, 2004). Nonetheless, it is important to note that there is no one-size-fits-all approach to lesson study in Ontario schools (Fernandez & Chokshi, 2002). Moreover, lesson study is not to be taken as a sole panacea to improve mathematics teaching in Ontario schools and teacher practices across the curriculum; rather it should be used hand-in-hand with other professional development activities and teaching and learning approaches (Audette, 2004).

Next Steps

All of the participants indicated a desire to continue lesson study activities beyond the project because they found that the process of sharing knowledge and skills with colleagues, coupled with the opportunity for focused observation of student learning, improved their teaching practice and also the way they approach lesson planning. The research findings suggest that if teachers are provided the time for lesson study collaboration as part of their ongoing professional development, they will enjoy a sense of accomplishment in knowing that they are part of a professional learning community focused on improving student learning. Future research is needed to examine lesson study collaborations in secondary schools and in subject areas other than mathematics. Also, when lesson study has taken root as a regular activity in Ontario schools, future researchers may decide to explore how lesson study works across schools, district boards, and provinces.

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project

MENTORING TEACHER CANDIDATES IN A PRACTICUM CONTEXT

Cathy Marks Krpan and Rochelle Rabinowicz

Project Coordinators

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Project Partners

- Peel District School Board elementary associate teachers
- Teacher candidates in the 2007/2008 academic year

Abstract

This study examines ways in which initial teacher education programs can support associate teachers in mentoring teacher candidates during their practicum experiences. OISE program instructors met with faculty liaisons from OISE's program schools in one of the elementary cohorts to discuss their perspectives regarding the mentoring process. This study explored and documented the mentoring strategies they find helpful, challenges they experience, and ways in which OISE's Initial Teacher Education program can better support their role in the field. Data were collected on how associate teachers mentor teacher candidates in a variety of contexts.

Project Focus

- How can associate teachers best mentor teacher candidates with diverse backgrounds and experiences?
 - What are some of the challenges and benefits of mentoring teacher candidates?
 - How can universities best support associate teachers in the field?
 - What kind of strategies do associate teachers find effective for providing teacher candidates feedback about their teaching?
-

This project grew out of OISE's close partnership with its program schools. As the program coordinators of 60 teacher candidates in OISE's Initial Teacher Education program, we wanted to enhance the mentoring relationship that takes place between associate teachers and their teacher candidates. We know that the influence of the associate teacher is critical to the professional development of teacher candidates (Gibbs, 1995). Research literature regarding the effectiveness of teacher candidates' professional experiences indicates concerns related to how associate teachers mentor teacher candidates by providing effective feedback and opportunities to reflect on their practice (Field & Field, 1994). Research shows that the practicum is one of the most influential elements in the initial teacher education program and that feedback from associate teachers is the most influential element in that experience (McCann & Radford, 1993). Consequently, it is essential that associate teachers develop effective mentoring skills to provide feedback in a way that is efficient for them and effective for teacher candidates. Associate teachers need to be able to discuss teaching practices and issues with their teacher candidate in meaningful, non-threatening ways (Guton & McIntyre, 1990).

This project was designed to draw from the expertise of associate teachers who act as OISE's school liaisons, a role whereby they assist with practicum placements and supervise/mentor teacher candidates and the associate teachers in their schools. Three meetings were organized in which the school liaisons met and shared their insights about the mentoring process. The intention was to create discussion groups to enhance partnerships between the field and the university programs.

Seventy per cent of OISE's Regional elementary cohort schools were represented in this project; this represents seven out of the ten program schools. Through meaningful inquiry, which includes critical reflection on current teaching practices (Suter, 1998), associate teachers had opportunity to explore their practicum experiences of mentoring teacher candidates. This approach enabled the university researchers and research participants from the schools to explore issues related to mentoring and to provide opportunities for participants to share their personal insights (McNiff, 2001). Group discussion allowed associate teachers to examine their mentorship strategies in a collaborative context and also to provide input into the ongoing improvement of OISE's practicum program.

Another aspect of this study was to identify issues related to at-risk teacher candidates. A teacher candidate who is deemed to be at risk of failing the practicum might demonstrate weak instructional practices or inadequate understanding of professional responsibilities. These teacher candidates require significantly more support and direction from their associate teachers than other teacher candidates. This study examined effective strategies that associate teachers could use to mentor their at-risk teacher candidates.

