# COLLABORATIVE ACTION RESEARCH SUPPORTING TEACHERS' PROFESSIONAL DEVELOPMENT AS EXEMPLIFIED BY ONE TEACHER TEAM'S ACTION RESEARCH ON A STUDY OF SILENT READING

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#### Abstract

This paper focuses on one teacher team and the university facilitators who supported their collaborative action research within a province-wide professional development initiative designed by the provincial elementary teacher union to bring together teachers and university faculty in teacher-directed action research. The paper is collaboratively written by three teachers, their principal, two university facilitators, and the teacher union's director of the project. We identify the principal's and university facilitators' involvement as important contributors to the success of the initiative, but underline the significance of the research as being teacher-led and collaborative with funding for release days as features that follow the democratic principles of teacher autonomy and equality to support teachers' professional learning for change. The success of the initiative, <u>Teachers Learning Together</u>, is exemplified by a report of one team's research methods and findings.

This paper, collaboratively written by three teachers and their principal working in a Canadian elementary school, a project manager of the provincial elementary teachers' union, and two teacher educators from a faculty of education, describes a collaborative action research initiative that took place over an eight-month period during the 2007-2008 school year. The purpose of this paper is to highlight features of effective partnerships between multiple stakeholders in supporting teachers' professional development through action research. Our research questions are:

- 1. What are the features of a successful collaborative action research project conducted by a featured school team?
- 2. Through analysis of the featured team's research and that of three other teams, what can we learn about the ways in which participation in a collaborative action research team influence teachers' professional development?

The province-wide project is described initially followed by greater detail about the action research of one teacher team. The paper concludes with observations about factors contributing to successful collaborative action research drawn from case studies of the teacher team whose research is described in this paper, and case studies of three other teacher teams.

## The Provincial Scope of the Teachers Learning Together Project

Recognizing that action research is a powerful professional learning tool for teachers, the Elementary Teachers' Federation of Ontario (ETFO) sponsored a large-scale action research project entitled Teachers Learning Together (TLT) during the 2007-2008 school year. This unique program connected teams of elementary teachers (grades K-8), a teacher union, and faculty members from five universities from across the Canadian province of Ontario.

In Ontario, teacher unions are charged with enhancing the professionalism of their members, which necessitates ensuring that members of the profession remain current in their professional knowledge. For this project, 50 teams of teachers from 26 of the province's 52 school districts selected a topic of inquiry and applied to participate in a year-long school-based action research project. They carried out collaborative action research, described by Calhoun (2002) as a catalyst for professional growth for classroom teachers. Action research provides "continual formal learning [that] is both expected and

supported," with the ability to "replace superficial coverage with depth of knowledge" and "generate data to measure the effects of various programs and methods on student and staff learning" (p. 18). Teams investigated a wide-range of topics including supporting oral aboriginal students' language development, encouraging adolescent boys' engagement in music class, and exploring strategies for differentiated instruction in middle-grade classrooms, to name a few.

The initiative was founded on the belief that "practitioner research has the potential to foster educational change and innovations to open doors for collaboration between school practitioners and schools of education" (Borko, Whitcomb & Byrnes, 2008, p. 1033). The teacher-led and directed action research projects helped to bridge the theory-to-practice gap, as the teacher teams were supported by researchers from faculties of education. University partners provided relevant research on the project topics and facilitated the various steps of the action research process.

The shared experiences, perspectives and insights informed classroom practice in both settings. Teachers and university faculty gained deeper understandings of the challenges and successes of both teaching contexts and were better able to work through bureaucratic and ideological tangles that trip up efforts to bridge theory and practice. Through working with colleagues, teachers and university faculty gained not only the practical benefits of working together in a group, but also found renewed enthusiasm for teaching and the excitement of ongoing learning alongside colleagues.

The teacher union supported teachers by providing up to four days of release time for teams to collaborate on their project. All teams attended an introductory symposium in the province's capital city in August as they began their action research journey, had access to an EBSCO database to access professional and research journals connected to their topics, and were supported by an online website and forum, and by webcasts throughout the project.

