University of Alberta

**A Journey Into School Health Promotion: District Implementation
of the Health Promoting Schools Approach**

by

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DEDICATION

To those who care about healthy kids,
wherever you may be.

"Why blame the dark for being dark?
It is far more helpful to ask why the light isn't as bright as it should be."
(Rob Bell, Velvet Elvis, 2005)

ABSTRACT

The purpose of the study was to examine a particular division-level implementation of the Health-Promoting Schools (HPS) Approach, the Battle River Project (BRP). Schools have become an important setting to positively affect health behaviors of children and youth. Although evidence exists for the efficacy of the HPS approach, there are recognized gaps in the areas of implementation and policy development. The BRP was initiated by Ever Active Schools (Alberta) and focused on social and organizational levels, with the end goal of positively affecting student health outcomes and policy. The participating schools and the division were supported by all partners involved in the research and worked to facilitate the development of healthy, active school communities. The study is presented as a series of four papers bracketed by introduction and conclusion chapters. The introduction chapter details the theoretical framework, literature review, context, and methodology of the study. The first paper introduces the BRP, provides provincial background, and details the structure and framework of the project. The second paper examines the use of evidence to effect change in schools and the division. The takeaway points from the project included the value of stakeholder involvement throughout the process, the need to share gathered evidence with those in a position to implement effective practice and capable of effecting change, and the importance of encouraging an embedding of health in school and division culture. The third paper shares the findings from the case study of the BRP under three dominant themes: participation, coordination, and integration. Evidence gathered in the study

strongly support the efficacy of school division–based HPS implementation. The fourth paper examines the development and early implementation of healthy school policy in the Battle River School Division. Several themes were gleaned from the case study data, including perceptions and misconceptions, the importance of a bottom-up/top-down process, flexible rigidity with regard to implementation, and the need to make healthy schools *the way we do business*. The concluding chapter provides a summary of the work, highlights results, provides recommendations, and next steps.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS AND GLOSSARY

AHS – Alberta Health Services

BRP – Battle River Project

BRSD – Battle River School Division

EAS – Ever Active Schools

HPS – Health-Promoting Schools

IUHPE – International Union of Health Promotion and Education

WHO – World Health Organization

Champion – an identified person working within the school to implement HPS

Coordinator (Project Coordinator) – the individual hired by EAS and the

      BRSD to coordinate the BRP

Director – the Director of the Ever Active Schools Program

Effectiveness – a measure of how a particular project will work in the real world[1]

Efficacy – a measure of how a particular project can work experimentally[1]

Evidence – data gathered and used as proof of effectiveness

School Division / District / Authority – throughout Alberta, these terms are often

      used interchangeably to indicate the body responsible for K-12 education

      in a particular region

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[1] Derived from the Evidence Based Medicine Toolkit found at:
http://www.ebm.med.ualberta.ca/Glossary.html#E
Effectiveness: A measure of the benefit resulting from an intervention
administered under usual conditions of clinical care for a particular group of
patients
Efficacy: A measure of the benefit resulting from an intervention for a given
health problem administered to patients under ideal conditions

CHAPTER 1:

INTRODUCTION TO THE STUDY

The school has become an important setting for individuals and

organizations seeking to positively affect the health behaviors of children and

youth. Part of this has to do with having a captive audience rather handily sitting

in desks. Schools are also societal institutions that exist to promote learning,

prepare children for "real life," and pass on societal values (Apple, 2001; Hursh,

2008). For example, the mission of Alberta's Ministry of Education (2009-2012)

states, "Every student has access to educational opportunities needed to develop

competencies required to contribute to an enriched society and a sustainable

economy" (p. 3). If this is truly the case, then there is no more appropriate place

than school to teach children about the importance of a healthy lifestyle and alert

them to some of the key determinants of health and risk factors for chronic

disease. Problems can arise, however, because, although educators may recognize

the importance of health outcomes, they may not realize the opportunities that

exist to connect health and education to support their work in schools, which is

often interpreted as delivering the curriculum (Pinar, 2004).

School health promotion began in the 1950s when schools were seen as

places to teach children about the determinants of health. Over time, this delivery

system began to follow developments in health promotion policy such as the

Declaration of Alma-Ata in 1978 and the Ottawa Charter for Health Promotion in

1986 (World Health Organization [WHO], 1951, 1978, 1986). The Health-

Promoting Schools (HPS) Approach (also called *comprehensive school health* and

coordinated school health) was clarified with a set of WHO guidelines developed in 1995 (WHO, 1996). At its heart, HPS strives to provide a way to link health and education outcomes by including the instruction, supports, and environment of the school setting as part of a foundation that fosters interaction and cohesion among home, school, and community.

Research Problem

A key review of the HPS approach comes from the WHO (Stewart-Brown, 2006). Completed for the Health Evidence Network, Stewart-Brown examined the effectiveness of HPS in controlled trials of school-based health-promotion initiatives. Essentially, her work is a review of reviews (15) and thus provides valuable information for the implementation and evaluation of HPS. Stewart-Brown concluded that evidence exists for the effectiveness of the HPS model; however, not all HPS programs are effective at creating environmental and behavioral change. Programs that involve mental health, physical activity, and nutrition interventions were found to be the most effective at bringing about positive change, especially if they were of long duration, of high intensity, multi-factorial and involved changes to the school environment. There is still, however, a lack of evidence of the efficacy of the HPS approach as a whole, especially as applied to implementation in local settings. Essentially, Stewart-Brown has demonstrated that the HPS approach can be effective, but there are still large gaps in what is known about implementation at school, district, and government levels.

Research Questions

The essential purpose of this study was to examine the effectiveness of a district implementation model of the HPS approach. Rather than seeking a definitive answer to one leading question, the study explored what happened in a particular district implementation model of the HPS approach. The research process involved asking a number of subquestions: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS approach look like at the district level? How did a district implementation model of the HPS approach effect change? What strategies were effective? Are there some emergent themes pertinent to successful implementation at the school level?

The study was part of a grant-funded program called the Battle River Project (BRP). The initiative featured a partnership between Ever Active Schools ([EAS] a provincial HPS implementation program), the Battle River School Division (BRSD) and Alberta Health Services ([AHS] the provincial and regional health-services provider). The interventions focused on the social and organizational levels, and the end goal was to positively affect student health outcomes. The essential question of the BRP was, *How can the school environment and health outcomes (healthy eating, physical activity, mental well-being) of children and youth be positively improved when a Health-Promoting Schools model, the Ever Active Schools Program, is implemented with school district support?* The participant schools were supported by the BRSD, EAS, and AHS to facilitate the development of a healthy, active school community. The

project had a number of embedded school and student health measures that were

shared directly with schools and the division. These measures not only influence

the decision-making process locally, but also provide statistical data to inform

future decisions for the division and EAS. They include an indication of the

school's capacity to promote health (Health Assessment Tool for Schools, an

EAS-created tool used by the HPS Committee in each school community);

Grade 8 and 11 student surveys (SHAPES, a University of Waterloo measurement

system for physical activity, healthy eating, and mental well-being); and Grade 5

surveys that include students, parents, and principals (REAL Kids Alberta, which

measures physical activity and healthy eating). My doctoral research used a

hermeneutical/interpretive inquiry approach and gathered "text" through a case

study of the BRP, with a view towards examining the challenges, triumphs, and

"on-the-ground happenings" in implementing the HPS approach within the

previously stated parameters. Figure 1.1 situates the relationships in the study.

Background and Rationale

In Alberta the only provincial nongovernment organization that

implements the HPS model is the EAS program. The mission of the program is to

partner with school communities to facilitate the development of healthy children

and youth by fostering social and physical environments that support healthy,

active school communities (EAS, 2009). EAS membership has grown over the

past 10 years to include over 250 school communities in a variety of school

districts across Alberta. Despite its origins with the Alberta Teachers' Association

Ever Active Schools	• A government funded program to implement HPS in Alberta • Vision: "Alberta students live, learn and play in a healthy, active school community"
The Battle River Project	• Developed and implemented by EAS • A 3-year grant funded project • Partners include the BRSD and ECH (AHS) • Health outcomes measurements: REAL Kids, SHAPES (2008, 2009, 2010)
Case Study: District Implementation of HPS	• PhD Dissertation • Located within the BRP • Original research using case study methodology • Paper dissertation

Figure 1.1 Relationships in this study.

and funding from the Ministries of Health; Education; and Tourism, Parks, and Recreation, at times the program struggles to be more than just an "add-on" in schools. As the director for the past six years, I have begun to wonder how EAS can truly reach its vision so that "Alberta students will live, learn and play in a healthy, active school community" (EAS, 2009, p. 6). What would happen if the program aligned with both the priorities of a particular school district and the overall mission of education? If health and education outcomes are inextricably linked, then perhaps they can better be reached through a systemic, district-level approach rather than one school at a time. This would allow district resources, strategies, and purpose to be aligned while still allowing for differences among individual school communities.

Significance

Essentially, my doctoral research could set the groundwork and rationalize the provincial implementation of an HPS approach. Although HPS is believed to be effective, which has been proven to some extent, there are still many questions surrounding actual implementation (Deschesnes, Martin, & Hill, 2003; Franks et al., 2007; Mitchell, Palmer, Booth, & Davies, 2000; Mukoma & Flisher, 2004; Stewart-Brown, 2006). Most researchers examined HPS in the context of a single school or a school grouped with others not in the same local jurisdiction (Franks et al., 2007; Mitchell et al., 2000; Mukoma & Flisher, 2004). It appears that HPS has not been implemented districtwide or throughout and in cooperation with a single school jurisdiction or authority in any research study. I believe that for the HPS approach to become embedded and for health and education outcomes to be linked, HPS implementation needs to include district policy and administrative procedure and, perhaps most important, be driven by the school board and supported by district staff.

A thorough examination of one particular district implementation model, linked with clear health outcomes, could have a marked effect on program implementation. An organization such as EAS could choose to pursue a district model based on the findings of the study. Implementation could be tailored to fit the needs of specific school districts, and, over time, common themes and strategies could emerge.

Review of Literature

The Health-Promoting Schools Approach

As I stated earlier, Stewart-Brown (2006) completed a paper for the Health Evidence Network of the WHO in which examined the effectiveness of HPS in controlled trials of school-based health-promotion initiatives. One of her first observations was that none of the reviews addressed all of the WHO guidelines identified in 1995 (school health policies, physical environment, social environment, school/community relationships, personal health skills, and school health services; p. 7). Although this omission is important, the researched approaches were similar enough to the HPS model that any conclusions would be applicable (p. 14).

Another interesting finding was that none of the reviews included any information on the cost effectiveness of HPS (p. 14). Given the scope of Stewart-Brown's (2006) analysis, the missing financial information is rather astounding. Perhaps the quantitative data from the BRP can be analyzed in the near future to begin to build a case for a cost-effective local implementation model. She devoted a significant portion of the paper to a discussion of the strength of the evidence and what constitutes appropriate research to study HPS. Randomized control trials (RCTS), although considered the gold standard in medical studies, are not always feasible or useful in school-based research. Essentially, Stewart-Brown recognized the importance of RCTs while still acknowledging the efficacy and validity of other types of research (pp. 14-16).

Although Stewart-Brown (2006) concluded that evidence exists for the effectiveness of the HPS approach, certainly not all HPS programs are effective. Effective interventions include mental health, physical activity, and nutrition; and they need to be multifactorial, sustained, intense, and environmental. Stewart-Brown also concluded that at a local level of implementation (e.g., a school authority or jurisdiction), evidence of the efficacy of HPS is lacking.

Mitchell et al., (2000) evaluated 22 schools in southwest Sydney, Australia. Their randomized control trial supported and trained intervention schools on the HPS model and provided a resource kit. The evaluation included measures of school structures and policies, awareness, and practices to support HPS. Although the intervention schools reported an increased level of awareness, no other significant changes were noted. The authors recommended both a longer timeframe for future studies and an improved support framework for interventions. Their recommendations included both the development of a school committee to implement changes and a formalized planning process.

Deschesnes et al., (2003) took a different approach to evaluation in their examination of how to achieve broader implementation of HPS. The authors proposed four conditions necessary for increased implementation of the HPS approach, the final one of which is evaluative research. They recognized that for the HPS approach to take hold and truly impact children's health it requires an ability to demonstrate its effectiveness. Although effectiveness can be obtained only through evaluative research, the parameters of these studies themselves need to be made clear with and include recognized components and proposed

intervention models. Deschesnes et al., proposed that process evaluation (how HPS is implemented) is most important and recommended that outcome evaluation (the impact of HPS) take a back seat.

Mukoma and Flisher (2004) reviewed nine evaluations of HPS interventions and offered an excellent look at the methodologies, efficacy, and rationale for the evaluation of HPS. Of optimal value were their recommendations and commentary on the types of evaluation that may fit the HPS model and help with implementation. Although Mukoma and Flisher were unable to state that the evidence for HPS efficacy is strong, they mentioned the importance of policy support for any implementation. One of the key methodological challenges to evaluating HPS is the synthesis of process, outcome, and output findings from a wide variety of schools. The authors recommended establishing clear indicators that can be used in a variety of settings and applications.

Mukoma and Flisher (2004) also dealt extensively with the issue of randomized control trials and suggested that: although the cost (financial, time, human resource) can be prohibitive, perhaps it is the price paid for proof of effectiveness; that ethical issues arise when comparison schools receive no support and are even expected to do nothing; and that the issue of complexity arises again because of the difficulty of comparing one school to another. In concluding their findings, Mukoma and Flisher advocated the inclusion of process evaluation to measure whether an implementation actually occurred.

Mukoma and Flisher (2004) made a number of practical recommendations for the evaluation of HPS: that the methodology be triangulated to achieve the

most valid results; choosing the right methodology for particular portions of an intervention is a key decision; that evaluations involve the school and local community to be considered high quality; teachers are very important access and implementation resources who should also be included in the evaluation process; and that long-term implementation and intervention be ensured to measure the long-term impact.

Franks et al., (2007) shared their lessons learned from three school-based programs. Although not all of the programs are HPS related, the authors used their review to illustrate why program evaluation is critical. They extrapolated four basic features of all three programs (Coordinated Approach to Child Health, Planet Health, and Not-on-Tobacco): (a) the identification of staff and resources for both implementation, (b) the involvement of stakeholders during all phases, (c) early dissemination planning, and (d) rigorous evaluation of the interventions to establish efficacy. All three of these interventions have been shown to be effective, and it is no surprise that evaluation is key to that effectiveness.

In a study that involved HPS primary schools, Lawry St. Leger (1999) identified a number of important points to consider in planning and evaluating interventions at any school level. This review of previous studies identified a number of gaps and issues: a lack of professional development for teachers, the need to train teachers to be able to work with parents and community, a reliance on engaging materials for efficacy, a dependence on personal health skills as an indicator of success, low priority given to policy, the need for intersectoral collaboration, the need for more evaluations at the primary level, a lack of

preservice teacher training, the potential for gains to be made by integrating curriculum with the broader school and community, a need for interventions to be based on theoretical models (social learning theory is most often used); and evaluation based primarily on health rather than educational outcomes. St. Leger concluded that, although health gains at the primary level are difficult to ascertain, changes will most likely occur with a well-designed intervention that links the curriculum to a broader HPS model and offers teachers substantial professional development.

Selection of Parallel Initiatives

The Annapolis Valley Health Promoting School Project ([AV] Annapolis Valley Regional School Board, n.d.) began in Nova Scotia as a two-and-a-half-year project funded by the Canadian Diabetes Strategy, Public Health Agency of Canada. As the intervention grew in scope and impact, the Nova Scotia Office of Health Promotion assumed the funding. At the outset, eight elementary and middle schools chose to prevent chronic disease by "Making the Healthy Choice the Easy Choice" and addressing both physical activity and healthy eating. Although the project began in one school board, it has since expanded to a provincial program available to all Nova Scotia schools. The AV's vision statement encompasses the behavior of students, family, and community and includes partnerships, infrastructure, staffing, funding, and equity. The goals of the AV for students are threefold: to make healthy choices (nutrition and physical activity), to gain the skills needed to develop healthy behaviors for life, and to reduce the risk of chronic disease such as Type 2 diabetes.

In the AV process schools are considered to be both the key voice and the real leaders. Each school forms a Health-Promoting School Team, which may include students, parents, cafeteria workers, school staff, and appropriate community members. This team is responsible for developing a strategic plan to meet the school's needs. Schools also have opportunities to share their ideas and mutually engage in problem solving. Two umbrella committees oversee the AV and are composed of agency representatives who are committed to the program. They include health, education, school board, and government members. An evaluation committee develops and guides the evaluation process, and a policy/management committee advocates and works to influence decisions with the aim of enhancing the provision of daily physical activity and affordable healthy food to all students in the AV (Annapolis Valley Regional School Board, 2009).

The Coordinated Approach to Child Health ([CATCH] 2009) program began as the Child and Adolescent Trial for Cardiovascular Health, with a controlled clinical trial evaluated in 1991-1994. The trial took place in 96 schools (56 intervention, 40 control) in four states (California, Louisiana, Minnesota, and Texas) and included over 5,100 students from diverse cultural and ethnic backgrounds. CATCH was a multicomponent, multiyear, coordinated school health-promotion program designed to decrease the amount of fat, saturated fat, and sodium in children's diets; increase their physical activity; and prevent tobacco use (Perry et al., 1992). At the end of the successful initial CATCH trial in 1996, the University of Texas–Houston used new funding to initiate the

CATCH program in Texas elementary schools. At this time the name was changed to a Coordinated Approach to Child Health because it was now a program rather than a research trial. CATCH has since become ingrained in the Texas government through the Texas State Board of Education (elementary diabetes education curriculum) as Senate Bill 1357, which mandates daily physical activity and a coordinated school health program in all Texan public schools. CATCH was approved as a suitable program to meet the requirements of this bill in October of 2002.