Stages of the Project

The principal investigators contacted all the Regional cohort program schools via email to invite school liaisons (associate teachers who assist with mentoring associate teachers and teacher candidates at their school site) to participate in the study. Seven school liaisons volunteered to be part of the study. Three

meetings were convened, each facilitated by the university researchers and lasting two and a half hours. For each meeting a set of questions was prepared to guide discussion and engage the participants in sharing their insights. Participants shared their mentoring experiences, explored different strategies they used to work with OISE's teacher candidates, and, in small groups, brainstormed ideas related to the research focus. When participants shared their insights, the researchers asked follow-up questions to clarify their understanding to ensure accuracy of their notes.

The first meeting took place in late November 2007. A discussion centred on the following questions designed by the researchers: Why do teachers volunteer to serve as associate teachers? How do effective associate teachers organize their time to provide feedback to their teacher candidates? What do teacher candidates expect from associate teachers in terms of the provision of feedback? A second meeting took place in February 2008. Discussion focused on the ways in which associate teachers support teacher candidates who experience difficulty in achieving success in their practicum responsibilities. The associate teachers provided suggestions in the areas of communication, lesson plans, teaching strategies, and professionalism.

The final meeting of the research group occurred in April 2008. Participants reviewed the situation of teacher candidates who were at risk of failing their practica and considered how associate teachers can support these teacher candidates. They discussed practicum placement issues and the professionalism of teacher candidates. In addition, they examined how associate teachers view the role of the faculty liaison, a faculty instructor who is responsible

for visiting specific schools during practicum to observe teacher candidates teach lessons and support the associate teachers in mentoring teacher candidates.

During the meetings, participants reviewed a draft Deskcard that had been developed by the Regional cohort coordinators in response to frequently asked questions about the practicum. Participants provided feedback for a final version of the Deskcard, which is a one-page handout that provides associate teachers with important information related to the practicum (such as practicum dates and an overview of practicum expectations). Also, during the research meetings discussion led to the development of several practicum resources. The participants felt a chart format and its content would be a practical tool to assist associate teachers in mentoring their teacher candidates. They created two communication prompts charts: one for associate teachers to help them facilitate discussions with their teacher candidates, and the other for teacher candidates to assist them in approaching their associate teachers with any concerns or questions.

Data Collection and Analysis

Three forms of data collection were used during each meeting of the research group: transcribed audiotaped discussions, written reflections from the participants, and researchers' notes. Information gathered from each data collection method was triangulated to identify common themes and patterns in the research, and the transcripts were analyzed to identify key themes. The following four main themes emerged: importance of university/school communication, benefits of the associate teacher role, support for at-risk teacher candidates, and provision of feedback.

Importance of university/school communication

The project participants emphasized the importance of ongoing communication between the university program and the associate teachers. They felt that having accessible university staff was paramount, especially if the teacher candidate they were working with was struggling. They noted that many of the teachers in the school had mentored teacher candidates for OISE's program in the past, but they still appreciated meeting with the OISE faculty liaison, who supervised teacher candidates in a specific set of schools. Participants stressed how important it is for teacher candidates and associate teachers together to hear the same message regarding practicum expectations. Developing a strong working relationship between the school and the faculty advisor was highlighted as a critical factor in the effectiveness of the practicum experience.

The participants said that the practicum Desk-card was valuable in assisting associate teachers in keeping track of practicum details, such as important dates and teaching expectations, and in developing a clear understanding of associate teacher and teacher candidate roles. Participants suggested that it would also be beneficial to have a similar card for the STEP Days, which are primarily observation days that take place once a week leading to the practicum block. Because associate teachers occasionally felt less sure of how the STEP days were to be organized, they thought it would be helpful to have a STEP card with specific examples of activities their teacher candidate could do on those days.

Communicating effectively with teacher candidates was also viewed as an important part

of an effective practicum experience. As part of this research, participants addressed communication issues from the perspectives of both the associate teacher and the teacher candidate (see Figure 1 and Figure 2). They felt that the prompts and strategies listed in the charts had the potential to improve communication during the STEP and practicum experiences, and thereby enhance the mentoring process.