#### Research Methods and Results of One Successful Collaborative Action Research Team

The research process and results of one team's action research are reported to illustrate successful collaborative action research practices and to provide data-based information for supporting young adolescents' literacy.

# Setting up the Action Research

The action research took place in a northern Ontario school in a community of 75,000 people. The team consisted of the school's male grade-4 teacher, the male grade-5 teacher, the female grade-6 teacher and their male principal. The principal was a willing participant in all meetings. He provided encouragement, arranged for supply teachers to free up teachers for meetings, and purchased resources for the classrooms. The grade 6 teacher organized meetings, and the grade 5 teacher provided computer expertise in collecting and analyzing our data, keeping records of observations, and setting up a PowerPoint presentation to communicate the research findings. The university facilitators met three times with the school team and communicated via email to help the school team revise and shape their research question, work through the data gathering and analysis process, and complete the research reports.

At meetings prior to the start of the data collection, the team established timelines, adjusted the research question, and made decisions about teaching interventions and the research design.

#### Research Purpose

Seventy percent of the student population of the northern Ontario school in which the teacher team worked is comprised of Aboriginal students. Eighty-percent of these students live on a First Nations reserve and are bussed to school. Within the school district, Aboriginal girls are twice as likely to get a postsecondary degree as are their male peers. The teachers wanted to conduct a research study that would help them to understand how they could better support male Aboriginal adolescents' literacy in their classrooms.

Like Leung (2007), teachers had observed that students did not use the 15 minutes of daily silent reading time to engage fully with the books they chose. Previous research has had mixed results in showing the contributions of sustained silent reading to students' reading achievement (Fischer, 2004; Krashen, 2005; Yoon, 2002). Teachers wanted to find out how students' engagement would change

when they varied what students did during the silent reading time.

The research question transformed numerous times in the early stages and was finalized as the following: How do young adolescent Aboriginal boys' reading enjoyment of their reading and their engagement change during silent reading time change when teachers introduce four changes to the silent reading practices? This study took place from October – April over the 2007/08 academic year. These are the changes made to silent reading time during that time:

October-November: Increased time for silent reading to 20 minutes per day from 15 minutes.

November-December: Partner reading with a classmate. Students selected a partner and the two partners chose a common text that they read to each other.

January-February: Introduction of new texts, including BoldPrint Series, graphic texts,

magazines, and non-fiction texts, on topics that students indicated in an

interest survey that they liked.

March-April: Teacher did a mini-lesson on visualization and making connections prior to

independent reading time. At the completion of silent reading, each student shared with a partner their visual images or personal connections

to the texts.

They drew on the teaching approaches of Kelley and Clausen-Grace (2006), Leung (2007), and Trudel (2007) when determining which new approaches to sustained silent reading to take in their action research study.

#### Data Collection and Analysis

Teachers selected six Aboriginal boys from their class as research participants, although all students in the class took part in the silent reading activities. The six participants in each class represented the range of reading abilities in the classroom; two stronger readers, two "average' readers and two who needed extra assistance.

The three teachers wrote anecdotal observations of the six participants' engagement with books at least once each week during silent reading time before the research began and during the seven months of the research study. They observed the following: the amount of time that the boys focused on the texts and the texts they chose, their body positioning, (e.g., where they held the book while reading), and peer interaction around the text. They asked students to complete surveys that they had designed after students had participated in the new approach. Questions in the four surveys asked students how they felt about the new approach. The choice of responses was: I love it/I like it/It's okay/I don't like it. Students were also asked about how frequently the new approach should be used. The choice of responses was: do more/keep it as it is/do less/stop it. Students were also asked how much they had learned from the approach. The choice of responses was: I learned a lot/I learned some/I learned a little/I learned nothing. Teachers carried out each treatment for four weeks, gathering data throughout the duration of each treatment.