CATCH (Coordinated Approach to Child Health, 2009) follows the coordinated school health model (the United States' version of HPS) and seeks to build an alliance of children, parents, teachers, and school staff to address health issues in the school environment. CATCH addresses four key areas: classroom curricula, food service modifications, physical education changes, and family enforcement. Schools in Texas contact the central office and then receive the training, assessment, and implementation tools that they need to begin their program.

Action Schools! BC ([ASBC] 2006) began as a pilot project to increase physical activity for British Columbian Grade 1 to 3 children. The project has since expanded to include K to 8 and has added a significant nutrition component as well. ASBC is part of the ActNowBC initiative, which intends to make British Columbia the healthiest jurisdiction ever to host the Olympic Games (Vancouver 2010). The Ministry of Health has set the goal of a 20% increase in British Columbia's population who are physically active and who eat the recommended

daily servings of fruit and vegetables. The vision of ASBC is to integrate physical activity and healthy eating into the fabric of schools and maintain them through partnerships with family and community. This process achieves long-term, measurable, and sustainable health benefits.

ASBC (2006) has six "action zones" in which schools are encouraged to make changes: school environment, scheduled physical education, classroom action, family and community, extracurricular, and school spirit.

EAS is a special project of the Health and Physical Education Council (HPEC) of the ATA. The original concept for EAS came from a recommendation from the Alberta Active Living Task Force (June 1997). The result of a provincial consultation with a wide variety of stakeholders was the creation of EAS through a grant from the Alberta Sport, Recreation, Parks, and Wildlife Foundation. Part of the development process included an international review of programs and interventions in the school setting, which led to the adoption of the HPS approach.

EAS began as an innovative and evidence-based implementation program that launched in 2000 with 30 pilot schools. The program identifies, encourages, and recognizes schools that value and promote positive health behaviors and practices, as well as physical activity opportunities, through an approach that affects the entire school community. Three government ministries currently fund the EAS: Alberta Tourism, Parks, and Recreation (through the Alberta Sport, Recreation, Parks, and Wildlife Foundation); Alberta Health and Wellness; and Alberta Education.

EAS's vision is for Alberta students to live, learn, and play in healthy, active school communities. This is operationalized through partnering with school communities to facilitate the development of healthy children and youth by fostering social and physical environments that support healthy, active school communities. The two goals of the program are to recognize EAS as a provincial leader in the development of healthy, active school communities and to increase the capacity of EAS member schools to support healthy, active living within their school communities.

EAS has recently revamped its membership process to expand the program and have more impact on a wider community of schools. The organization has grown rapidly in recent years and has increased both membership and staffing. The current structure involves members and associates. Members include those who are already signed up under EAS and are actively assessing, planning, and implementing the HPS approach. Associates begin by signing up with EAS to receive information, resources, and support to explore the HPS approach. These schools can move to member status by completing both an assessment of their school's capacity for HPS and an action plan. The assessment and plan revolve around the 4 Es, everyone, environment, education, and evidence, EAS's interpretation of the HPS approach. School champions are encouraged to form a committee to examine the strengths and weaknesses that the assessment identifies and then formulate a plan for improvement. Staff with EAS offer support in the areas of professional development, implementation, communication, and research. Health behaviors that they address included

physical activity, healthy eating, mental well-being, and student leadership (EAS, 2009).

Educational Change

A HPS approach essentially seeks to change the educational environment or culture into one supportive and inclusive of health. Although there is very little literature directly linking HPS and educational change, the literature on educational change in general has much to offer those hoping to transform school culture through HPS. Given the nature of the doctoral study, three aspects of educational change will be explored: the role of professional development; leadership capacity building; and the concept of cultural change in educational settings.

Professional development of teachers is widely recognized as one of the essential elements of implementation (Fullan, Cuttress & Kilcher, 2005; Hargreaves & Fink, 2003; Hargreaves and Fullan, 2000; Moffett, 2000; Thompson, 2003; Trubowitz, 2001). Michael Fullan, a long time advocate for educational change and reform wrote, "...research on implementation has demonstrated beyond a shadow of a doubt that the process of sustained interaction and staff development are crucial regardless of what the change is concerned with" (1991, p. 86).

A number of authors also agree that professional development must go beyond the beginning of implementation and extend throughout (Fullan, Cultress & Kilcher, 2005; Moffett, 2000; Thompson, 2003). In this way, teachers are supported with specific, timely professional development after they have had a

chance to experience contextual learning. Trubowitz (2001) notes that since educators are often isolated in their classes and schools, professional development in a district wide initiative must also include training in collaboration skills such as group processes, definitions of roles, and listening skills. Moffett (2000) not only supports abundant staff development but also time for adult learning and a reduction of fragmentation and overload so that teachers can take time to reflect on and improve practice.

Educational change requires leadership at many levels (Fullan, 2002; Hargreaves, 2007; Hargreaves & Fink, 2003; Hargreaves & Fink, 2006; O'Neill, 2000). Moffett (2000) advocates for the use of internal and external facilitators to build capacity for leadership among teachers in a school system. Hargreaves (2009) insists that leadership must be distributed more widely than just to principals and superintendents and points to poor succession practices as a critical issue for educational change. He also points to four opportunities that are to be found in quality leadership succession: increasing leadership stability; building systematic leadership; developing distributed leadership and creating coaches for new leaders. The importance of sustainable leadership is raised by a number of authors (Hargreaves & Fink, 2003; Hargreaves and Fink, 2006; Moffett, 2000). Fullan (2002) identifies four components of sustainability: developing the social environment; contextual learning; leadership cultivation at multiple levels; and enhancing the teaching professional itself through improved working conditions.

"Transforming culture – changing what people in the organization value and how they work together to accomplish it – leads to deep, lasting change"

(Fullan, 2002, p. 18). As stated above, lasting educational change needs to reach deeper than a program or initiative and become a cultural shift of values and processes (Fullan, Cuttress & Kilcher, 2005; Hargreaves & Fink, 2003; O'Neil, 2000). Moffett (2000) discusses developing a reform-supporting infrastructure of which the following processes are crucial. "A creative communication networking system – including frequent stakeholder meetings, focus groups, face-to-face dialogue, small group information sharing, ongoing oral and written updates, and parent and community meetings..." (p. 35). Hargreaves and Fink (2006) also support community consultation as a critical component to cultural change.

The discussion of cultural change in educational settings involves a sense systemic change as well as moral purpose (Fullan, 2002; Fullan, Cuttress & Kilcher, 2005; Hargreaves, 2009; Hargreaves & Shirley, 2009; O'Neill, 2000). Systemic change requires a shift not only at the school level, but for the district, between districts and provincially as well. Deep, systemic change involves all staff, infrastructure, policy, practice, strategy and resource allocation. Fullan (2002) rejects the principal as instructional leader and instead refers to a Cultural Change Principal as someone who can create fundamental change to the learning cultures and even the teaching profession itself.

Fullan, Cuttress and Kilcher (2005) identify eight forces for leaders of change, the first of which is to engage people's moral purpose. The authors define moral purpose in educational change as "...improving society through improving educational systems and thus the learning of all citizens" (p. 54). In

the proposed model, moral purpose is a goal and a process - the other seven forces

exist to enable the first. Cultural change viewed in this light seeks to engage a

type of reform that is concerned with democracy, social justice, equity, narrowing

gaps and developing contributing citizens.   The following quote from *The Fourth*

Way: The Inspiring Future for Educational Change (Hargreaves & Shirley, 2009)

illustrates the potential for more future linkages between HPS and educational

change.

> A compelling and inclusive moral purpose steers a system, binds it
> together, and draws the best people to work in it. Literacy and numeracy
> are sometimes such a purpose and should always be an educational
> priority. But they are not always the right reform priority, especially when
> schools and nations are already high performers in those areas, or when
> they sideline other emphases that need more attention. For instance, while
> Canada ranks very high on tested literacy achievement and on economic
> prosperity as measures of educational wellbeing, it performs very poorly
> in self, family, peer-related, or health-based well-being. (p. 76)

Rationale for a Case Study of the Battle River Project

This case study was located within the BRP (Gleddie & Melnychuk,

2010). Funded by the Alberta Sport, Recreation, Parks, and Wildlife Foundation

as well as the Alberta Healthy School Community Wellness Fund ($55,000 and

$50,000, respectively, per year for three years), the project focused on social and

organizational levels, with an end goal of positively affecting school communities

as well as student health and education outcomes. The partners supported the

participating schools in facilitating the development of healthy, active school

communities. The schools received tools to measure progress and aid in the

planning process; release time for lead teachers to be trained in the HPS model,

meet, plan, and share strategies; facilitated collaboration and information

exchange with school cohorts; access to expert advice and support in the areas of healthy eating, physical activity, and mental wellness; as well as opportunities to access a variety of events and resources. The participating schools were expected to plan and implement an HPS model, administer and review schools' capacity and student health measures, and contribute to the growth, evaluation, and success of the project.

The health progression of individuals such as students can be assessed in a variety of ways. Vanhees et al., (2005) examined a variety of methods to assess the levels of physical activity of individuals who participate in particular interventions. These include objective measures such as pedometers, heart rate monitors, and accelerometers; and subjective measures such as surveys and self-reporting tools. Other researchers have also used the BMI (Veugelers & Fitzgerald, 2005), although there are concerns with the short time span and the validity of measuring the BMI of developing children. Nutrition and mental well-being are more limited in objective assessment options; therefore most data will be gathered through student surveys that use self-report measures.

The BRP obtains student health outcome data from two separate sources. REAL Kids Alberta (Raising healthy Eating and Active Living Kids in Alberta) is a large-scale evaluation of the effectiveness of a number of Alberta Health and Wellness initiatives. The evaluation includes Grade 5 student surveys on physical activity, nutrition, and health-promotion knowledge, as well as height and weight measurements; parent surveys on the home environment; and principal surveys on the school environment (REAL Kids Alberta, 2009). All Grade 5 classes within

the BRP participated in the evaluation in 2008, 2009, and 2010; and over 150 other schools across the province also participated in 2008 and 2010.

SHAPES (School Health Action, Planning and Evaluation System) is a survey tool used to obtain information from students in Grades 8 and 11 on their behaviors related to healthy eating, physical activity, and mental well-being (University of Waterloo, 2009). All grade 8 and 11 classes in the BRP participated in this survey in 2008 and 2009 and are repeating in 2010.

The BRP concept, which EAS implemented, was based partially on ecological theory (Bronfenbrenner, 1977; Kelly, 1990; Sallis & Owen, 1997), which recognizes the interplay and complexity within and between levels—individual, social, organizational, community, and policy—as well as the role of the physical environment at all levels. The BRP intervened at the social and organizational levels with the goal of ultimately affecting individual children and youth in the Battle River School District. Additionally, the EAS planned to impact school division policy, or micro policy, for long-term sustainability and effective change.

Another key foundational element of the BRP was action research (ATA, 2000; Catelli, Padovano, & Costello, 2000; Smits, 1997). One of the reasons that the BRP included surveys such as SHAPES and REAL Kids was to provide initial information to each school community to inform their practice. Smits examined several *aporias* (doubtful matters or perplexing difficulties) surrounding hermeneutics and action research. One of these is the *aporia* of theory and practice. Often, the difficulty involves the *and*, which may imply a difference or

disconnect between the two (p. 290). In reality, practice is much more than the

application of theory (technique); it also involves care for others and an implicit

understanding of the lifeworld. Hermeneutically,

> action research can be both theory and practice. Theorizing is a form of
> practice when it is oriented to questions of purpose and common concerns.
> Practice involves the mediation of tradition, and the reflexive
> responsibility to bring that to language and responsibility. (p. 291)

The BRP can be viewed as conversations among the district, schools, and EAS

involving practitioners who are concerned with health and education outcomes for

school-aged children and youth. The conversation itself formed the basis for the

case study of the BRP.

Donna Ladkin's (2005) work, although she focused specifically on

phenomenology, is also rooted in hermeneutics and addresses the concepts of

subjectivity and objectivity. She defined subjectivity as "a way of knowing which

is located in a person's own perspective, including their experiences and

expectations as well as their 'here and now' perceptions" and objectivity as "a

way of knowing which is not specifically located, and in this way can see the

entirety of any situation" (p. 110). Ladkin explored three themes that are all

interrelated and connect to practice: the lifeworld as the basis for knowing

(p. 112), the quest to discover the 'essence' of things (p. 113), and doing as a

basis for knowing (p. 115). All three emphasize the real world as a construct for

obtaining knowledge. Subjectivity is critical for action researchers because they

seek to know "things." This also involves trying to know the other and introduces

the idea of interpretation as applied from subjectivity to objectivity—with the

realization that there are other ways to view validly. Essentially, "action

researchers will be sensitive to understanding that how something is known will have an impact on how one relates to it" (p. 114). The interaction between meaning and truth can be subtle, yet important. For example, Ladkin stated that it is impossible to truly 'know' a hammer unless it is used for hammering. Likewise, if researchers truly want to know about health promotion in schools, they need to be involved in that process.

An important concern for any research project involves asking, "What truth can be generated?" Ladkin (2005) posited that the basis for generated truth must be within the lifeworld. Truth cannot be found in a lab with test subjects, but must be engaged actively. These types of inquiries lead to a localized and emerging truth that leads to a deeper understanding of a particular context within which to effect change. Truth generated by the BRP must be locally valid to affect change. "Knowing and the truth it implies is therefore, necessarily, a constantly evolving, creative act between self and the world" (p. 122). In this scenario meaning (subjective) and truth (objective) are purposefully joined, and validity is measured through process rather than results (p. 124).

Collaboration is another critical component of action research (ATA, 2000). Catelli et al., (2000) saw the goal of action research (collaboratively) as to "permit change and improvement to occur at both levels, and strive towards a new seamless system of education" (p. 227). The authors came from deep experiences of making change in the teacher education system and raised two important questions about the concept of collaboration within action research. The first question, How do culture and structure contribute to successful research? brings

out a critical point: collaboration must take into account the structures and cultures of all collaborating partners. Catelli et al., explained this in the context of university/school partnerships and suggested that the inherent culture of a university can interfere with successful collaboration. If tenure and status are based on grant awards and publication alone, then the structure does not exist to reward and encourage collaborative partnerships (pp. 234-235). EAS, the division office, schools, and even the Ministry of Education all differ greatly in their structures and cultures. The preparation of a research project must carefully take this into account. A common culture and set of guidelines are essential to ensure that collaboration and communication can occur successfully.

With regard to the second question, Who benefits? Catelli et al., (2000) felt that if a project is a true organic partnership (p. 227), then all stakeholders will benefit. Perhaps the most interesting conclusion that they made was that the ultimate beneficiary of collaborative research in schools should be the students themselves. Sometimes the benefits to children can be lost in the focus on institutional gains. From a health outcome perspective, the most important and, indeed, targeted beneficiary must continue to be the students themselves. Although EAS, the district, the schools, and the school staff should also benefit, this project would be a failure if it did not improve the health and education of school-aged children and youth.

Catelli et al., (2000) concurred with Smits' (1997) earlier definition and identified the ultimate role of collaboration as to permit change and improvement at all levels and, ideally result in individual, social, and organizational

improvement and positive change. Franks et al., (2007) further illustrated the idea of continued interplay between theory and practice with the goal of improvement. Each of these interventions involves multileveled participants in the planning, implementing, and modifying processes. The BRP leans heavily on action research, an essential element to bridge theory and practice and provide a basis for sustainability. Throughout the project planning, implementation, and evaluation, the stakeholders and participants will be intricately involved. The formation of the steering committee, which is comprised of researchers, program staff, teachers, administrators, public health professionals, school trustees, and school district staff, reflects this commitment to consultation. Lawry St. Leger (2004) captured this spirit of cooperation in his closing words to an editorial on the place of schools in health promotion:

> Let us rethink school health away from kits and projects to solve problems and use the school as an ongoing setting where health is created, supportive environments are built, partnerships made and many skills are learned. Then we might be able to say this is what school communities can realistically do to build the health and well being of their students now and into the future. (p. 408)

Theoretical Framework

I derived the structure for the examination of research assumptions for my case study from Creswell (1994) and followed his explication of the qualitative paradigm.

Ontological

The nature of being is critical to the remainder of the assumptions and permeates each one. Being is the foundation on which knowledge rests. A failure to recognize ways of being is a failure to recognize the value of knowledge based

in that being. Creswell (1994) delved into the ontological issue of what is real and identified reality in the qualitative paradigm as being constructed by those involved in the research. Thus, the researcher seeks to bring to the forefront the realities and opinions of the participants in the study.

In hermeneutics the ontology of the researcher also comes into play (Ellis, 1998). After reading Stewart-Harawira (2005) and having a personal conversation with her, the concept (based in Aboriginal studies) emerged that all data have value. Her work also stimulated me to examine the connections between epistemology and ontology. My own Judeo-Christian worldview also impacts my construction of knowledge. The qualitative ontology of listening to the stories and realities of participants is consistent with biblical narratives of characters applying values in their own realities.

Epistemological

Creswell's (1994) epistemological question (p. 6) examines the relationship between that which is being researched and the researcher. For my research, the space between what I was researching and who I am included many roles: director, student, participant, and observer. Qualitative research involves interaction and a minimizing of the space between. The concept springs directly from the ontological in that both entities interact and translate their "being" into a form of "knowing" that any number of new participants can then disseminate and examine. Creswell directly linked the epistemological and the axiological as the values of the researcher and the participants are encouraged to connect, collide, and otherwise interact.