Benefits of the associate teacher role

The participating associate teachers described their role as very gratifying. They appreciated the energy and strategies teacher candidates bring to their classroom programs. It was rewarding for them to see their teacher candidates grow in their teaching and leadership abilities. They felt that mentoring teacher candidates was an effective way to develop their own leadership skills and give back to the teaching profession.

They often grew from the experience, noting that they learned new teaching strategies from their teacher candidates. One participant explained, "Sometimes I can become a bit jaded with all of the politics in teaching. But when I get a teacher candidate in my classroom, it reminds me why I am in this profession and why I really love it."

One of the key benefits of being a mentor was reflecting on one's own teaching. The associate teachers explained how teacher candidates often asked questions about their classroom program. These discussions would cause them to think critically about their own classroom practices and make changes to improve their program.

Communication Prompts Chart for Teacher Candidates	
If your associate teacher takes over your lessons	<ul style="list-style-type: none"> • assume the associate teacher has the best intentions, i.e., they may not be aware they are interrupting the lesson • don't make comments about the experience in front of students • raise the issue when discussing the lesson, not during the lesson • request a conference • talk to your faculty advisor • start with "I ..." <p>Examples:</p> <ul style="list-style-type: none"> • ask, "I notice you had feedback for me during the lesson, but could you also write it down for me?" • say, "I noticed ..." • explain, "I learn best when I make small mistakes"
If your associate teacher leaves the room while you are teaching	<ul style="list-style-type: none"> • know the legalities • be pre-emptive ("Please don't leave the room ...") • say, "I feel uncomfortable when you ..." • say, "Is there anyone who can stand in for you if you have to leave?"
If your associate teacher's feedback is too vague, e.g., "Great lesson" or "That was really good"	<ul style="list-style-type: none"> • when talking to the associate teacher, point out specific notes they've made for you and provide feedback on how they help you improve • tell them that you value receiving written feedback quickly • ask questions • ask the associate teacher to elaborate, e.g., what did you notice about my timing? • revisit your questions at another (better) time • give them a stop, start, continue outline • write down any feedback your associate teacher provides
If your associate teacher does not provide written feedback	<ul style="list-style-type: none"> • give your associate teacher a journal • explain, "I'd like you to write in this so I can improve ..." • ask, "Would you write that down to remind me to use that strategy next time?"
If your associate teacher does not let you try anything new	<ul style="list-style-type: none"> • explain, "I am looking at this experience as a learning opportunity" • say, "I really like the things that you do ... I would like to try ..."
If your associate teacher does not provide resources	<ul style="list-style-type: none"> • ask for them • visit the school library resource centre • talk to the teacher-librarian
If your associate teacher expects too much teaching	<ul style="list-style-type: none"> • refer to the OISE expectations in the cohort or Practicum Handbook and the Deskcard • remind your associate teacher, "The expectations for teaching time this week are ..." • talk to your faculty advisor or the school liaison
If your associate teacher has a different style of class management	<ul style="list-style-type: none"> • ask, "How would you feel about me doing ...?" • say, "I would like to try ..." • follow your associate teacher's routines. This is not your class. Everyone is different. Different styles may be equally effective.