Teachers tallied the survey results for all three grades for each of the four changes made to silent reading in their classrooms. They categorized the anecdotal observation data at each grade level by assessing whether they thought the behaviour indicated that the student was engaged in the text or was not engaged in the text.

#### **Findings**

The students felt that the 20-minute time allotment for reading should be increased, or at the very least, remain the same. They did not want to go back to the 15-minute time allotment that had traditionally been in practice.

Three-quarters of the students indicated that they learned little to nothing from partner reading. Students were frustrated when their partners read at different paces and showed different levels of interest in the texts the partners had chosen. This frustration led to off -task behaviours, thereby decreasing their engagement.

Ninety-five percent of the students "loved" or "liked" the addition of new and varied resources and chose their silent reading texts from these new resources 75% of the time. Two-thirds of the students stated that they learned a lot from the new resources. Overall, grade 4 students chose and indicated that they preferred reading the *BoldPrint* (Booth, Green & Booth, 2004) series. Students in grade 5 preferred the *BoldPrint* series and graphic novels. Grade 6 students were drawn to novels of nonfiction about World War II and the Holocaust. One student, who had started the year showing little interest in reading during silent reading time, began reading whenever he had free time during the day and asked his parents to buy books for him after discovering *Anne Frank: Diary of a Young Girl* (Frank, 1952) and other books on historical and current wars.

Ninety-five percent of students across the three grades felt that reading with a focussed intervention should continue on a regular basis. Half of the students reported that they learned a lot from focussed intervention. They were highly engaged when invited to share individual visualizations and connections.

In summary, the teachers working together on this team found that their young adolescent students were most wholeheartedly engaged in their silent reading when the texts they read were of high interest to them. Students preferred having extended time for silent reading—15 minutes was not long enough for them. The invitation to talk about the visual images and personal connections students made to the characters, ideas, plots and themes of texts read during silent reading time led to students' greater engagement than reading with a partner. Although the small sample size precludes generalizing these results too widely, the teaching ideas can be introduced in other middle-grade classrooms to foster students' engagement with texts during silent reading time. Teachers in other school contexts can use these findings as a comparison point when gauging the potential success of these strategies in supporting their young adolescent students' silent reading.

As this example of successful collaborative action research shows, teachers' action research has much to offer middle school teachers. The research purpose stems from everyday issues and concerns shared by many middle-grade teachers. Furthermore, the action research results are based on data that have been systematically gathered as part of teachers' everyday work with students and then analyzed through the perspective of teachers of young adolescents. In the final section of this paper, the professional learning that the university facilitators observed in case studies of this action research team and three other school teams in the TLT project are highlighted.

# The University Team's Research on Teachers' Professional Learning: Case Studies of Four Action Research Teams

The university researchers conducted case studies of four action research teams to determine the influence of the Teachers Learning Together initiative on teachers' professional development. The case study participants were as follows. In Reading Elementary School, the team which wrote about its results in the initial part of this paper, one teacher from each of grades 4-6 and the school principal participated. The Research Middle School team was composed of 1 male and 2 female grade 8 Language Arts teachers and a female Special Education teacher. A male music consultant, four female and one male music teacher teaching in schools from one side of the school district to the other comprised the Music Leadership Team. The Reading Comprehension team was composed of a grade 3 and a grade 5 female teacher, and an ELL teacher.

# Data collection and analysis

Classroom observations, interviews, focus groups, action research teams' proposals and their interim and final research reports, and meeting minutes served as data sources. We wrote non-verbatim minutes of face-to-face and teleconference meetings held with each of the teams (see Table 1 for schedule of meetings). A research assistant conducted a focus group in the last week of April with each of the three teams at their schools. The interviews were tape-recorded and transcribed by the research assistant. In addition, we conducted half-day classroom observations of each teacher's instruction that stemmed from their action research. In a member check, teachers read through our field notes to tell us whether we had accurately represented what they said and did. We followed up our observations by asking teachers about their goals for their teaching and how well they felt they were met.