Dussel (2000) reminded us that other traditions of health are accepted and prescribed. Perhaps the mind-body-soul connection need not be artificially severed, and a transmodern healthy schools framework can become a possibility. Throughout my university career I have been intrigued and challenged by discourse on relative and absolute as two disparate ways of knowing. Creswell (1994) rather absolutely and ironically placed relativity squarely in the qualitative camp and absolutism in the quantitative camp (pp. 6-7). McLaren (as cited in Smith, 2009) helped me to begin to look at the search for truth as a way of being. Perhaps it is possible to uncover absolute truth through qualitative means—as stories, interpretations, and the constructed realities of researcher and participant seek to find a perspective on truth that rings true to the human condition. In other words, the truth that is constructed will connect with the ontological being within which it is based and will be expressed epistemologically.

A reading of Bernstein (2002), Grondin (1995), and Davies and Davies (2007) encouraged me to continue the examination of interpretation, phenomena, relationships, and the ethical interplay between absolute and relative. I hope that my research is the beginning of a long conversation that will gradually lead to a greater understanding of healthy school communities. If we want to determine what a healthy school is and how to get there, we need to engage in many more such conversations and allow a variety of interpretations and perspectives to emerge.

Axiological

As I stated earlier, the ways of knowing and interacting are linked directly to values. Creswell (1994) saw qualitative research as recognizing the values inherent to a study, a researcher, and the research area. These values, instead of being suppressed and hidden (quantitative), are "actively reported" (p. 6) and used to engage and examine the topic of study. As a researcher, I brought many values to my research that interconnected and interrelated with the values of others in the study.

One of the key considerations from a values perspective is my personal investment with the larger background project (the BRP). This project is my "brainchild" and is intricately connected with my daily work to further health promotion in schools through the EAS program, of which I am the director. On another level, I have built a personal connection to the health and well-being of children and youth that began as a seed in my own childhood with play and natural experience, blossomed through a youth filled with games and sport, began to bear fruit in my experience with teens and teaching physical education, fell to the ground and decomposed in a master's degree and a new job, and has been newly seeded again through doctoral study.

Methodological

Qualitative methodology is inherently inductive in that categories and themes emerge from the study rather than using preset hypotheses or theories (Creswell, 1994). Hermeneutics has formed the background of my own research journey over the past eight years, mostly in the form of interpretive inquiry. The

idea of research described as a conversation by which we engage each other's horizons (subjectivities, forestructure) and create understanding continues to intrigue and motivate me (Gadamer, 1979). Action research is part of the theoretical underpinning of the BRP because the project was designed to share the process and research findings with the participants. Hans Smits (1997) examined the relationship between hermeneutics and action research and recognized that, despite their apparent divergence, hermeneutics serves as the inspiration for action research. At the core, hermeneutics is "a philosophical *theory and practice*. Action research is a form of *theory and practice* engaged with real life; practical questions and issues" (p. 282).

My dissertation is an exploration. I was not sure what I would uncover, but in true hermeneutic fashion, I looked forward to the journey. Case study is the vehicle I used, and hermeneutics/interpretive inquiry was the driver. In the evolution of my research I experienced the development of a created knowledge that resulted from the relationships among the subject area, the participants, and myself (Denzin & Lincoln, 1994). Travelling farther and farther into the question of healthy schools has brought me to new and sometimes even uncomfortable places. Hermeneutics provided my research with the structure to begin to uncover elements needed to implement and sustain healthy school communities. I have charted many different paths, roads, and highways to create what I hope is a valuable and useful map. Students, parents, teachers, principals, school boards, government, policy, postsecondary institutions, student teachers, and the general public are all key stakeholders; and the map will not be complete until all are

considered. For this reason my study included focus groups, interviews, and an examination of other data from the project, including statistics, district policy documents, and other pertinent information uncovered as part of the BRP.

Rhetorical

Much of the rhetoric in the dissertation has already worked its way into my examination of assumptions (Creswell, 1994, p. 5). Words such as *interpretation*, *discover*, *uncover*, and *construct* have all alluded to a qualitative rhetorical identification. My past writing of a masters' thesis, project reporting, and sharing the successes of EAS have fit very well into this framework because it has been largely informal, very personal, and full of relationships and definitions that have sprung from the study (p. 7). As part of my masters' thesis I even included four poems to give the reader a glimpse into my own ontology, epistemology, and axiology as seen in the progression from child to student to teacher and back to student again.

Through the case study methodology and my personal involvement in this research on a number of levels, the language of the writing and research naturally flows in the qualitative vein. Although the information is detailed and encompassing, it has been and is locally constructed and interpreted. I hope I have been able to blend the various horizons into a coherent piece that seeks to continue the journey into what a healthy school can be, how it can be supported by a healthy district, and what challenges and successes have been realized as a result. Many questions have emerged, but also, I hope, some truth has been uncovered that can improve the implementation of HPS.

Research Design

Methodology: Case Study

Case study emerged as the most effective methodology for what I have

tried to achieve in this investigative study. Among others, two key books have

informed my methodological choice: *Qualitative Research and Case Study*

Applications in Education by Sharan Merriam (1998) and *The Art of Case Study*

Research by Robert Stake (1995).

Case study, by design, has to have a "case." Merriam (1998) described this

as "intensive descriptions and analyses of a single unit or bounded system"

(p. 19). Stake (1995) stated that "the case is an integrated system" (p. 2). The

implementation of the HPS approach within one school system fits the

requirement of a closed system. I have "made a case" out of the BRP as a district

implementation model and been able to delve into how implementation did, or did

not, happen.

Merriam (1998) also described case study as having three basic

characteristics: particularistic, descriptive, and heuristic. Particularistic means that

the case focuses on a certain event or problem. In my study I examined the

implementation of HPS in one school division and focused on the issues,

problems, solutions, and particularities within those bounds. The end result of a

case study should be a rich, deep description of the actual event or problem.

Again, this fits very well with my study, because one of my primary goals was to

examine how whatever happened, happened, rather than just listing what

happened—deep, descriptive, and thick. Finally, to be heuristic a study needs to

uncover meaning and bring about a deeper understanding of the phenomenon that is being studied. "Insights into how things get to be the way they are can be expected to result from case studies" (Stake, 1981; as cited in Merriam, 1998, p. 30). Another primary goal of the study was to be heuristic. If this research helps others to rethink and come to a greater understanding of how HPS can work in a school district, then it will have value and longevity.

Data Collection

This research study was fairly complex in that it involved work that I had already begun for EAS, data from previous meetings and events, new research, some quantitative data sets, as well as further uncoverings from the case study itself, which was the *real* work of my dissertation. For ease of reference, a research timeline is included in Appendix A. One of the benefits of case study is that it allows researchers to include many different types of information as data, each with its own rationale and purpose (Merriam, 1998; Stake, 1995). This is also consistent with Stewart-Harawira's (2005) identification of the Iroquois concept of all data having value. Valued data that I gathered included the following sources:

1. Focus groups are an accepted qualitative research method that can provide meaning, reflection and opportunity for discussions based on an event or topic (Thackeray & Neiger, 2004). The focus groups in my study involved representatives from each of the groups that I invited to participate in discussions of the BRP: (a) school champions: teachers from participating schools whom I identified as the lead for

the BRP with whom I conducted three focus groups (7 participants total); and (b) principals, with whom I held two focus groups (8 participants total). Invitations with an information / consent letter (Appendix B) were sent to each group asking for voluntary participation in the appropriate focus group with a selection of dates and times offered. The focus groups were held at a neutral site (not at a school or division site so as to protect anonymity) in Camrose, Alberta and all participants reviewed and signed the consent form prior to the session. Each focus group was approximately one hour long. Due to my personal involvement with the BRP the focus groups were conducted by a trained Masters student who signed a confidentiality agreement prior to involvement with the study. Sample questions can be found in Appendix C and all sessions were audio recorded and transcribed.

2. I based the interviews on the focus group discussions and invited individuals to participate in follow-up interviews to dig deeper into their perceptions of the BRP: (a) champions (teachers) whom I selected based on their contributions to the focus group and their willingness to participate in further examination of the implementation, and (b) principals from the same schools as the champions. Based on interest and recommendations of the interviewer, two champions were invited for a personal interview. Each of the principals from the champions schools were also invited to

participate and all parties received an information / consent letter (Appendix D) prior to the interview. One principal was unable to make the scheduled interview date due to unforeseen circumstances and declined an opportunity to reschedule. Each interviewee reviewed and signed a consent form prior to the interview. All sessions were conducted by the same Masters student as the focus groups and were held at a neutral site. Each interview was audio recorded and transcribed. Sample questions can be found in Appendix E.

3. I analyzed a variety of document data that I felt would be of value to this study, including (a) policy and administrative procedure agendas, changes and updates, (b) school action plans, (c) meeting minutes and notes from the steering committee (multi-stakeholder group including Board members, division staff, teachers, administrators, public health and EAS) and builders committee (smaller, advisory group for the Coordinator), (d) feedback and materials from all meetings with the champions and, (e) grant applications, action plans, updates and final reports from EAS. In adherence to the ethics review, I sent release forms to both the Alberta Teachers' Association (the governing body of Ever Active Schools – Appendix F) and the Battle River School Division (Appendix G) requesting access to all document data from September 2007 until the conclusion of the study.   Both release forms were signed and returned prior to document analysis.

4. I also used secondary data: two separate quantitative tools that were currently connected to the BRP. I did not use them as primary sources for the dissertation but, rather, to inform and interpret the case study data. For both of these instruments I gathered baseline data (in 2008), but the final measures will not be ready until late fall 2010. At that time, I can then examine these data in light of this case study and add to the body of research on local implementation of the HPS approach: (a) the SHAPES survey (University of Waterloo, 2009) of Grade 8 students that yielded self-reported data on physical activity, healthy eating, and mental well-being; and (b) the REAL Kids Alberta (2009) survey of Grade 5 students, parents, and principals on physical activity and healthy eating; the Harvard Food Frequency survey; and Grade 5 students' body mass index (BMI) measurement (REAL Kids Alberta, 2009).

In their examination of case study, both Merriam (1998) and Stake (1995) explicated interview and document study and, clearly recognized these data sets as valid sources of information for case study research that also facilitate the triangulation of findings. Focus group data has also been explored by a number of authors and is widely accepted as a relevant source of information (Thackeray & Neiger, 2004; Vicsek, 2010).

Data Analysis

In line with the chosen methodology, I was personally involved with the findings in that the data filter through the researcher as interpreter. As Merriam

(1998) stated, "The researcher is the primary instrument for data collection and analysis. Data are mediated through this human instrument, the researcher, rather than through some inanimate inventory, questionnaire, or computer" (p. 7). Given the very nature of case study and qualitative research in general, the researcher must remain open and responsive to the material being studied. With the use of a hermeneutical method such as interpretive inquiry, an openness to the emergent data is critical to the development of the study. Only the primary researcher in the field can be sensitive to nuances and missing pieces as they loop through the spiral of analysis (Merriam, 1998).

Denzin and Lincoln (1994) explained that "qualitative research is endlessly creative and interpretive. The researcher does not just leave the field with mountains of empirical materials and then easily write up his or her findings. Qualitative interpretations are constructed" (pp. 14-15). As expected, I found the analysis very complex because it involved many re-visits to and revisions of the data. To analyze the data I used the constant comparative method (Merriam, 1998), in which I compared one source of data—for example, the focus group material—with another source—the interviews—to examine similarities and differences. I then grouped the data according to general dimensions, assigned them tentative names, and treated them as themes (Merriam, 1998). Listening to the audio recordings of both the focus groups and interviews while taking notes on the transcripts was an effective way for me to search for common threads. I began to place these threads into natural groupings which eventually emerged as themes. Reading the focus group and interview transcripts numerous times

enabled me to re-evaluate the thematic developments and ensure that key comments were not missed or interpreted the wrong way. A document study was conducted in a similar manner looking for collaborative data supportive of the themes emerging from the focus groups and interviews.

Interpreting data in this fashion can result in any number of conclusions. One of the most prevalent and far-reaching approaches is to uncover problems within a particular structure or experience. "Problem finding is a type of insight that may result from interpretation" (Peshkin, 1993, p. 26). This type of discovery can pinpoint areas for later research as well as initiate discussions and possible solutions. I must note that my intention was not to validate the findings but, rather, to uncover and question. Packer and Addison (1989) examined several evaluative techniques and utilized the following analogy to describe the inherent flaws in the validity:

> The traditional approach to validation involves a misunderstanding that is like thinking the question, "How good is the hammer?" is similar to "How heavy is the hammer?" Two things are overlooked: the task in which the hammer will be employed, and its place among the other tools. The hammer's weight can be established with no attention to either of these. But the hammer is good only if it advances the current task and only if it works well with its companion tools. The choice is not a fixed one. It will change as new phases of the task arrive. (p. 291)

I asked the following questions as I worked with the data: Does my study have practical applications for healthy schools? Does it extend current research and understanding? Does it change something—anything? I believe that the answer to these questions is a resounding "Yes!" Packer and Addison also disputed the notion of qualitative interpretation as conjecture. The importance of the projection

portion of the hermeneutic circle is sometimes forgotten in the search for external validity:

> To see interpretation as conjecture is to misunderstand interpretive inquiry, just as to think that the natural sciences proceed by guess-and-validation is to have a mistaken view of science. Ricoeur and Hirsch missed the significance of projection. Interpretation is the working out of possibilities that have become apparent in a preliminary, dim understanding of events (p. 277).

Ethical Considerations

One of the ethical tensions within the study involved my dual roles as the Director of EAS and as a graduate student. One of the ways that I maintained distinctive boundaries was through the conceptualization of the roles and spheres as depicted in Figure 1.1. There were specific elements that only involved my role as Director (case study), others that included both roles (steering committee meetings) and still others that were conducted only as Director (EAS reports). That being said, Figure 1.1 also illustrates the weaving together of perspectives, a phenomenon I found to be particularly effective both in time management and insight. One of the reasons that the relationships worked between EAS, the BRSD and my graduate work was the openness and transparency involved from the start. The BRP was conceived and designed initially to explore a new direction for EAS. From those beginnings two key events occurred. First was the wholehearted embrace of the BRSD for the proposed project. Chapters 4 and 5 both demonstrate the very strong buy-in of both the Board and Division for the concept of HPS and district implementation. The second event was the emergence of case study as a relevant and effective research methodology to examine, analyze and, disseminate what happened in the

BRP. From the first BRP steering committee meeting in 2007, the participants embraced the concept of research being embedded in the process. This collaborative spirit continued as the research process proceeded and the case study began.

My research study was reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana, and Campus Saint Jean Research Ethics Board at the University of Alberta (Appendix H). The BRSD and the Alberta Teachers' Association ([ATA] the governing body of the EAS) granted me permission to use case study data such as documents, meeting notes, and agendas (Appendix F and G). Since the original proposal, the BRSD had enthusiastically agreed to be part of the study and made significant changes that involved the concept of healthy schools. The BRSD has been very accommodating in allowing me to share the journey even though the purpose of the study was to uncover problems and issues as well as solutions.

I have ensured that the individuals whom I selected for the focus groups and interviews and their schools will remain anonymous and have used pseudonyms where appropriate. I contacted each selected participant via a private letter, e-mail, or a phone call and invited him or her to participate in the focus groups, interviews, or both. Finally, because I had identified the BRSD as the location of the study, I distributed drafts of the papers in chapters 4 and 5 (the dissemination of the case study findings) to appropriate individuals on the board and in the division for their approval which was granted.

The Paper Dissertation

When the concept of a paper dissertation was first introduced to me, I had only heard of the format in reference to business degrees and had the vague notion that paper dissertations were popular in Europe. As I began to examine the possibilities, I learned of three recent paper dissertations in the Faculty of Education's Department of Secondary Education (Adams, 2008; Conrad, 2004; McRae, 2007). Each of these dissertations provided a slightly different interpretation of the genre, and the common themes included the general agreement that each paper in the dissertation must be publishable but does not have to be published at the time of the dissertation defense; the recognition of the practical nature of this approach, both from an academic perspective and to increase the readership of emerging research; and the acknowledgement of the ability to reach different audiences.

I chose to write a paper dissertation for a number of reasons. First, the HPS approach is complex, as are schools, and I found it effective to be able to examine a broad topic such as district implementation from a number of perspectives. Second, the format has allowed me to publish, or at least submit, while I worked on my dissertation and to engage in substantial peer review. Finally, I believe that this format has helped me to reach different audiences as the individual papers took shape.

Overview and Organization of the Papers

The dissertation is made up of four papers. As of the date of defense, one is in print, one has been accepted for publication, and I have submitted the final two for publication.

I co-authored "Paper 1: An Introduction to the Battle River Project" with Nancy Melnychuk (University of Alberta), and it has been published in *The Physical and Health Education Journal* (Winter 2010). Essentially a methods paper, it describes the background, rationale, and structure of the BRP.

I also co-authored "Paper 2: Assessment for Learning: Using Student Health and School Capacity Measures to Inform Action and Direct Policy in a Local School District" with Erin Hobin (University of Waterloo), and it has been accepted for publication in *Global Health Promotion* (March 2011). The paper will become part of *Global Perspectives on Health Promotion Effectiveness, Volume II*. This two-part volume features a series of case studies from around the world that illustrate the challenges and practical issues involved in using evidence for the planning, implementation, scaling up, and evaluation of health-promotion interventions. The paper focuses on the impact of sharing research results with school communities to effect positive change to health behaviors and environments.