Figure 1. Communication Prompts Chart for Teacher Candidates

Communication Prompts Chart for Associate Teachers	
If your teacher candidate provides insufficient lesson plans	<ul style="list-style-type: none"> • be clear about your expectations from the beginning • discuss the purpose and value of lesson planning • refer to the Ontario College of Teachers' Standards of Practice • refer to the OISE and Cohort Handbook • make it clear that the lesson plans of a teacher candidate and of an associate teacher will be different because of experience and internalization of planning elements • work together to develop a complete plan • set up times to expect plans, e.g., "I want to see your plans 2 days in advance" or "I want to see your plans by 8:00 a.m." • discuss lesson plans with written and oral feedback • mention lesson plans in lesson reflections
If your teacher candidate arrives late and/or leaves early	<ul style="list-style-type: none"> • set out clear expectations from the very beginning, e.g., "I'll meet you in the classroom at 8:00 a.m." • remind your teacher candidate of the time you expect them • be clear, e.g., "It is expected that you are here far enough in advance to prepare ... and that you are available after school to ..." • explain to your teacher candidate that they should not leave until they show you they are prepared for the next day
If your teacher candidate lacks initiative	<ul style="list-style-type: none"> • model the activity you want the teacher candidate to do on their own • motivate the teacher candidate, e.g., "I think the students will appreciate your lesson because ..." • encourage positives, e.g., "Your questioning was effective because ..." • let the teacher candidate know that it's safe to make mistakes in your class
If your teacher candidate is not integrating your feedback into his or her lessons	<ul style="list-style-type: none"> • encourage/praise the teacher candidate when feedback is used • ensure your feedback is clear and achievable • feedback needs to go beyond "great lesson." Teacher candidates need to know why it worked or did not work. Provide support so teacher candidate can integrate this knowledge into their next lesson • provide information to the faculty advisor
If your teacher candidate leaves the class to prepare work for their next lesson or to "just zip out and ..."	<ul style="list-style-type: none"> • remind your teacher candidate of safety issues, i.e., you can't leave when it is your own class • explain that this is a real-time experience • clarify that teacher candidates can't do what the associate teacher can't do
If your teacher candidate talks down to the students or tries to be their buddy	<ul style="list-style-type: none"> • invite your teacher candidate to watch you as you model appropriate talk to students • address issue as part of your daily feedback • explain to your teacher candidate what professional boundaries are and why they are important
If your teacher candidate does not dress professionally	<ul style="list-style-type: none"> • discuss school dress code and dress down days • remind teacher candidates to dress for the weather, e.g., yard duty is part of the job • invite teacher candidates to look at themselves from the students' perspective • explain that attire should allow teacher candidate to bend, stretch, sit, move

Figure 2. Communication Prompts Chart for Associate Teachers

Support for at-risk teacher candidates

The most challenging aspect of the mentoring process was supporting at-risk teacher candidates. Providing support could be very stressful if the associate teacher was also in the midst of other school-related responsibilities, such as preparing report cards, doing parent interviews, or being involved in additional leadership projects. The associate teachers noted how much time they would invest in supporting at-risk teacher candidates; in some cases, they would have to put other school initiatives on hold. Another concern in hosting an at-risk teacher candidate was the impact not only on the classroom program but also on the students, especially if concepts and skills were not taught effectively. Also problematic is that many associate teachers feel overwhelmed with the responsibility of having to fail a teacher candidate. As a result, they often second-guess their ability to mentor and wonder if they are doing everything they can. The thought of being the one to “destroy” someone’s career by writing a failing evaluation is an extremely emotionally draining experience.

Provision of feedback

All participants had their own strategies for providing feedback, and they agreed that the feedback needed to be both specific and also a blend of positive and constructive points. Saying “That was great!” was considered too vague and did not promote professional growth.

During the project, many associate teachers shared that they used a journal to record feedback as part of their mentoring process during the practicum. Some used two journals: one in which they recorded feedback and another in which the teacher candidate reflected on his or her practice. Most believed that it was important to engage the teacher candidates in some form of written reflection on their teaching. One noted that it was critical to have an ongoing written dialogue in addition to verbal feedback, as this allowed her to understand her teacher candidate’s thinking *behind* the lessons she taught. Some noted that in their school other associate teachers would record feedback directly on the lesson plan, thus providing

The participants shared some key strategies that they felt would be helpful for associate teachers who are mentoring *at-risk teacher candidates*:

- Model strategies that your teacher candidate needs to improve. Provide teacher candidate with “look-fors” before you teach, to help focus their observations.
- Be clear in your communication. Ensure that your teacher candidate understands where he/she needs to improve and that he/she may be at risk of failing.
- Maintain written communication and documentation of the teacher candidate’s progress.
- Set specific goals on a daily basis and be clear about expectations
- Review skeletal lesson plans a day in advance in order to provide more support and feedback.
- Try team planning a lesson with your teacher candidate to provide extra support and mentoring.
- Communicate your concerns to OISE’s faculty liaison immediately.

an effective means for later reference. The observation sheets and teaching rubric included in OISE's practicum handbook, which was given to associate teachers, and also the Deskcard were considered helpful because they provided specific look-fors that could be used to assess teacher candidates.