Table 1: Consulting Meetings with the Four Teams

Team	Dates	Content of Meetings
Reading Elementary (team composed of gr. 4, gr. 5, and gr. 6 teacher and principal)	Sept. 20, 2007	Refining research questions and establishing timeline
	Nov. 23, 2007	Refining research questions and teaching and data collection methods
	Mar. 26, 2008	Making sense of initial findings
	May 13, 2008	Data analysis
Research Middle School (team composed of 3 gr. 8 language arts teachers and a special education teacher)	Oct. 1, 2007 Nov. 13	Refining research questions and establishing timeline
	(meeting of all Toronto area teams)	Refining research questions and teaching and data collection methods
	Mar. 18, 2008	Ethics protocol
	June 16, 2008	Data analysis and final data collection process (e.g., how many students and criteria for selecting focus group participants)
Music Leadership Team (team composed of five music teachers)	October 2, 2007	Refining research questions
	Nov. 13, 2007 (meeting of all Toronto area teams)	Refining research questions, consolidating data collection methods, and ethics protocol
	•	Data analysis
Reading Comprehension Elementary (team composed of gr. 3, gr. 5 teacher and ELL teacher)	June 25, 2008 October 4, 2007	Refining research questions and teaching methods, and establishing timeline
	Nov. 13, 2007 (meeting of all Toronto area teams)	Refining teaching and data collection methods

The action research teams were required to write proposals with a preliminary statement of their research purpose, the teaching methods they proposed to try and what they hoped to achieve through their action research. They also wrote interim reports that included their research question, a project rationale and overview of teaching and data collection methods. Teachers identified emerging findings in describing the impact of their research on their students' learning and on their professional growth and wrote feedback to ETFO on their successes and anticipated needs to continue with their research. In their final reports, teachers presented their final results, the impact and implications of their research on practice and questions that arose for further research. These documents provided specific information about teachers' learning about their math teaching practices and about action research.

Data analysis involved identifying initial codes together after individually analyzing each data source. We modified the codes as we talked about our interpretations of the data, and identified key

quotations and examples to illustrate the themes that arose in this process. We continued to shape the themes until we reached consensus.

# **Findings**

Many teachers explained that sharing teaching practices, being part of a team, and having opportunities to meet other teachers at the August meeting in the province's capital city added an excitement to their teaching that carried over to their students. The students in their classes were enthusiastic participants in the classroom action research studies, as they could see that their teachers were engaged in active learning alongside their students. Case study results show that three factors were particularly important contributors to teachers' excitement and their professional growth through action research: shared leadership within the school teams; supportive, collegial relationships with university facilitators; and teachers' commitment to improving practice and their professional growth.

## Shared leadership within the school teams

The Teachers Learning Together collaborative action research upset the traditional power structures that determine professional development in schools. In this respect, it was a "practice of democracy," (Shannon, 2004, p. 18), as two democratic principles, autonomy and equality, were an inherent part of the project. Teacher autonomy took the form of decision-making about the topics of the research; decisions were not imposed by consultants, administrators or university researchers. Because the research questions were drawn from classroom teachers' observations and issues, and because teachers, who are invested in classrooms, were analyzing the data collected, the results are particularly powerful.

The principle of equality was also in evidence as all teachers on a team shared a common focus that arose from their own classroom practice. The funding for four release days throughout the school year provided a unique opportunity for teachers to carry out research that would support their professional learning and lead to improved classroom practice. Teachers worked together to plan and review the research, to collect and analyze data, to present findings and to reflect and plan again. All participants had the opportunity to reflect on their practice, to test new ideas, methods and materials and to assess the effectiveness of new approaches; all with the goal of supporting, extending and enriching the learning of teachers, students, and university facilitators. Ultimately, the project empowered teams of teachers to engage in inquiry that was meaningful to them in their classroom contexts and to disseminate the results of their research to colleagues within their school districts and beyond.