I have submitted "Paper 3: A Journey into School Health Promotion: District Implementation of the Health Promoting Schools Approach" to *Health Promotion International*. This paper is the fruit of case study methodology and examines what happened in a particular district implementation model of the

BRP. I identified several emerging themes in the light of ongoing support for local implementation of HPS.

I have also submitted "Paper 4: The Devil is in the Details: Process and Policy in the Battle River Project" to the *Health Education Journal*. One of the most exciting developments in the BRP has been the development and implementation of policy and administrative procedure at the school board and district levels. This paper examines the process of creating those documents and the perceptions surrounding the implementation of policy and procedure.

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CHAPTER 2:

PAPER 1: AN INTRODUCTION TO THE BATTLE RIVER PROJECT: DISTRICT IMPLEMENTATION OF A HEALTH-PROMOTING SCHOOLS APPROACH[2]

Introduction

The school has become an important setting for individuals and organizations looking to positively affect health behaviors of children and youth (St. Leger, 2004). As a societal institution, it exists to promote learning, prepare children for "real life," and pass on societal values. The mission of Alberta's Ministry of Education, for example, states that, "Every child has access to educational opportunities needed to develop the knowledge, skills and attributes required for an enriched society and a sustainable economy" (Alberta Education Business Plan: 2010-2013). If this is truly the case, then the school is certainly an appropriate place to teach children about the importance of a healthy lifestyle and the necessary actions to improve the key determinants of health and risk factors for chronic disease. However, even though educators may recognize the importance of health outcomes, they may not recognize the ongoing opportunities to make direct connections between health and education that support their work in schools.

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[2] This chapter has been co-authored with Nancy Melnychuk and published in the 2010 *Physical and Health Education Journal, 75*(4), 24-29 (Appendix I).

The Health-Promoting Schools Approach

School health promotion began in the 1950s with schools being seen as a place to teach children about the determinants of health (World Health Organization – WHO, 1951). Over time, this delivery system began to follow developments in health promotion policy such as the Declaration of Alma-Ata in 1978 and the Ottawa Charter for Health Promotion in 1986 (WHO, 1951, 1978, 1986). The Health Promoting Schools Approach (HPS – also called comprehensive school health and coordinated school health) was clarified through a set of WHO guidelines developed in 1995 (WHO, 1996). At its heart, HPS strives to provide a way to link health and education outcomes by including the instruction, supports, and environment of the school setting as part of a foundation that allows for interaction and cohesion between home, school, and community.

A key review of the health promoting schools (HPS) approach was published by the World Health Organization (Stewart-Brown, 2006). The paper, which examines the effectiveness of HPS as found in controlled trials of school based health promotion initiatives, was completed for the Health Evidence Network. Essentially, this paper is a review of reviews and thus, provided insightful information for the implementation and evaluation of HPS. Stewart-Brown concluded that although evidence exists for the effectiveness of the HPS model, not all HPS programs are effective. Mental health, physical activity, and nutrition interventions were found to be the most effective, especially if they were of long duration, high intensity, multi-factorial, and involved changes to the

school environment. Stewart-Brown also recognized that there are still large gaps in the areas of implementation at school, district, and government levels.

Ever Active Schools and the Initiation of the Battle River Project

In Alberta, the only provincial organization implementing a HPS approach is the Ever Active Schools Program (EAS). The mission of the program is to partner with school communities to facilitate the development of healthy children and youth by fostering social and physical environments that support healthy, active school communities (Ever Active Schools, 2009). EAS membership has grown over the past nine years to include over 250 school communities in a number of school districts across Alberta. Even with a base of support within the Alberta Teachers' Association, funding from the Ministries of Health, Education, and Tourism, Parks and Recreation, as well as healthy membership growth, EAS staff have pondered the effectiveness of an implementation model that recruits individual schools. What would happen if the program aligned with both the priorities of a particular school district and the overall mission of education? If health and education outcomes are inextricably linked, then perhaps they can better be reached through a systemic, district level approach rather than one school at a time. In this way, district resources, strategies and purpose can be aligned while still allowing for differences among individual school communities.

These ongoing thoughts and queries led to the creation and design of a grant-funded program called The Battle River Project (BRP) in the spring of 2007. This current initiative features a partnership between EAS, the Battle River School Division (BRSD) and East Central Health ([ECH] a regional health

services provider). Interventions focus on the social and organizational levels with the end goal to positively affect student health outcomes. The essential question of the BRP is, "How can the school environment and health outcomes of children and youth, specifically healthy eating, physical activity, and mental well-being (Stewart-Brown, 2006), be positively improved when a Health Promoting Schools model, the Ever Active Schools Program, is implemented with school district support?" Participating schools are supported by the school division, the local health authority, and EAS to facilitate the development of healthy, active school communities. Using an action research model (Alberta Teachers' Association, 2000), measured student health outcomes are continuously shared with participating school communities and the school division to help refine and modify practice.

Case Study Significance

A case study of the Battle River Project could provide the rationale and set the groundwork for the provincial implementation of a HPS approach. Although the approach is believed to be effective, and has been proven to some extent, there are still many questions surrounding actual implementation (Stewart-Brown, 2006). Whereas most studies examine HPS in the context of a single school or a school grouped with others not in the same local jurisdiction (Franks, et al., 2007; Mitchell, Palmer, Booth, & Davies, 2000; Mukoma & Flisher, 2004), a thorough examination of one particular district implementation model, the Battle River Project, linked with clear health outcomes, could have a marked effect on future program implementation. Although results are not generalizable, organizations

similar to EAS could choose to pursue a district model based on the findings and insights of this particular case study. Implementation could be tailored to fit the needs of each specific school district and, over time, common themes and effective strategies could emerge.

Review of Literature

A number of papers (Deschesnes, Martin & Hill, 2003; Franks et al., 2007; Mitchell et al., 2000; Mukoma & Flisher, 2004; Stewart-Brown, 2006; St. Leger, 1999) have engaged in extensive analysis of the HPS approach to examine implementation, evaluation, and potential effectiveness. Deschesnes, Martin and Hill (2003) evaluated an intervention that took place in 22 local schools. Franks et al., (2007) shared lessons learned from three school based programs that, although not all HPS related, highlighted effective change. Mitchell et al., (2000) evaluated 22 schools in Sydney, Australia that all received support and training about the HPS model as well as a resource kit. Mukoma and Flisher (2004) reviewed nine evaluations of HPS interventions, including seven published in peer-reviewed journals. Stewart-Brown (2006) explored the effectiveness of HPS as found in controlled trials of school based health promotion initiatives. St. Leger's 1999 review involved eleven studies utilizing the HPS approach as part of interventions in primary schools. This diverse collection of papers, united by their common examination of HPS, reveal emergent themes around the implementation and evaluation of the HPS approach.

The most dominant theme within implementation of the HPS approach relates to the timeframe required for effective change. Some of the authors make

explicit mention of a preferred extended timeframe (Mitchell et al., 2000; Mukoma & Flisher, 2004; Stewart-Brown, 2006), while others refer to political and financial commitment (Deschesnes, Martin & Hill, 2003), or long-term indicators (St. Leger, 1999). Essentially, it is agreed that effecting lasting change, whether behavioural or environmental, takes time. Stakeholder inclusion and involvement also emerged as a primary factor for implementation. Mitchell et al., (2000) recommend the formation of a school committee that is engaged in a formalized planning process while others make reference to intersectoral action, multiple domains (home, school, community), and inclusion of teachers in the entire process, from start to finish (Deschesnes, Martin & Hill, 2003; Franks et al., 2007; Mukoma & Flisher, 2004; Stewart-Brown, 2006). Finally, implementation should be complex and multifactorial in nature. St. Leger (1999) advocates for improved professional development for teachers which includes the training of teachers to work with parents and the community, linking curriculum elements with the HPS model, and considering the social environment as part of implementation. Deschesnes, Martin & Hill (2003) suggest changes to the environment, behaviours and attitudes be part of implementation along with the need to move beyond a classroom based approach. As well as a change to the school environment, Stewart-Brown (2006) identifies mental health, physical activity and healthy eating as three of the factors most associated with effective implementation.

There seems to be agreement that for the HPS approach to take hold and ultimately impact children's health, an ability to demonstrate effectiveness is

crucial. As effectiveness can only be determined through evaluative research, the parameters of these studies need to be made clear with identifiable components and proposed intervention models. Deschesnes, Martin and Hill (2003) proposed that process evaluation (how HPS is implemented) is most important with outcome evaluation (what is the impact of HPS) being less significant. Mukoma and Flisher (2004) argued that one of the key methodological challenges to evaluating HPS is the ability to synthesize process, outcome and output data, and to do so within a wide variety of schools. They recommend establishing clear indicators that can be used with different applications in a variety of settings. Franks, et al., (2007) used their review of three school-based programs to illustrate why program evaluation is critical. One the four basic features identified as common to all three programs (Coordinated Approach to Child Health, Planet Health, and Not-On-Tobacco) was the rigorous evaluation of the interventions to establish efficacy. All three of these interventions have been shown to be effective and it is not surprising that evaluation has been a key to that effectiveness. Finally, a number of the authors advocated for further research, including diverse methodology, with the intent to clarify indicators, more closely link health and education outcomes, and to continue to shape the implementation and evaluation of the HPS approach (Deschesnes, Martin & Hill, 2003; Mitchell et al., 2000; Mukoma & Flisher, 2004; Stewart-Brown, 2006; St. Leger, 1999).

Implementation of the Battle River Project

The BRP concept, as implemented by EAS, is partially based on ecological theory (Bronfenbrenner, 1977; Kelly, 1990; Sallis & Owen, 1997)

which recognizes the interplay and complexity that exists within and between

each level; individual, social, organizational, community and policy, as well as

the role of the physical environment throughout all levels. The BRP intervenes at

the social and organizational levels to ultimately affect the individual children and

youth within the Battle River School Division, while also impacting school

division policy, for long-term sustainability and effective change (Mukoma and

Flisher, 2004). Table 2.1 briefly summarizes the process of the BRP. The

preintervention process involves (a) submitting proposals to and requesting

approval from the Alberta Sport, Recreation, Parks, and Wildlife Foundation and

the Alberta Healthy School Community Wellness Fund; (b) identifying a school-

division partner; (c) formatting a steering committee and establishing parameters

for the partners; and (d) hiring a project coordinator from the Battle River School

Division

      Participating schools (22) are able to access a variety of supports and

resources such as: tools to measure progress and aid in the planning process;

release time (approximately 10 days per school) for lead teachers and their

committees to be trained in the HPS model, meet, plan, and share strategies;

facilitated collaboration and information exchange with school cohorts; access to

expert advice and support in the areas of healthy eating, physical activity, and

mental wellness; and opportunities to access a variety of resources, special events,

and professional development opportunities. A part-time coordinator (0.6 FTE in

total with 0.4 FTE from grant dollars and 0.2 FTE contributed by the school

division), hired from within the school division, liaises with the project partners,

Table 2.1

Overview of the Battle River Project

Pre-Intervention Process	Grant proposals submitted to and approved by: • the Alberta Sport, Recreation, Parks, and Wildlife Foundation • the Alberta Healthy School Community Wellness Fund Identification of school division partner. Formation of the Steering Committee and establishment of partner parameters. Hiring of a project coordinator from the Battle River School Division.	
Timelines	**Planning and Implementation**	**Data Collection and Reflection**
Year One *September 2007 to August 2008*	Recruitment of participating school communities and identification of lead teachers. Development of support materials, planning template, and Health Assessment Tool for Schools (HATS). Initial lead teacher meeting to discuss the project, review the HPS approach, and begin to examine mental well-being, physical activity, and healthy eating within each school community. Steering Committee meetings focused on project buy in and design.	Administration of SHAPES survey 2008 and REAL Kids Alberta survey 2008. Lead teachers engaged in reflection on the perceived health issues in their school and began to share ideas and processes to effect change. Lead teachers provided feedback to the project coordinator and partners to assist with planning the project in Year Two.
Year Two *September 2008 to August 2009*	Lead teacher meetings to jointly plan, learn and share. Implementation of supports for professional development, planning and implementation. Formation of Builder Team (small group of key stakeholders) to support the coordinator through discussion, sounding board and idea generation. School planning and implementation for mental well-being, physical activity, and healthy eating based on data and feedback gathered in Year One. Steering Committee meetings focusing on policy development.	Lead teachers used their school reports from SHAPES 2008 and REAL Kids 2008 as a basis for reflection on areas of strength and weakness, as well as to effectively plan for the current year. Project coordinator and partners used the school division data from 2008 to reflect on division strength and weakness, and as a catalyst for action surrounding policy and administrative procedure. Administration of SHAPES survey 2009, REAL Kids Alberta survey 2009, and the HATS survey 2009 (online) Lead teachers provided feedback to the project coordinator and partners to assist with planning the project in Year Three.

(table continues)

Timelines	Planning and Implementation	Data Collection and Reflection
Year Three September 2009 to August 2010	Ongoing support for lead teachers and participating schools including professional development, resources, school visits, administrator meetings, planning sessions, and sharing to meet needs identified in the Year Two data. Continuation of Builder Team concept. Steering Committee meetings focusing on continued policy development as well as sustainability beyond the grant funding.	Lead teachers continue to use school reports from SHAPES 2009, REAL Kids 2009, and also HATS 2009 as a basis for reflection to inform planning and implementation. Project coordinator and partners continue to use the school division data from 2009 to reflect on division direction for healthy school, inform policy, and look towards sustainability. Lead teachers continue to provide ongoing feedback to the project coordinator and partners.

supports each participating school community, and promotes the BRP within the division. Utilizing available supports and resources, participating schools are expected to plan and implement the HPS approach. Lead teachers at each school, with the help of their committees, assist with administering and reviewing school capacity and student health measures, as well as share results with their school community.

As participants are engaged in a dynamic, cyclical process of action research (ATA, 2000), the BRP can be viewed as an ongoing conversation between the district, schools and EAS involving all individuals who are concerned with health and education outcomes for school aged children and youth. The ultimate purpose of the collaboration is to permit change and improvement at all levels, ultimately resulting in individual, social and organizational improvement, and positive change (Catelli, Padovano, & Costello, 2000; Smits, 1997).

The BRP obtains student health outcome data from two separate sources. Raising Healthy Eating and Active Living Kids in Alberta (REAL Kids Alberta) is a large-scale evaluation into the effectiveness of a number of Alberta Health

and Wellness Initiatives. The evaluation includes grade five student surveys on physical activity, nutrition and health promotion knowledge as well as height and weight measurements, parent surveys regarding the home environment, and also principal surveys related to the school environment (REAL Kids Alberta, 2009). All grade five classes within the BRP participated in the evaluation in 2008, 2009 and will do so again in 2010. Over 150 other schools across the province also participated in 2008 and will be assessed again in 2010. The School Health Action, Planning and Evaluation System (SHAPES) is a survey tool used to obtain information from students in grades eight and eleven about their behaviours related to healthy eating, physical activity and mental well-being (SHAPES, 2009). All grade eight and eleven classes in the BRP participated in 2008, 2009 and will be surveyed again in 2010. Each participating school receives a detailed report with student health data (summary) from both SHAPES and REAL Kids Alberta. Data gathered from these tools will be shared in future publications as the priority was to share the results with the school communities and division first.

HPS committees at the school, led by the lead teacher, are encouraged to examine their school's reported results to guide the next planning phase as part of the action research cycles, as illustrated in Figure 2.1.

Each HPS committee also completes the *Health Assessment Tool for Schools* ([HATS] created by EAS), which determines a school's capacity to promote health according to the EAS 4 Es, Essential Elements and Indicators (Ever Active Schools, 2009). The BRP utilizes action research as an essential
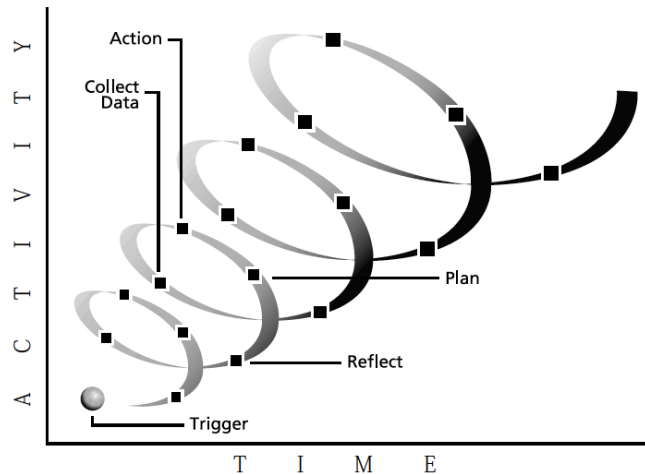
Figure 2.1 Research cycle (Alberta Teachers' Association, 2000, p. 12).

element to bridge theory and practice as well as provide a basis for sustainability.

Throughout the project planning, implementation and evaluation, the stakeholders

and participants have been, and will continue to be, intricately involved. Data

gathered through HATS, SHAPES and REAL Kids Alberta is shared with each

school community for the purposes of reflection, planning and action. Even the

formation of the BRP Steering Committee reflects this commitment to

consultation as it is made up of EAS staff, teachers, administrators, public health

professionals, school trustees, and school division staff. Lawry St. Leger captured

this spirit of cooperation in his closing words to an editorial on the place of

schools in health promotion.