Finding time to discuss the written feedback with teacher candidates has become more and more challenging for associate teachers due to their busy schedules. Most associate teachers met with their teacher candidates during their preparation time or over lunch. Yet, they stressed the importance of setting aside time, as much as 30 minutes each day, to discuss their teacher candidate's lesson plans, instruction, and classroom management. They also said it was important that teacher candidates be asked to reflect on what went well and on the areas they could improve before the associate teacher feedback was discussed. Doing so provided opportunity for teacher candidates to critically assess their own practice.

Impact Partnerships

This research study strengthened OISE's school/university partnerships and produced insight into the challenges that associate teachers experience as they mentor teacher candidates. The participants were grateful to have the opportunity to share insights and learn from each other. Many took away ideas to use in their own mentoring process, and some shared the ideas with colleagues at their school.

The topics discussed during the research meetings clarified the importance of the faculty liaisons and the importance of this role being consistent across different schools in terms

of the number of visits faculty liaisons make. The project coordinators were surprised to learn that associate teachers consider the group meetings that are held at each program school before each practicum to be beneficial—even for those who had been associate teachers for several years. It will be important to ensure the continuity of these meetings as an integral activity for all faculty liaisons supervising in the OISE program.

Supporting associate teachers

This study highlights the challenges that OISE's associate teachers face when they mentor at-risk teacher candidates. The research findings confirm that associate teachers found it extremely challenging to provide the support that struggling teacher candidates needed to succeed in their practica. The time constraints and emotional drain were overwhelming for many. The participants stressed that the accessibility of faculty and support staff at OISE's SUPO (School/University Partnership Office) was greatly appreciated by mentors in the field.

As cohort coordinators, we will continue to explore strategies to provide support and encouragement for OISE's associate teachers as they take on the challenging role of mentoring. The Communication Prompts Chart for Associate Teachers that was developed through this research will be included in future information packages and shared at program school meetings. It will also be shared with SUPO at OISE so that other faculty liaisons might also use this communication tool.

Supporting teacher candidates

The insights that educators shared during this research project will assist OISE instructors in preparing teacher candidates for their

practica. The Communication Prompts Chart for Teacher Candidates will be used as part of the Initial Teacher Education program to support the work in practicum preparation with teacher candidates. This chart may be effective in providing concrete examples of how teacher candidates can resolve practicum issues with their associate teachers in a professional manner. This could lead to improved communication between teacher candidates and their associate teachers.

Continuing the conversations

Through this research it became very evident that associate teachers want to ensure that teacher candidates succeed in their practica. Over time they have developed mentoring strategies to create environments of support and risk-taking in their classrooms. This study has highlighted the need to continue to provide opportunities for sharing and discussion not only among teacher liaisons but also among all associate teachers. In this way, communication can be strengthened and the work of associate teachers will be recognized and celebrated.

Implications for Teacher Education

Although this research focused on one cohort of program schools, it can inform practice in other OISE cohorts, or in other initial teacher education programs. This study contributes to existing teacher education research by providing further insight into the mentoring process between associate teachers and teacher candidates. The findings highlight some of the complexities and challenges involved with mentoring teacher candidates, and these can assist both university instructors and field personnel in their support of new teachers.

This research may serve as a model for other faculties who are interested in creating similar discussion groups to enhance partnerships between the field and their university programs.

In addition, the communication charts may provide concrete strategies for supporting teacher candidates and associate teachers in the field. The ideas promote discussion and awareness of key issues relating to the unique complexities of mentoring a specific teacher candidate.

Next Steps

Based on the findings of this research, we are going to implement the STEP Deskcard and monitor its use in OISE's Initial Teacher Education program. The use of communication charts will be explored further to verify their effectiveness in supporting teacher candidates, associate teachers, and faculty liaisons. Information gathered from this research will be shared with OISE's SUPO office. The communication charts, for example, may be useful to other cohorts in the Initial Teacher Education program. More meetings with associate teacher liaisons will be organized to continue the discussions that began during this study.

Further research on mentoring practices in initial teacher education programs will contribute to improving the experience for both associate teachers and teacher candidates. Specifically, studies that examine how initial teacher education programs can support new associate teachers *before* they begin their role as mentors may help to build mentorship capacity. Research that further explores ways in which associate teachers can better support at-risk teacher candidates is paramount, not only from the perspective of associate teachers but also from the point of view of teacher candidates.

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