Having a shared vision and sense of purpose that guided decisions, together with a willingness to respect and accept all contributions in team meetings, were important contributors to success as an action research team. Teachers had created a safe environment for considering the possibilities for their research and for making plans that could carry their research forward. The team members were friends and colleagues who shared outside interests, as well as their devotion to their students and to professional learning. Like the teachers participating in lesson study in an American school setting, teachers participating in the TLT project felt that the collaborative action research supported building deep, trusting relationships with each other (Hurd & Licciardo-Musso, 2005).

Team members on each of the four teams took up leadership roles spontaneously as the need arose and as their individual talents were called upon, although there was an appointed leader who corresponded with university faculty and with ETFO faculty. The wholehearted involvement of the principal strongly contributed to the northern Ontario team's success that is featured in this paper. The principal described his role as that of "cheerleader" in encouraging teachers, providing financial support, and flexible schedules that allowed teachers to meet to plan and reflect on their research. He explained that the art of the school leader was "to read the situation and get a sense of when someone needed to make a quick decision and when to let the teachers run with it." He felt the group wanted his input, his attention, and collegial participation, and he was more than willing to give it.

#### Supportive, collegial relationships with university facilitators

The university facilitators were responsible for coordinating the strategic planning and functions of the team's action research journey and promoting teachers as leaders of their own professional process. Generally, the facilitators followed the teachers' lead, providing information about research processes as teachers indicated it was needed, and sometimes anticipating when information would be needed.

The action research teams seemed to appreciate the attention that their work received from university faculty as much as the advice they received about conducting research. Although teachers said that the face-to-face meetings with university faculty "helped us focus" and provided new direction when they seemed to be "floating along without any real direction", team members relied less and less on the facilitators as they began to see themselves as researchers. The university facilitators' role changed from an advisory one--helping the teams refine their research questions, their teaching and their data collection methods in the first three months, to a supportive one--reassuring teams that they were on track, validating what they were doing, and rejuvenating them when they felt that the demands of teaching and carrying out action research were overwhelming. At every meeting the inevitable question came up: "Are we on the right path?" Teachers wanted reassurance that they were fulfilling expectations and appreciated knowing that other teams were having similar experiences in carrying out the various stages of their action research.

# Teachers' commitment to improving practice

The collaborative action research gave teachers a focus for their commitment to improving their teaching. Teachers on all action research teams found that their research either provided a new perspective on practices they had been conducting in the past or confirmed hypotheses or beliefs about effective teaching that they had held. In this respect, they agreed that their teaching had not changed significantly. What had changed was the systematic gathering of information about their students' learning to address their research questions. Teachers used the research data for teaching and reporting purposes, in addition to using it for their research. Teachers spoke authoritatively about the new learning they had gained. They confidently explained what practices worked well and what did not work so well. They developed personal principles and theories to explain why the practices were successful.

Across the four case study teams who worked with the university facilitators, teachers' goals for their research were ambitious and they showed high expectations for every member of their group. They wanted the research to inform not only their own practice, but that of teachers in their schools, their school districts and beyond. One team frequently expressed a concern that what they were doing had already been done and that they were not contributing new knowledge to the field. Two other teams were excited at the prospect of "doing something that was groundbreaking or in some way publishable and that would benefit all."

Every team had plans to disseminate the results of their research beyond the final report submitted to ETFO in June and the October symposium where all teams met again in the provincial capital city and shared their research findings. Teachers felt that they were doing something important and, in the words of one teacher, that they "were able to give something back to their teaching community." As such, a collaborative action research model, such as the Teachers Learning Together initiative, with an emphasis on improving practice through research arising from issues arising in everyday practice, has great potential to make important contributions to all teachers. The research results are based on data gathered by classroom teachers and interpreted with both the teacher's practical lens and the university faculty's theoretical lens, integrating classroom practice and research in meaningful ways.

# Authors' note:

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