> Let us rethink school health away from kits and projects to solve problems and use the school as an ongoing setting where health is created, supportive environments are built, partnerships made and many skills are learned. Then we might be able to say this is what school communities can realistically do to build the health and well being of their students now and into the future. (2004, p. 408)

This vision is at the heart of the Battle River Project as EAS examines *how* the Health Promoting Schools approach can be implemented at a district level. Stewart-Brown (2006) recognizes that despite the depth of her review for the *Health Evidence Network* there is a failing to answer critical questions related to the success of HPS initiatives such as: "How did this initiative work? Why did it succeed in this context and not that? What might make this initiative more effective?" (p. 18). Through an intermingling of process, outcome, and output evaluation and study, the Battle River Project is intended to contribute to what is hoped to be a growing body of answers to the how, why and what of HPS implementation.

The Battle River Project is funded through the *Alberta Sport, Recreation, Parks and Wildlife Foundation* and the *Alberta Healthy School Community Wellness Fund*. For more information on EAS or the BRP visit http://www.everactive.org.

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CHAPTER 3:

PAPER 2: ASSESSMENT FOR LEARNING: USING STUDENT HEALTH AND SCHOOL CAPACITY MEASURES TO INFORM ACTION AND DIRECT POLICY IN A LOCAL SCHOOL DISTRICT[3]

Description

Health Promoting Schools is an internationally recognized framework for supporting improvements in students' education and health outcomes [1]. The Battle River Project (BRP) was a school division (also called a school authority or jurisdiction) health intervention in rural Alberta, Canada built upon the health promoting schools (HPS) approach. The central aim of the three-year project was to examine how implementing the HPS model can positively influence student health behaviours (physical activity, healthy eating, and mental wellness) and the school environment. A unique attribute of the BRP was the commitment, cooperation, and partnership between the school division, the local health authority, and the Ever Active Schools program (EAS); a provincial, membership-based initiative designed to assist schools in fostering social and physical environments that support healthy, active school communities [2].

Grants for the BRP were provided by the Alberta Sport, Recreation, Parks and Wildlife Fund ($55,000/year) and the Alberta Healthy School Community Wellness Fund ($50,000/year). The Battle River School Division [3] provided 0.2 FTE (full time equivalent) of a coordinator's salary as well as numerous "in-kind"

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contributions (e.g., participation in district wide professional development days, school release time, office space). Using grant dollars and regular operational funds, EAS funded an additional 0.4 FTE for the coordinator and also provided each participating school with: tools to measure progress and aid in the planning process; release time for lead teachers to be trained in the health promoting schools (HPS) model, meet, plan and share strategies; facilitation of collaboration and information exchange with school cohorts; access to expert advice and support in the areas of healthy eating, physical activity and mental wellness; as well as opportunities to access a variety of events and resources. With support from the BRP coordinator and partners, participating schools are expected to: plan and implement a HPS model, administer and review school capacity and student health measures, and contribute to the growth, evaluation and success of the project. Through division-level implementation, the potential exists for both an implementation and financial model that EAS can pursue with other school districts seeking to promote health [4].

Evidence

Stewart-Brown noted that school health promotion can be effective if it is "...complex, multi-factorial and involve(s) activity in more than one domain." [1]. As well, school-based interventions that promote mental health, physical activity and healthy eating were also found to be effective [1]. To encourage evidence-informed health promoting change in the BRP three separate mechanisms were used to measure and share evidence with the school district and communities. First, the Health Assessment Tool for School (HATS) is an EAS created tool that

collects information about school programs, policies, and resources and provides

an indication of the school's capacity to promote health. In the first year of the

BRP, HATS was completed in paper format by the Action Team (a multi-

stakeholder group that works to plan and implement along with a champion

teacher) in each school community but can now be accessed online. School-

specific reports of each school's HATS results are organized by the essential

elements of the EAS framework (Table 3.1) and available to the champion teacher

upon completion [2]. It is recommended that each Action Team reviews the

HATS report, shares the results with the rest of the school community, and uses

the resulting discussion to plan for change.

Table 3.1

"The "4 Es" of Ever Active Schools: A Health Promoting Schools Framework

Education	Supporting a culture of learning for all school community members including wellness related programs for students and health promotion learning opportunities for teachers, staff and parents.
Environment	Fostering safe social and physical environments in the school, home and community, implementing policies that enable healthy, active lifestyles and cultivating a place where everyone knows they belong.
Everyone	Collaborating in a meaningful way with the people involved in the everyday life of the school and equal and inclusive opportunities for everyone to make healthy choices.
Evidence	Collaboratively identifying goals, planning for action and gathering information to indicate the effectiveness of actions to support healthy, active lifestyles throughout the school community.

Student health behaviours and outcomes in the BRP are assessed through

two separate survey mechanisms: a grade eight and eleven student-level health

behaviours survey (SHAPES – a University of Waterloo measurement system for

physical activity, healthy eating and mental well-being) [5], and a grade five

survey that includes students, parents and principals (REAL-Kids Alberta –

physical activity, healthy eating) [6]. Baseline student-level data were collected in

2008 with results shared directly with each school community and the division.

Year two measures were completed in May 2009. All survey tools and procedures

passed through the ethics process of the appropriate University and are fully

supported by the Battle River School Division.

Conversations with school champions revealed that they found the

information sharing process established in the BRP valuable for creating

awareness and informing action. For many school staff, the results were shocking

and served to galvanize action and work as a catalyst for change. A number of

schools were holding onto misconceptions about the health of their students and

consequently used the data to educate and inform action. School champions were

encouraged by the project coordinator to present their results to staff, parents and

the community to initiate discussion and plan for change. Having direct access to

their own student survey results allowed school Action Teams the opportunity to

plan based on evidence followed by further evaluation. This process, facilitated

by the project coordinator, serves to refine and target actions by the school

community to meet the actual needs of the students. At a district level, the

evidence stimulated the Board and District to begin to look at policy surrounding

healthy schools and workplaces [3].

Discussion

School champions have shared that the evidence in the BRP played a very

significant role in supporting school-initiated change aimed at improving the

health of school communities. Results of the student surveys and the HATS assist school staff in identifying specific areas for improvement (e.g., providing healthier food choices in school cafeterias) and allow such changes to be monitored and evaluated. Without the student surveys and the HATS each school community would be planning and implementing "blindly" – guessing at the impact of actions. Evidence has provided the impetus for district and school change that is tailored to each school's unique profile, and is flexible, realistic and measureable. Parents, staff and community members have a hard time ignoring issues that are clearly identified. Many school communities have experienced a renewed sense of purpose as school health can be seen as something that can be measured with real targets and goals. For example, the SHAPES [5] survey asked students, "Have you noticed healthier foods being offered at the cafeteria or hot lunch program in the last 12 month?" The 2009 data shows a 13 percentage point increase from 2008. Many of the participating schools made healthy food choices a priority in their first year. Schools can now see their results, monitor their improvements, and alter policies and practices accordingly.

Thus far in the project, the evidence has not been challenged by those involved in the BRP. Participating schools have taken the evidence to heart and used results to effect change in their community. There was, however, some disbelief at first with the levels of inactivity in some school communities. One school in particular thought their students were very active and were surprised by the results. As a district, only 42% of grade 8's and 31% of grade 11's reported levels of PA that meet Canada's Physical Activity guidelines. Rather than

disputing the evidence and continuing current practice, this particular school, and others, took a hard look at the opportunities for physical activity in the school for all students and made changes. After one year, the evidence is showing a swing in a positive direction.

The process of evidence gathering has been quite substantial with a wealth of information generated and shared with schools. Currently, the BRSD has implemented a wellness policy (Policy 21 – Healthy School Communities and Workplaces) as of August 2009 [3]. This will be followed by administrative procedure in September of 2010. The policy process was both aided and supported by the evidence. As well, buy in from school communities will be that much easier because they have seen the evidence first hand and already taken numerous actions for change. Using the current evidence, however, has generated a thirst for continued information. There have already been discussions about how to continue gathering evidence after the project's grant funding is completed.

Conclusion

The three most important take away points of the BRP are:

1. Invite and involve all stakeholders from inception to completion of the project. Value their opinions, experiences and community wisdom.

2. Gather appropriate evidence and SHARE it regularly with those capable of creating change and implementing effective practice.

3. Through policy development and community groundswell, encourage an embedding of health within the culture of the community you hope to change.

In our experience, evidence has been a primary catalyst for change and informed action. That being said, if the evidence is not shared with those in a position to implement change it becomes a useless, or at best, academic exercise. Our process has been action oriented from the start. All partners were invited to participate and were valued, listened to and informed. Our BRP Steering Committee included district staff, trustees, principals, teachers, health professionals and researchers. It is a very powerful experience listening to this diverse group unifying over healthy schools. The BRP has been able to draw from the strength of the "sandwich effect." Momentum builds at the ground level in school communities as they find out what the true status of their students' health is. At the same time, the upper levels of the district and board are also privy to this same information. What results is a meeting in the middle, with effective change in schools supported by policy and administrative procedure that embeds health within the culture of each school and the district itself.

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CHAPTER 4:

PAPER 3: A JOURNEY INTO SCHOOL HEALTH PROMOTION:

DISTRICT IMPLEMENTATION OF THE HEALTH-

PROMOTING SCHOOLS APPROACH[4]

Introduction

December 19, 2007. We sat together for the first time as a steering committee for the Battle River Project in a small room at the Seniors' Centre in Camrose. I looked around at everyone and thought to myself, "Wow, this is awesome. Everyone is here!" We had teachers, administrators, health professionals, the chair of the school board, another trustee, an associate superintendent and the director of curriculum—all of us meeting together to figure out how to implement a Health-Promoting Schools approach, via the Ever Active Schools Program, in the Battle River School Division. Although I had no idea where we would end up, I thought, "This, this is a good place to start." (Meeting notes, December 19, 2007)

June 18, 2008. All 22 champions from the participating schools had been asked the following questions: When you go to sleep at night and dream about healthy schools, what do you dream about for your school? . . . for your district? . . . for your province? Heads down, intently scribbling on the provided index cards—I had not expected such fervent focus so late in the day. Later, reading the thoughtful, sometimes passionate answers, I found out why. These individuals cared, not only about their own schools and students but far, far beyond. They understood the connections between learning and health; understood that it takes us all to make lasting, effective, positive change. (Meeting notes, June 18, 2008)

Health-Promoting Schools and the Battle River Project

The Health-Promoting Schools Approach (HPS) continues to gain

significance and support in many countries. A recent publication featured 26 case

studies from around the world, all of which utilized HPS in some manner

(Whitman and Aldinger, 2009). Beginning with a set of guidelines developed in

1995 by the World Health Organization, it can be agreed that HPS seeks to bridge

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[4] This chapter has been submitted to *Health Promotion International.*

the gap between health and learning. School communities that use the approach work towards policy development, supportive social and physical environments, school/community relationships, personal health skills and effective school health services (WHO, 1996). Other organizations such as the International Union of Health Promotion and Education (IUHPE), the Pan-Canadian Joint Consortia for School Health (JCSH) and the Ever Active Schools Program (EAS) also offer equivalent guidelines and frameworks for school communities that wish to utilize the HPS approach (EAS, 2010; IUHPE, 2009; JCSH, 2010).

The HPS approach has endured for over 15 years, and a number of recent related articles have examined issues of efficacy, evaluation and implementation (Deschesnes, Martin and Hill, 2003; Franks et al., 2007; Mitchell, Palmer, Booth and Davies, 2000; Mukoma and Flisher, 2004; St. Leger, 1999; Stewart-Brown, 2006). Through meta-analysis, research, and evaluation, much has been learned about the broad strokes required to be successful: the importance of an extended timeframe for effective change (Mitchell et al., 2000; Mukoma and Flisher, 2004; Stewart-Brown, 2006), the need for political and financial support (Deschesnes et al., 2003), the involvement of critical partners (Mitchell et al., 2000), and the multifactorial nature of effective HPS (St. Leger, 1999; Stewart-Brown, 2006), to name a few. What appears to be lacking are details of local implementation design and practice. Stewart-Brown acknowledged that despite the depth of her meta-analysis for the WHO, there was a failure to answer critical questions related to how particular initiatives worked and what might increase local efficacy. It is generally agreed that further research that utilizes multiple

methodologies is necessary for the ongoing development of implementation design, evaluation and effectiveness of the HPS approach (Deschesnes et al., 2003; Inchley, Muldoon and Currie, 2006; Mitchell et al., 2000; Mukoma and Flisher, 2004; St. Leger, 1999; Stewart-Brown, 2006).

Purpose of Study

EAS is the only provincial organization that is implementing HPS in Alberta, Canada. After seven years of working with individual school communities to "facilitate the development of healthy children and youth by fostering social and physical environments that support healthy, active school communities" (EAS, 2009), EAS staff began to question the effectiveness of working with individual school communities. If health and education outcomes are linked, could those outcomes be reached more effectively through a systemic approach that targets school districts? Perhaps provincial implementation could align with the local school district resources, strategies and purpose while still allowing for differences between individual school communities within the district. After much consultation and planning, the Battle River Project ([BRP] Gleddie and Melnychuk, 2010) came into being.

The essential purpose of the study was to examine the effectiveness of a local school district implementation model of the HPS. Rather than seek a definitive answer to one question, however, I intended to explore *how* a particular HPS model actually worked. The process therefore involved asking a number of questions such as the following: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS

look like at the district level? How did the model effect change? What strategies were effective? Are there some common themes in successful implementation at the school level? Additionally, if the model proved to be effective, perhaps EAS could choose to pursue a provincial implementation of HPS based on the findings from the BRP.

<div align="center">**Context**</div>

The Battle River Project

The project was located in the Battle River School District (BRSD) in Alberta, a western province in Canada. Alberta has 63 school authorities (public, Catholic and francophone, not including private and charter schools) that operate over 2,000 schools with more than a half million students. The BRSD is a predominantly rural, medium-size school district (37 schools) that includes the City of Camrose (10 schools) and the Counties of Camrose (8 schools), Flagstaff (9 schools) and Beaver (10 schools). Twenty-one schools voluntarily participated in the BRP; they represent 85% of the student population of the BRSD.

The project was initiated by EAS in partnership with the BRSD and assisted by Alberta Health Services ([AHS] the provincial and regional health services provider). Interventions focused on social and organizational levels with the end goal of positively affecting student health outcomes and the school environment. The essential question of the BRP was, "How can the school environment and health outcomes of children and youth, specifically healthy eating, physical activity, and mental well-being, be positively improved when a

Health-Promoting Schools model, the Ever Active Schools Program, is implemented with school district support?"

All of the partners supported the participant schools to facilitate the development of healthy, active school communities. The project also included a number of embedded school and student health measures that were shared with school communities each year and provided statistical data to inform school and division decisions (Gleddie and Melnychuk, 2010).

Methodology

I have used a case-study approach to examine the BRP. By design, case study methodology must have a "case." Merriam (1998) described this as "intensive descriptions and analyses of a single unit or bounded system" (p19). Stake (1995) explained that "the case is an integrated system" (p2). Implementing HPS within one school system fit the requirements of a closed system. A case has been made out of the BRP as a district implementation model, and the methodology enabled delving into the *how* of implementation.

Merriam (1998) also described a case study as having three particular characteristics: particularistic, descriptive and heuristic. The study of the BRP examined the implementation of HPS within the school district and focused in on the issues, problems, solutions and particularities within those bounds. The end result of a case study should be a rich, deep description of the actual event or problem (Stake, 1995). One of the goals in this study was to examine how whatever happened, happened, rather than just listing the results. Finally, to be heuristic, a study needs to uncover meaning and bring about a deeper

understanding of the phenomenon that is being studied. "Insights into how things get to be the way they are can be expected to result from case studies" (Stake, 1981; as cited in Merriam, 1998). If the research allows others to rethink and come to a greater understanding of how HPS can work in a school district, then it will have had value and longevity.

One of the benefits of case study methodology is the ability to include and analyze many different forms of data (Merriam, 1998; Stake, 1995). Stewart-Harawira (2005) built on this idea and spoke to the Iroquois concept of all data having value regardless of source. In that light, I gathered and valued data from focus groups of teacher champions and principals; interviews with teachers and principals; a variety of documents on, for example, policy and administrative procedure, school action plans, meeting minutes and notes, feedback and materials from champion workshops and, finally, personal observations and interactions over a three-year involvement with the BRP.

Theoretical Framework

Qualitative methodology is inherently inductive, with categories and themes that emerge from within the study rather than using preset hypotheses or theories (Creswell, 1994). Hermeneutics provides the basis for this research journey, primarily in the form of interpretive inquiry (Ellis, 1998). The idea of research being described as a conversation through which we engage each other's horizons (subjectivities, forestructure) and create understanding motivated and guided the study (Gadamer, 1979), which has been an exploration. Case study was the vehicle and hermeneutics/interpretive inquiry the driver. In the evolution

of the research, created knowledge was developed from the relationships between the subject area, the participants and myself as the researcher (Denzin and Lincoln, 1994). Travelling farther and farther into the question of healthy schools has led to new and intriguing places. Hermeneutics gave the study the structure to begin to uncover the elements needed to implement and sustain healthy school communities.

About the Investigator

The BRP was essentially my "brainchild" in the beginning, initiated as part of my graduate work through a series of courses and papers and springing to fruition through my daily work as the director of EAS. The project was designed to examine ways to further HPS in Alberta through EAS, and the design drew on conversations with many different people involved in HPS at a variety of levels. My background, training and experience as a teacher have also firmly embedded in me the value of praxis: If it doesn't work for the teacher, it won't work at all!

Findings and Discussion

> *When kids walked out of my school, someone said, "What do you see as a success?" If I come down 20 years from now and I'm driving down the road and I see kids that I've taught and they're going for a run, somewhere along the line I was successful. They still want to be active citizens.* (Focus group participant)

A school is a complex place full of interactions, relationships and stories. The division within which the school is located is by no means a simpler entity. The challenge of determining how the BRSD embraced the HPS involved sifting and winnowing through a great deal of data. As I mentioned earlier, the primary purpose of the research was to provide space for others to think and come to a

greater understanding of how HPS can work in a particular school authority. I have organized the description of how the BRP worked into three essential themes: participation, coordination and integration.

Theme 1: Participation

> *It's positive anytime we're talking about healthy living. Very few people are going to say, "No, that's not a good thing to do.'" My sense though is that it was much more ambivalence, that, okay, here is another project from the division, and how much is it going to cost? What do I have to do as an individual teacher to get this thing off the ground? For the most part, it was just something we accepted.* (Focus group participant)

Each school and champion participated in the project somewhat differently. Some jumped in feet first, created a committee and got to work. Others signed up and then sat back to get a sense of what might happen. Still others decided to limit the project to only physical activity or healthy eating and did not invite anyone else on staff or in the community to participate. It is important to remember that a school division such as the BRSD has a great deal going on, and school staff can be inundated with requests for initiatives and projects.

Even the title, *Battle River Project*, became a barrier for some participants because they felt that it did not have a direct connection to what the project was trying to do. In the second year the project coordinator suggested to the Steering Committee that we add the tagline "Building Healthy School Communities" to the name for that very reason. Looking back, I believe that the title of the project was picked more from the perspective of the EAS (to show that we were working with one particular division) than from the perspective of the division (to choose a name that would mean something to staff).

Many times in interviews and focus groups and in a variety of documents the word *value* was used. A critical indicator of a school's or champion's participation level was whether the school or champion valued the concept of healthy schools. One focus group participant mentioned that until the culture of the division office changed and there was some accountability, in his or her eyes it was "lip service" only. An essential element of any successful HPS implementation, then, is the inherent value of health to a school community. One champion explained that at his or her school, that value came when the staff realized *"that this project was not just for the kids; it was for kids and for staff and for parents. They quickly bought in because staff wellness is always a big issue"* (Interview participant).

Participating schools had access to release time for the purpose of meeting, developing strategies or initiatives, sharing ideas and planning the implementation. There was a fairly large discrepancy in how individual schools accessed these days. Most schools used every sub day possible and asked for more; others struggled to use a few. In conversations with the project coordinator over the three years, we came to the conclusion that it was best to allow some flexible rigidity. Rather than allow unlimited choice for the use of these days, we planned to target some for specific processes (planning, meetings), some for specific training or professional development, and others for "flex time" for which schools could apply if the need arose. As the following statement illustrates, overall, the release time was seen as very positive: *"And if the subs not paid for, my principal's probably going to say, 'Oh, I don't know if I want to pay*

for a sub, so you can go to something like that [gymnastics workshop]'" (Focus

group participant).

Theme 2: Coordination

> *I think it was really important to have administrators or somebody else*
> *besides just the school champion involved.* (Interview participant)

From deciding on allocation of release time to organizing meetings, the

inherent complexity of the BRP required extensive coordination at three levels.

First and foremost were the school champions who were responsible for local

school implementation. Next, the project coordinator, paid jointly by the BRSD

and EAS, was responsible for division implementation and aided by the Steering

and Builders Committees. Finally, through both committees and through reports

on the project to granting agencies, the division and the province, EAS provided

direction to the project coordinator.

The most effective champions involved their staff from the outset and

quickly formed a committee for school health. *"So it's nice to have different*

people who are involved in the school in different ways, not just always physical

education teachers" (Focus group participant). A true mix of stakeholders was

invited to participate in the process as well as the activities. One champion

explained it as

> *spending some time to explain why you are doing things and how it's*
> *going to work and how it is going to benefit them. Our staff definitely*
> *became part of the process. They helped develop the goals for the school.*
> (Interview participant)

Not only was the project coordinator's role complex, but to some extent it

also had to be created "on the fly" and was constantly in transition. One area for

improvement that some champions, the Steering Committee and the project

coordinator identified was communication: *"Maybe that could have been the*

project coordinator's job right from day one making it [the BRP] more known,

and then celebrating what is happening in each building. And then schools can

feedback off that" (Focus group participant). The champions also identified the

need to develop key messages and gather resources: *"That to me is part of their*

job, is to pick the best one or two (from a large list of Web sites, for example) and

say, 'Here, this is great. You go there'" (Focus group participant). What also

became apparent in the focus groups was that some participants were unclear

about the intended role of the project coordinator. We should have communicated

much more clearly, even the fact that the position was only 0.6 FTE, not full-time

as some thought.

One strategy that was successful in providing direction and a sense of

accountability to the project coordinator was the creation in year 2 of the Builders

Team. The *Year Two Final Report* states:

> A Builder's Team was formed consisting of teachers from each grade
> level division, district staff, health practitioners and board members.
> Essentially, the Builder's Team is a sub-committee of the Steering group
> that also provides direct support to the Project Coordinator as well as
> project consultation and direction. (p. 1)

The new team created an instant network on which the project coordinator could

rely for feedback, idea generation and support. Comments such as *"Having*

someone [project coordinator] in the middle and having someone coordinate all

that stuff makes it so much easier" (Focus group participant) illustrate the

importance of having someone in place to coordinate the HPS process and

implementation.

Theme 3: Integration

> *Staff never saw this as an add-on. It has always been something that has been a positive thing in our building. Even the students, changing our canteen to be healthy, they just accepted it right away.* (Focus group participant)

> The Board believes that the Health Promoting Schools approach contributes to the realization of the BRSD vision and mission through its support of the Pyramid of Success. Academic, character and relationship development rests on the base of family, community and health. (BRSD, 2009, ¶ 2)

HPS as implemented in the BRP can be seen as both top down and bottom

up. Many of the staff and students were ready for change and already working in

some capacity to improve the health of their school communities. Policy

statements such as the one above created a sense of legitimacy: *"Now it was not*

just us at the school telling them; there were other people, the school trustees"

(Focus group participant). At a provincial HPS conference where the project

coordinator, a division office staff member and a trustee presented a session on

the development of policy and procedure in the BRSD, a participant asked the

following question: *"Do you think it is better to begin with policy first and 'make*

it [health] happen?" The three presenters all quickly replied that they felt that the

policy and procedure in the BRSD started with a groundswell first, then were

reinforced through board and division action.

Health is slowly becoming embedded in the BRSD. The "Pyramid of

Success" was modified in 2009 to add health as a pillar (Appendix L). Policy 21

was aptly titled *Healthy School Communities and Workplaces* to reflect the importance of staff wellness (Appendix M). At a division-wide administrators' meeting in 2010, the superintendant highlighted critical portions of Administrative Procedure 190 (which explains how Policy 21 is operationalized; Appendix N) and reiterated that the division cares not only about its students, but also about the health of its staff (meeting notes). These actions demonstrate that the integration of health is evident in a variety of documents, processes and, perhaps most important, actions.

The final evidence of the integration of HPS can be found in the three-year plans that each school in the BRSD is required to maintain. These plans contain demographic information, the results of standardized tests and school goals under the categories of character, academics and relationships ("Pyramid of Success," BRSD, 2009). As of September 2010 each school will also have to include an action plan tied to Policy 21 that sets goals and indicators as well as strategies and timelines and identifies the person in the school responsible for each strategy (Appendix O). Each school's three-year plan is a public document that can be found on the BRSD Web site. For example, Killam Public School, a K-9 rural school in a town of 1,000 people, has a three-year plan that includes the following two school results goal statements (BRSD, 2010):

> (Character) Students will experience the benefits of being a member of a healthy, active learning community. (p4)

> (Relationships) Inform stakeholders of the school's initiatives towards the development of students as healthy, active, responsible citizens. (p6)

Documents such as this help to hold school communities accountable to the public. When health is prominent in the policy, administrative procedure, planning, action and accountability structures of a school division, it has truly been integrated.

Conclusions

Although more research and study of local implementation models are still needed (Inchley et al., 2006; Moon et al., 1999; St. Leger, 1999; Stewart-Brown, 2006), the evidence that I gathered in this case study strongly supports a school authority–based local implementation. The BRP was designed to implement HPS systematically in a particular school authority or division. Through this project, the BRSD has embedded HPS into its structures and processes. The BRP was particularly effective in stimulating the development of policy and procedure grounded in the HPS and inclusive of physical activity, healthy eating and mental well-being. Although the project was capable of having a direct impact on only 85% of the students, all school communities in the BRSD can now continue to benefit from the division's focus on health.

EAS as the organization responsible for the provincial implementation of HPS will use the evidence from the BRP to continue to explore the division model as an effective means of engaging other school authorities. A systematic divisional approach that considers local differences seems to be an effective use of resources because processes can be both streamlined and embedded. Further exploration based on the three emergent themes of participation, coordination and integration will occur as EAS develops relationships with new school divisions.

Inchley et al., (2006) identified ownership, leadership, collaboration and integration as critical concepts in internal school improvement through HPS. Essentially, these concepts were repeated in the three themes that the BRP identified for division implementation. As we continue to build the evidence base for effective local implementation of HPS, it is essential not only to consider individual schools, but also not to ignore the efficacy of utilizing the inherent structures, processes and personnel of local school authorities; rather, they must continue to be explored and developed.

> *The other key thing is every school has to put these goals on their three-year plan. So that's the accountability piece right there within each building, is within their three-year plan there's a template attached to the BRP. I think the success of this project will live on because each administrator has to be responsible.* (Interview participant)

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CHAPTER 5:

PAPER 4: THE DEVIL IS IN THE DETAILS: DEVELOPMENT OF

POLICY AND PROCEDURE IN THE BATTLE RIVER PROJECT[5]

The Board believes that the quality of student learning and the quality of student health are interdependent. Educational research supports this connection and acknowledges the school system's role in creating and supporting healthy school communities as foundations for optimal learning. Battle River School Division values the benefits of healthy lifestyles and supports environments that promote healthy living choices.
The Board believes that the Health Promoting Schools approach contributes to the realization of the BRSD vision and mission through its support of the Pyramid of Success. Academic, character and relationship development rests on the base of family, community and health (2009).
As follows, BRSD's Health Promoting Schools' holistic approach focuses on three specific tenets: mental well-being, physical activity, and healthy eating, and acknowledges the causal relationship among the three. (1)

Objective

A health-promoting school (HPS) is one in which all partners—home, school, and community—work together to ensure optimal teaching and learning, social and physical environments, and supports and services (2). There is a growing body of evidence on the efficacy of the HPS (3,4,5,6), as well as agreement on the inclusion of healthy school policy as an effective catalyst for change and sustainability. For example, the WHO established regional guidelines for HPSs and identified school health policy as one of the six major elements (2). The Joint Consortium for School Health (Canada) also includes healthy school policy as one of their four pillars of comprehensive school health (an alternative term for HPS; 7). Ever Active Schools, a provincial (Alberta, Canada)

[5] This chapter has been submitted to the *Health Education Journal.*

implementation program for HPS, considers policy an essential element under social and physical environments (one of the "4 Es": education, environment, everyone, and evidence; 8).

Research has told us that policy is important; however, what seems to be lacking is information on *how* to develop and implement policy at the local level (9,5). Are there certain strategies and processes that might be beneficial to follow? Who should be involved? How does policy come to life? The purpose of this paper is to examine the process leading to the development and implementation of comprehensive healthy school policy as part of a particular division-level HPS implementation model.

Design

The study is a part of the *Battle River Project* (10), a multilevel partnership designed to explore the happenings in a school division implementation of the HPS approach. Ever Active Schools (EAS) is a provincial nongovernment organization that works with school communities in Alberta, Canada, to implement the HPS approach. The Battle River Project (BRP) was designed to determine whether working directly with a school division (or school authority) would be an effective way to implement HPS systematically. Table 5.1 is a brief overview of the project.

The BRP action plan for the first year (2007) included the following outcomes: (a) alignment of the project with school division initiatives and priorities and (b) collaboration and discussion with regard to policies to support physical activity and healthy eating (mental wellness was added later). From these

Table 5.1

Overview of the Project

Timelines	Planning and implementation
Preintervention process	Grant proposals submitted to and approved by the Alberta Sport, Recreation, Parks, and Wildlife Foundation and the Alberta Healthy School Community Wellness Fund ($305,000 over three years)
	Identification of school division partner.
	Formation of the Steering Committee and establishment of partner parameters.
	Hiring of a project coordinator from the Battle River School Division.
Year 1: September 2007 to August 2008	Recruitment of participating school communities and identification of lead teachers.
	Development of support materials, planning template, and Health Assessment Tool for Schools (HATS).
	Initial lead teacher meeting to discuss the project, review the HPS approach, and begin to examine mental well-being, physical activity, and healthy eating within each school community.
	Steering Committee meetings focused on project buy in and design.
Year 2: September 2008 to August 2009	Lead teacher meetings to jointly plan, learn and share. Quantitative data gathered in 2008 used as a basis for reflection on areas of strength and weakness, as well as to effectively plan for the current year.
	Implementation of supports for professional development, planning and implementation.
	Formation of Builder Team (small group of key stakeholders) to support the coordinator through discussion, sounding board and idea generation.
	School planning and implementation for mental well-being, physical activity, and healthy eating based on data and feedback gathered in year 1.
	Steering Committee meetings focusing on policy development. School division data from 2008 utilized to reflect on division strength and weakness, and as a catalyst for action surrounding policy and administrative procedure.
Year 3: September 2009 to August 2010	Ongoing support for lead teachers and participating schools including professional development, resources, school visits, administrator meetings, planning sessions, and sharing to meet needs identified in the 2009 data.
	Continuation of Builder Team concept with a view to administrative procedure development.
	Steering Committee meetings use school division data from 2009 to reflect on division direction for healthy schools, inform policy, and look towards sustainability. Focus for the year is on continued policy development, administrative procedure as well as sustainability beyond the grant funding.

auspicious beginnings, policy development was ingrained as a primary goal of the collaborative partnership. It should be noted, however, that although EAS initiated the discussions and placed policy on the agenda, the school board and division were quick to take the lead, recognize the potential for positive impact, and drive both policy and administrative procedure development.

In the BRSD, policy is the domain of the school board (elected officials), and administrative procedure falls to the division office staff. In the words of the superintendent, each entity has its own "sandbox" in which to play. From the first time that policy appeared on a steering committee agenda, the trustees were determined to move forward. A committee was struck that consisted of trustees, division staff, teachers, administrators, EAS staff, and health professionals charged with examining other healthy school policies and writing a policy that would fit the BRSD. The committee recognized the importance of a comprehensive policy and immediately agreed to submit a draft that would include HPS as well as physical activity, healthy eating, and mental well-being (see year 2 in Table 5.1). As well, the policy was titled "Healthy School Communities and Workplaces" and focused on inclusivity and the importance of school staff wellness. At the time of writing, the administrative procedure (essentially, how the policy will be implemented) had been developed and recently presented to all BRSD administrators for an August 2010 implementation.

Setting

Two recent government initiatives in Alberta have been significant in the development of healthy schools. The first was the Daily Physical Activity Initiative, which came into effect in September 2005 (11). Implemented by the Ministry of Education, the initiative mandated 30 minutes of physical activity every day for school children and youth in Grades 1 to 9. The initiative, soon dubbed the DPA, was supported by a per-pupil allocation of money for budgets, and schools were allowed the flexibility to use instructional or non-instructional time as well as accumulation of the 30 minutes throughout the school day. Above all, the initiative raised awareness of the importance of daily physical activity for children and youth, and by 2008, 70% of the schools that responded to a government survey were implementing daily physical education (12).

The second initiative that impacted the policy climate in Alberta was the development and release of the *Alberta Nutrition Guidelines for Children and Youth: A Childcare, School, and Recreation/Community Centre Resource Manual* (13). The guidelines provided school communities with a point of reference in implementing changes to the food sold and provided on their campuses. Many school jurisdictions in Alberta have begun to implement healthy eating policy that is connected to or was inspired by the guidelines (14).

EAS originally worked with individual school communities, beginning in 1999 with 30 pilot schools. Although the program saw exponential growth over the next few years, the program staff began to wonder if there were more effective ways of implementing HPS. A research project, the BRP, was proposed to explore

the idea of local implementation of HPS through a close relationship with a specific school division. Alberta's education system is composed of 63 major school authorities (public, Catholic, and francophone, not including private and charter schools) that operate over 2,000 schools with over a half a million students (15). The BRSD is a predominately rural, medium-size school district (37 schools) that includes a city (Camrose, 10 schools), and three rural counties (Camrose, Flagstaff, and Beaver, 27 schools). Twenty-one schools that represent 85% of the student population of the BRSD voluntarily participated in the BRP.

A project coordinator was hired from within the BRSD and worked together with the partners to support the implementation of HPS. Participating schools were given resources and support, including release time for staff to meet, engage in professional development on HPS, plan, implement, and assess. Perhaps implementing HPS division-wide would increase the potential for both an implementation and financial model for EAS that can be applied to other districts that seek to integrate health and education outcomes to build and support healthy, active school communities.

Method

I examined the development of policy and procedure in the BRSD by using a case study approach that allowed the inclusion of multiple and varied sources of information (16,17). The data collected included interviews with lead teachers and principals, focus groups of administrators and lead teachers, multiple informal discussions with partners and participants, observation and participation

in meetings, and a wide variety of documents, including meeting minutes,

agendas, action plans, and reports.

Results

I stated earlier that policy was identified as a desirable goal very early in

the project, and the initiation of the process was a planned event. It is important to

note, however, that the board and division took several unique and critical steps

early in the process. The first step involved embedding the HPS approach in the

policy statement to solidify the connections between health and learning:

> The Board believes that the Health Promoting Schools approach
> contributes to the realization of the BRSD vision and mission through its
> support of the Pyramid of Success. Academic, character and relationship
> development rests on the base of family, community and health. (1,
> Appendix M)

The second was that, despite the current trend in Alberta school authorities

towards stand-alone nutrition policy (14), the BRSD policy recognized that HPS

involves more than just healthy eating: "BRSD's Health Promoting Schools'

holistic approach focuses on three specific tenets: mental well-being, physical

activity, and healthy eating, and acknowledges the causal relationship among the

three" (Appendix M). Finally, as the title clearly indicates, the policy includes the

workplace and thus recognizes school staff as critical partners in and components

of a healthy school community.

The analysis of the case study data revealed four primary themes as part of

the development and implementation of policy and procedure in the BRSD.

Together, the themes tell the story of a school division's journey towards creating

and supporting healthy school communities and workplaces.

Perceptions and Misconceptions

When the focus groups were facilitated, Policy 21 was already in place;

however, Administrative Procedure 190 (Appendix N)—how the policy would be

implemented—had not yet been finalized. After I read the transcripts from the

focus groups and interviews, it became quite clear to me that rumors were floating

around the division about when this procedure (often confused and called *policy*)

would come into effect: *"My understanding is that in September they will have*

the policy in place"; *"I thought it was January"*; and *"They gave the policy, the*

draft of the policy, for us to look at; and then they also mentioned that they were

going to show this to administrators at their November meeting. Now I don't

know what is happening." Although these comments from one focus group

illustrate some confusion between the policy and the administrative procedure,

most of the champions wanted it completed to give them something specific to

which they could refer:

> *So I am thinking that in September we can go back to the people [staff]*
> *and say, "This is what the policy looks like." Now, when people have a*
> *problem with the policy, they can deal with it. This is what the policy is;*
> *whereas right now people are thinking anything.* (Focus group participant)

Much of the confusion that the focus groups shared came from staff

members concerned about the healthy-eating component, and they raised

questions such as the following. "Can I still drink coffee?" "Can we have birthday

cake?" "What exactly does *healthy* mean?"

> *The biggest thing is that when the policy comes out, you know, the rubber*
> *stamp gets put on it, and people are a little concerned. It becomes law,*
> *and when law starts to affect their [staff's] lifestyle, then they may push*
> *back.* (Interview participant)

> *In general terms, once the project was explained before anything really happened, everybody was 100% on board. In theory, I [the principal] had no pushback at all. The pushback has come later once specifics have come into play. In theory, everyone wants good mental health with staff; everybody wants good food in schools.* (Focus group participant)

The committee responsible for drafting the administrative procedure took these types of questions and concerns seriously and followed several steps to address the concerns about specificity and staff role modeling. First, they built flexibility into the procedure to allow for gradual change such as adding one or two food-related fundraising mechanisms from the "Choose Least Often" category (13). Second, they tied the procedures for healthy eating, the most contentious component, to the newly drafted provincial nutrition guidelines. Finally, school communities and administrators were given the flexibility to "develop school-level procedures pertaining to snack, meal and fundraising programs, extra-curricular activities, and the role modeling of healthy choices" (Appendix N).

Bottom Up/Top Down

In many ways the BRSD was ready for this policy. School communities and lead teachers had been involved in the project for a year and a half when Policy 21 was put into effect. The groundswell of opinion was that the district was ready for policy and procedure to reinforce what, in many schools, was already happening: *"Now it was not just us at the school telling them; there were other people, the school trustees"* (Focus group participant). The grassroots were ready.

> *Staff never saw this as an add-on. It has always been something that has been a positive thing in our building. Even the students, changing our canteen to be healthy, they just accepted it right away.* (Focus group participant)

I think that the thing that we tried to point out to our staff to try and get people to buy in is, for the most part, we're already doing the things we're supposed to do. There's not a whole lot of things that we need to change. (Focus group participant)

As well, a charismatic board chair and supportive trustees provided leadership and created a vision for a healthy school policy. The superintendent, a smoker and a self-confessed Pepsi addict, made it clear to the administrators that health is a journey that begins with a single step, not just an endpoint. One of the interview participants recalled the words of the superintendent:

Everybody knows he smokes, everybody knows he has his Pepsi, and he has identified it's going to be a challenge for me, but I am working towards it. I think having a superintendent identify that "Yeah, this is not going to be easy, but I believe in it," and you know, that's that modeling piece that's important.

The superintendent's honesty about his own habits and his efforts to curb them at work set the stage for school communities also to begin with a realistic assessment and progress from there. Therefore, school communities have been both pushed and supported to ensure that they would follow administrative procedure to properly support the policy:

Well, if you are at school and you [the champion] are saying that this is what we need to do and everyone is saying, "Ah, well, big deal"—but when you say, "You know what? There's going to be a division policy behind it," that gives it a little more clout. And it's good to know the division is back there and they are actually supporting the project. I've been to a couple of the meetings, and we have had school board members there, which is really nice because they are interested in what is happening. (Focus group participant)

An interview participant commented, "*There's no Pepsi in the division office fridge any more.*"

Flexible Rigidity

The concept of flexible rigidity, to which I alluded previously, connects

with the idea of both pushing and supporting. Administrative Procedure 190

(Appendix N) allows room for individual school flexibility, recognizes that adults

are different from children, and includes one or two traditional fundraisers such as

the selling of chocolate-covered almonds. There is no room for the school to sell,

distribute, or provide "Choose Least Often" foods or beverages, for antiquated

physical education instruction, or for unsupportive environments: *"It's not as*

scary as people think it is. There is flexibility within that admin procedure"

(Focus group participant); and

> *The cute analogy that somebody brought up was that instead of seeing the*
> *teachers going to the furnace room and seeing smoke coming out from*
> *under the door, . . . you see cookie crumbs coming out. You know, we have*
> *to be the role models. We can't expect them [students] to do things that we*
> *can't.* (Focus group participant)

As I stated earlier, many of the perceived issues with the policy and procedure

arose from confusion about what will and will not be allowed for staff. The

procedure allows more than adequate flexibility while still pushing schools

towards healthier environments for students *and* staff.

The Way We Do Business

Along with the policy implementation in 2009, the BRSD made a critical

decision to add *health* to the "Pyramid of Success" (Figure 5.1). The pyramid is a

visible reminder of the BRSD's values, which it shares with parents, the

community, and the staff in many different ways. The inclusion of health reinforces

not only the importance, but also the foundational role of health in education.

Battle River School Division Pyramid of Success

Character
Academics
Relationship

FAMILY
COMMUNITY
HEALTH
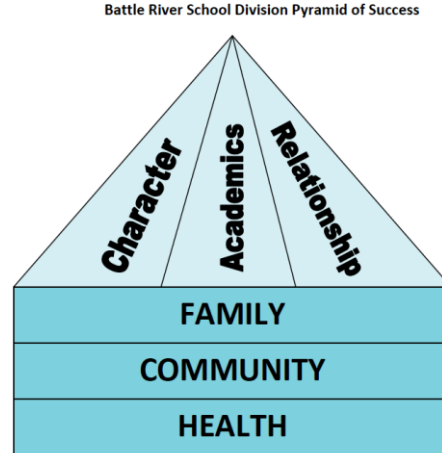
Figure 5.1. BRSD Pyramid of Success.

Each school in the BRSD is required to submit a three-year plan to the

board annually that sets out its priorities and goals as well as a starting point for

school-assessment discussions. A new template was developed to include goals,

strategies, and responsibilities for the development of a healthy school community

in the three-year plan. These initiatives are evidence that healthy schools are "just

the way we do business" in the BRSD. HPS might not have quite the credence or

name recognition of *assessment for learning* or *professional learning*

communities (both popular pedagogical movements)—yet. However, by

embedding and integrating the concept within the structures, the documents, and

the minds of staff and students, the BRSD is well on its way:

> *[HPS] gives direction—some sort of idea where you need to end up and*
> *some tools or implements for the boat to get there. I think we are getting*
> *kids and teachers to think about being healthy. I really think kids and*
> *teachers right now are getting healthier.* (Focus group participant)

Conclusion

There seems to be a consensus that policy is a critical component of HPS implementation (2,7, 8). Policy provides school communities with the structure and support that they need to effect positive change. What is missing are clear guidelines and analysis of actual policy development at a local level (5,9, and others). The strategies and processes for healthy school policy development involved in the BRP could serve as a guiding light for others to follow.

The findings from the BRP suggest the importance of clear communication with and the engagement of stakeholders, the need for both grassroots and top-down strategies, recognition of the need for both rigidity and flexibility, and the importance of embedding health into the procedures, actions, and frameworks of a school authority. Although both Policy 21 and Administrative Procedure 190 (Appendices M and N) have been successfully developed in the BRSD, what remains to be seen is if and how, over time, they are effectively implemented and operationalized. Because the board and division have not only developed these two documents, but also added health to the division improvement model and included a template for goal setting/accountability as part of each school's three-year plan, implementation is also predicted to be a success—not easy, but a success.

> *Other divisions might have one or two aspects, but no one has all three (healthy eating, active living, and mental well-being), and no one has healthy workplaces as well. Our board and central office are modeling this same policy and administrative procedure in their own building. This is a great policy and a great administrative procedure. It's comprehensive, and it is breaking ground for a lot of other divisions.* (Interview participant)

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CHAPTER 6:

DISCUSSION AND CONCLUSIONS

Research Questions

The essential purpose of the doctoral research was to explore *what happened* in a particular school division implementation of the health promoting schools approach. As part of the inquiry process, a number of sub questions were proposed at the beginning of this journey (Chapter 1). It may be helpful here to revisit and highlight findings as they pertain to each sub-question of the case study.

How did the school and district culture change as a result of implementation?

One of the primary examples of cultural change in the school division through the BRP was the inclusion of health as a foundational element in the "Pyramid of Success" (Appendix L). As stated in chapter 5, the pyramid shapes school goals, district priorities, three-year plans and communication to parents. Now that health is embedded, it can be considered as one of the key decision making influencers along with family and community. Additionally, both *Policy 21: Healthy School Communities and Workplaces* (Appendix M) and the accompanying *Administrative Procedure 190* (Appendix N) are evidence of a cultural shift towards healthier schools and workplaces. Focus groups and interviews also revealed a strong commitment to health that includes the Board, Superintendent, division office, school administration, teachers, parents and students. Perhaps one of the most common threads running through the documents, interviews and focus groups was the concept of the division office

and even more specifically, the superintendent, taking action and modeling the HPS approach. *"There's no Pepsi in the division office fridge any more."* (Chapter 5, p. 94)

At the school level, cultural change can also be found in a number of places. First, the planning process of school communities has been impacted by the implementation of HPS. As evidenced by the 3-year plans from Killam Public School (Chapter 5), planning is now inclusive of active, healthy students. Focus group and interview data also demonstrate evidence of school level change. Participants discussed positive changes in staff attitude; practices such as fundraising or school food supplies; parent awareness and; other ways that their school has moved closer to the HPS model. Perhaps one of the most telling vignettes pertaining to school cultural change was the comment in chapter 5 depicting cookie crumbs coming out from under the boiler room door. I am old enough to remember clouds of cigarette smoke coming out from under the staff room door in my school. The schools in the BRSD seem to be on their way to relegating other unhealthy practices into hiding.

What does successful implementation of the HPS approach look like at the district level?

Chapter 4 provides an exposition of the three major themes: *participation*, *coordination*, and *integration* that form the foundation to successful implementation. Essential elements of the BRP success includes: a well-supported coordinator with the resources to share ideas, communicate with all levels and train others in the HPS approach; the valued involvement of all

stakeholders in the planning, implementation and evaluation of the HPS approach; a significant amount of time to effect change; clear communication and training for those responsible for implementation and finally; an integration of health into the district culture (policy, procedure, documents, planning).

How did a district implementation model of the HPS approach effect change?

Utilizing a district implementation model was effective in a number of ways as evidenced in chapters 4 and 5. A district model allowed for all stakeholders to be valued contributors to a concept that became "owned" by the district. The focus group and interview data showed an immense pride in the progress that the BRSD has made, especially as pertaining to policy. As well, change that occurs at the district level has the capacity to impact all schools, not just those who already value healthy school communities.

Policy and procedure are effective methods of effecting change in a district model. As stated in chapter 5, the division took immediate ownership of healthy school policy and procedure development and took a few crucial steps right at the beginning. First, the HPS approach was embedded directly in the policy statement inextricably linking health and education in the division's culture. Second, a wellness approach inclusive of healthy eating, physical activity and mental wellbeing was adopted as opposed to a one-dimensional approach. Third, the division made the choice to include the school as a workplace, immediately recognizing the critical role of staff as role models and leaders as well as affirming healthy staff as a division value.

Finally, both communication and coordination was simplified through the access of district mechanisms such as email, regular professional development opportunities, superintendent memorandums and, administrative structures. Additionally, a project coordinator hired from within the district was able to access these networks quickly as well as maintain lines of communication with champions, administrators and division staff. Although more work needs to be done to clarify roles and responsibilities, a local coordinator can work at maximum efficiency and minimize duplication.

What strategies were effective?

Effective strategies can be grouped in three broad categories: relationships, communication and integration. Each category is not a stand-alone entity but rather, is inter-connected and related to the others. For example, the role of the project coordinator involves developing relationships with champions, administrators and division staff. The coordinator is also responsible for effective communication processes that are critical for raising awareness, implementing ideas and evaluating action. The coordinator also has a key role in integrating health into school and division mechanisms and becomes a critical resource as health becomes embedded at multiple levels.

A sampling of effective strategies inclusive of relationships (R), communication (C), and integration (I) include: regular project coordinator visits to schools to get to know champions and administrators (R, C); regular communiqués to stakeholders (C); formation and support of school and district level healthy school committees (R, C, I); development and implementation of

healthy school policy and procedures (C, I); school level staff challenges and friendly competitions (R); incorporation of health into school and division schematics and planning tools (I); scheduled, purposeful training for champions and administrators (R, C, I) and; inclusion of healthy school concepts in division mechanisms (C, I).

Are there some emergent themes pertinent to successful implementation at the school level?

Emergent themes have been explored as part of chapters 3, 4 and 5. These themes have relevance for successful implementation at the school level as well as the division level. Chapter 3 identified the importance of stakeholder involvement, shared evidence and, an embedding of health. For a school, this can look like: inclusion of all partners on a health promoting school committee; a structured process to share evidence and effect change (action research) and; the inclusion of health in the schools planning and evaluation process. Chapter 4 revealed three primary themes that also pertain to school level implementation. Key points under the themes include: access to teacher release time for training and planning; addressing common barriers; the concept of value; coordination between schools and the division; development of a multi-stakeholder healthy school committee; the importance of a project coordinator with defined roles and; an embedding of health into school structures, policy and actions. Chapter 5 included four policy and procedure related themes. Theme one, perceptions and misconceptions, included elements of communication and dissemination. Theme two, bottom up / top down, involved the relationships between stakeholders and

the interaction of grassroots with division leadership. Theme three, flexible

rigidity, emerged out of the content of both policy and procedure development.

Theme four, the way we do business, explored the cultural shift to include health

in the everyday decisions in the BRSD.

Reflection and Critique of the Research Process

As illustrated in Figure 1.1, there were many complex relationships within

the study. Most prominent from an ethical perspective was the dual role I played

as both the Director of EAS and a graduate student. I chose to deal with this

tension in a number of ways. First, as part of the formal ethics approval process I

obtained permission from both EAS (the Alberta Teachers' Association) and the

BRSD to engage in case study research. All focus groups and interviews were

intentionally conducted by another researcher so as to provide participants the

opportunity to speak with anonymity. As well, from the outset of the study, all

participants were made aware of my dual role through the formal ethics process

(letters) as well as through the steering and building committee meetings.

Creswell's (1994) examination of the epistemological aspects of qualitative

research includes the relationships between what is being researched and who is

doing the research. Gadamer (1979) also referred to qualitative research as a

conversation where the subjectivities and horizons of all involved can

intermingle. Essentially, the purpose of the study was to share created knowledge

from the district implementation of HPS emerging from the relationships among

the participants, subject area and myself (Denzin & Lincoln, 1994). The chosen

methodology, case study, was well suited to my intricate relationship with the

study as it allowed for a wide variety of data to be included and analyzed. Both

Merriam (1998) and, Denzin and Lincoln (1994) acknowledge and affirm the

researcher as the primary instrument involved in the analysis and interpretation of

data. As such, the researcher needs to stay open to the material and emergent

created knowledge. I believe through the use of case study, my own subjectivities

(perhaps as the Director wanting to see success) can not only be openly engaged,

but are also tempered by the evidence gathered through focus groups, interviews

and document study. As mentioned in Chapter 1, both Chapter 4 and 5 (including

all emergent themes from the case study) were shared with some of the people

involved in the BRP including the superintendent, curriculum coordinator, project

coordinator and board members. Their examination and acceptance of the

emergent themes provided another check for the potential of my biases entering

into the data analysis.

There are also certain limitations to be found in the study. The case study

involved a particular model of HPS implementation involving one particular

school division. Results are not necessarily generalizable since there are many

factors that may have led to perceived successful implementation including a

supportive Board, individual champions and a school district that was "ready" for

HPS. More research on local implementation models remains critical to develop

some common understanding of the themes and strategies that may be proven to

be effective over time (Inchley et al., 2006, Moon et al., 1999).

Travelogue

A travelogue is a type of travel documentary intended to inform and entertain audiences who are unable to travel to the exotic or historic destinations themselves. In the past these were lectures accompanied by slides or film reels often shown during the winter in small-town movie theatres (Wikipedia, 2010). Although now a myriad of travel shows exist in the satellite and cable television milieu, the purpose has not really changed. The new shows still take the audience virtually to a place where they cannot go themselves. The previous five chapters have been a virtual tour of the complexity and depth that is the division-level implementation of the HPS approach. Think of it as a travelogue, although I sincerely hope you find the time to take the journey yourself some day.

A Summary of the Journey

The journey into the division-level implementation of HPS has been complex and multi-factorial. In each chapter of the dissertation I have examined slightly different foci and themes. Chapter 1 took us through a detailed examination of the theoretical framework, research design, methodology, and literature. These essential elements involved not only the development and implementation of the BRP, but also the place of EAS and the structure and evolution of this dissertation.

Chapter 2 introduced the BRP and provided context, background, detail, and insight into the development of the division's implementation. The literature review reinforced the importance of an extended timeframe, stakeholder participation and collaboration, and recognition of the complexity of HPS

(Deschesnes, Martin, & Hill, 2003; Mitchell, Palmer, Booth, & Davies, 2000; Mukoma & Flisher, 2004; St. Leger, 1999; Stewart-Brown, 2006). The paper closed with a reminder that the purpose of the BRP was to "contribute to what is hoped to be a growing body of answers to the how, why and what of HPS implementation" (Gleddie & Melnychuk, 2010, p. 29).

In chapter 3 I examined the ways in which shared evidence, or assessment for learning, could be used to effect change and identified three key "takeaway points" from the BRP: (a) the importance of stakeholder involvement at all phases, (b) the need to share evidence gathered through research with all stakeholders who are capable of effecting change and improving practice, and (c) the importance of embedding health within the school and division culture.

In chapter 4 I communicated the findings from the BRP case study and revealed three critical themes that emerged from the examination of the division's implementation of HPS. *Participation* was the first theme, which included barriers, the concept of value, and access to release time. The next theme was *coordination*, which included recognition of the variety of levels of coordination, the importance of a school committee made up of a variety of stakeholders, and suggestions for the role of the project coordinator. The final theme was *integration,* which included a top-down/bottom-up philosophy and revealed the importance of embedding health into the structures, policy, and actions of the school division.

The purpose of chapter 5 was to discuss the processes surrounding development and implementation of healthy school policy within the BRSD.

Multiple organizations (EAS, 2010a; JCSH, 2010; WHO Regional Office for Europe, 1996) have identified healthy school policy as a critical factor; however, little has been written about *how* policy is created and put into action at a local level (Deschesnes et al., 2003; Stewart-Brown, 2006). Emerging themes included *perceptions and misconceptions*, *bottom up/top down*, *flexible rigidity*, and *the way we do business*. I also pointed out three critical elements of BRSD's Policy 21: (a) an embedding of the HPS approach within the actual policy; (b) inclusion of not only healthy eating, but also physical activity, mental well-being, and the causal relationship among the three; and (c) recognition of the role and health of staff: schools are also workplaces.

When looking for wildlife, as on a safari, action is most often found "on the edge," where boundaries or differing habitat connect; think: Forest meets meadow meets stream. Life is abundant where there are connections and crossovers. Any study of HPS implementation is also an examination of the edge: where health and education come together. The implementation of HPS is fascinating, complex, and teeming with life: students, staff, parents, trustees, division staff, health professionals, and community members. We know that health promotion in schools is anything but simple and straightforward (Deschesnes et al., 2003; Inchley, Muldoon, & Currie, 2006; St. Leger, 1999; Stewart-Brown, 2006). The journey into the division's implementation of HPS has, however, fostered the beginnings of a trail map for others not just to follow, but also to develop new and divergent paths.

Cartographical Musings

   Cartography is the science or practice of map drawing (*Oxford Canadian*

Dictionary, 1998). In some way, that is what this entire journey has been about.

The HPS approach within a school division, yes; but not just implementation.

Documentation and dissemination also play a role. Practice is good, shared

practice is better, and researched practice, shared with others and improved, is

best. A recording of the events, process, and thoughts from my interactions with

EAS and the BRSD through the BRP has resulted in a short "travel guide" of

recommendations for others who may journey to a similar destination.

Travel Guide

   Hire a guide. Properly implementing HPS at the school division–level

requires someone with the time and expertise to devote to relationship building

and communication. Ideally, this person would be connected with a larger

organization such as EAS to facilitate training, professional development, and

networking outside the division; but it is also important that the coordinator be

able to work within the division structure. The coordinator needs to have a clear

job description and responsibilities but considerable flexibility to get the job done.

   Meet in the middle. Several times in the papers I used the term *bottom*

up/top down. A grassroots movement, supported and structured by the school

board and division, can be very effective. It is important to have both. The need

for stakeholder involvement also emerged numerous times throughout the case

study and in the literature (Franks et al., 2007; Mitchell et al., 2000; Mukoma &

Flisher, 2004). The BRP included all critical stakeholders who were able to effect

change and improve practice: school champion teachers, principals, trustees, the superintendent, the board chair, health professionals, and division staff. Schools were encouraged to form committees made up of parents, students, community members, teachers, and administrators. The momentum created by such a synergy allows change not only to happen, but also to be properly supported and embedded. Quite simply, the BRSD was ready for policy because of consistent, grassroots advocacy and practice.

Build relationships with fellow travelers. School health is not a journey to take alone. Again, multiple stakeholders are important, and the best way to value their opinions is to value who they are. A related story to illustrate the importance of relationships:

> Early in the project I was presenting the BRP at a division professional development day. After the session a teacher (let's call him Rob) approached me and stated that he was incredibly pumped, and the first thing he was going to do was eliminate all pop in the school. I applauded Rob on his enthusiasm, directed him to a few supports, and wished him well. Later that day he approached me again and, crestfallen, said, "Well, so much for getting rid of pop!" Turns out Rob had run into the physical education teacher (we'll call him Mark) who told him that pop sales funded most of the extracurricular physical activities and sports, so it could not be removed. Rob and I had a talk and decided that maybe removing pop was not the place to start, even though we both thought that it would be a good step eventually. A few minutes later Mark came by and told me his story and why he was resistant. We chatted for a few minutes about the mixed messages involved in using money from unhealthy "fuel" for school sports. Rob walked by again and joined the conversation, and, eventually, the two of them walked off deep in discussion. Although I don't know all of the details of that discussion, in the time that I spent with these two men, they both made a conscious and visible effort to understand where the other person was coming from. One year later, that school had not only removed all pop sales, but Mark had also become one of the biggest teacher advocates for healthy eating in the division.

Building quality relationships with and among stakeholders is foundational for effective change to occur.

Establish lines of communication. Effective communication is the next logical step after quality relationships have been built. Communication is also the most important factor in preserving those relationships already established. Develop and facilitate ways for schools to learn about each other. Bring together champions and committees to share ideas, plan together, and celebrate successes. Talk to administrators. One of the most important actions that our project coordinator took was to find the time to talk with the principal at every participating school to affirm what his or her school was already doing and to encourage new growth. Communication must be both vertical—board $\Leftrightarrow$ superintendent $\Leftrightarrow$ division staff $\Leftrightarrow$ administration $\Leftrightarrow$ school staff/parents $\Leftrightarrow$ students—and horizontal—communication among members at the different levels.

Embed health. In the journey that is school health, HPS is not a first aid kit to pull out in critical situations. Rather, it is a way of life. Planning for school health becomes part of the decisions that are made on a daily basis; it is just the way we do business. I believe that the main reason that the BRSD was successful is that it embedded health. It became part of the Pyramid of Success in 2009 (Appendix B). Health and education are linked in the wording of Policy 21 (Appendix A), and a commitment to health has been made in Administrative Procedure 190 (Appendix C). Alberta schools' boards, their divisions, their parents, and the government hold them accountable for their three-year plans. I

once asked a principal, a friend of mine, how he would know that his division valued health. He replied that when school trustees start asking questions about student and school health and not just about budget and provincial test scores at the school's annual review meeting, then he would know that his division values health. By requiring an action plan on school health and promoting school improvement goals that include healthy school communities, the BRSD has demonstrated that schools can and should be about more than just budgets and achievement tests.

Future Explorations

Where to from here? The BRP will officially have ended in June 2010, however, the journey into school health is not over for the BRSD. As I stated earlier, policy and process are in place to ensure a continued focus on school health. The Steering Committee is meeting to decide how to continue to move ahead with HPS in the division and within each school. Recommendations will be made to the board to continue the district's school health coordinator position, as well as to continue the relationship built with EAS. Some tough decisions have to be made, especially as Alberta slowly emerges from a recession that has seen enormous cuts to education. I am confident, however, that with the momentum from the BRP and the strong support for school health evident throughout the board and division, HPS will continue to grow and flourish in this division.

The research process is also not over for the BRP. REAL Kids data are being collected in the spring of 2010 and will be compared with other schools across Alberta as well as shared with the BRP schools in the winter of 2011.

SHAPES data are being collected in April and May 2010, and a quantitative analysis of student health outcomes will be conducted. As well, EAS has committed to running the SHAPES surveys in the BRSD again in 2011 because the students who filled it out the first year in Grade 8 will be in Grade 11. As more data are analyzed, information will be shared with the division, and the evidence will be disseminated through a variety of media. Future studies could include mixed methods—both quantitative and qualitative data—to examine the results of student health outcomes correlated with healthy school practices.

A very interesting development for local implementation practice for HPS will be the comparisons between the BRP and the Alberta Project Promoting active Living and healthy Eating in Schools (APPLE schools). Each project has been and is being evaluated through the REAL Kids Alberta surveys and measures. APPLE is a privately funded, comprehensive school health (another name for HPS) intervention in 10 Edmonton, Alberta, area schools that seeks to improve health behaviors (healthy eating, active living) and increase capacity to promote health behaviors in schools (Schwartz, Karunamuni, & Veugelers, 2010). Each of the 10 schools hires a full-time school health facilitator from outside the school to work with the staff and students to implement the project. Essentially, two very different implementation models will be compared: (a) APPLE, which works in five different school divisions with a full-time facilitator in each of 10 schools, administered by the School of Public Health at the University of Alberta, and funded privately by a "generous donation" (p. 3); and (b) the BRP, which implemented HPS through one school division with 21 schools, one coordinator,

21 volunteer champions, and administered by EAS, with grant funding of $105,000 per year. We hope that, among comparisons of efficacy, student health outcomes, and school capacity to promote health, a cost/benefit analysis between the two projects can be conducted. Evidence generated from the research on the BRP and APPLE will certainly have an impact on any plan for provincewide implementation of HPS in Alberta.

Finally, there are some important next steps for EAS. The BRP was partially designed to determine whether a division's implementation model could be effective. Although much more evidence is still to come, the initial results and the findings of this case study indicate success and enough evidence to pursue the model on a provincial basis. EAS has begun to put together a provincial framework for the implementation of HPS—Healthy Schools Alberta (EAS, 2010b). Figure 6.1 is a partial schematic that shows how EAS (Healthy Schools Alberta) could become a central hub for HPS in Alberta, which would eliminate duplication and maximize efficiency.
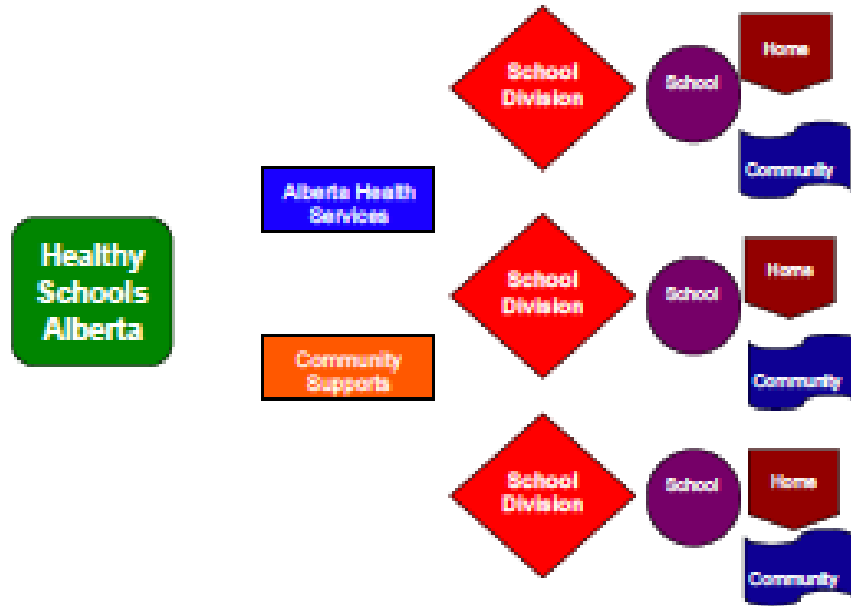
Figure 6.1 EAS as a central hub for HPS in Alberta.

Strongly based on the efficacy of the BRP, Figure 6.1 illustrates one

"spoke" of a wheel, where EAS works closely with Alberta Health Services and

Community Supports to support local school divisions as they implement HPS.

The discussion paper is an open document available at http://www.everactive.org

and has been presented at the January 2010 Shaping the Future HPS Conference

in Edmonton, shared with numerous health professionals across the province, and

also presented to the deputy ministers of Health & Wellness, Education, and

Tourism, Parks, and Recreation. EAS will continue to seek feedback and to revise

and pursue the Healthy Schools Alberta framework in an effort to ensure that "all

Alberta students live, learn, and play in a healthy school community" (EAS,

2010a, p. 1).

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APPENDIX A: RESEARCH TIMELINE

Timeline	Dissertation Research Process
Pre-Intervention *September 2006 to* *August 2007*	Concept of the Battle River Project (BRP) emerges out of several papers completed for graduate courses: ▪ Physical Activity and Population Health ▪ Action Research Applications for funding of the BRP submitted to: ▪ The Alberta Sport, Recreation, Parks and Wildlife Foundation ▪ The Alberta Healthy School Community Wellness Fund
BRP Year One *September 2007 to* *August 2008*	Collection of document data begins ▪ Action plans and grant reports ▪ Steering committee meeting notes ▪ Champion meeting notes and documents
BRP Year Two *September 2008 to* *August 2009*	Collection of document data continues May ▪ Candidacy exam June-July ▪ Paper 2 submitted to *Global Health Promotion*
BRP Year Three *September 2009 to* *August 2010*	Collection of document data continues September ▪ Paper 1 submitted to *Physical and Health Education Journal* December ▪ Ethics approval granted for a case study of the Battle River Project January – February ▪ Focus groups and interviews conducted and transcribed ▪ Focus group responses used to develop interview questions March – April ▪ Analysis of case study data ▪ Writing and revision of dissertation May ▪ Paper 3 submitted to *Health Promotion International* ▪ Paper 4 submitted to *Health Education Journal* ▪ Revision of dissertation June ▪ Dissertation defence

**APPENDIX B: FOCUS GROUP INFORMATION LETTER
AND CONSENT FORM**

<u>Information/Consent Letter – Focus Group Participation</u>

This letter is to inform you about a study I am conducting at the University of Alberta. My name is Douglas Gleddie and I am a PhD student in the Faculty of Education, Department of Secondary Education. The study will be supervised by my academic advisor Dr. Nancy Melnychuk. The information gathered in this study will be used as part of a doctoral dissertation and may be published in professional journals or presented at related conferences in the future.

As you know, the Battle River School Division has been involved in a project with Ever Active Schools entitled, ***The Battle River Project (BRP)***. Part of the BRP involves a research study. The essential purpose of this research is to examine the effectiveness of a district implementation model of the Health Promoting Schools (HPS) approach. Rather than seeking a definitive answer to one leading question, this study intends to explore how a particular district implementation model of the HPS approach works. This process includes asking a number of sub questions such as: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS approach look like at the district level? How did a district implementation model of the HPS approach effect change? What strategies were effective? Are there some common themes to successful implementation at the school level? How is implementation of HPS linked to improved health outcomes for students?

The proposed doctoral research will use case study methodology to examine the BRP with a view towards examining the challenges, triumphs and "on the ground happenings" of implementing the HPS approach within the previously stated parameters. This study could set the groundwork and help rationalize the provincial implementation of a HPS school approach. Although HPS is believed to be effective, and has been proven to some extent, there are still many questions surrounding actual implementation. Most studies examine HPS in the context of a single school or a school grouped with others not in the same local jurisdiction (Mukoma and Flisher, 2004; Mitchell, J. et. al., 2000; Franks, et. al., 2007). To the best of my knowledge, HPS has not been implemented "district wide" in any research study. I believe that for this approach to become embedded and for health and education outcomes to be linked, HPS implementation needs to include district policy, administrative procedure and most importantly, be driven by the school board and supported by district staff. A thorough examination of one particular district implementation model, the BRP, could have a marked effect on program implementation. An organization like EAS could choose to pursue a district model based on the findings of this study. Implementation could be tailored to fit the needs of specific school districts and, over time, common themes and strategies could emerge.

As an important part of the BRP, you are invited to participate in a focus group with other people involved in the BRP. Due to my relationship with the project, although I will design the focus group questions and structure, another individual will facilitate the groups so you will be able to speak freely.

Method: Description of research procedures and expected duration and nature of participation

As stated above, you are being asked to participate in a focus group session. There will be 4-6 people in your focus group and the session will last approximately 1.5 hours. The facilitator will be a Masters student or research assistant trained in facilitation, ethics and confidentiality.

All champions (lead teachers in BRP schools) and their principals have been asked to participate. Each focus group will be audio recorded and the audio will be transcribed into text. As well, some of the focus group activities may involve gathering written responses using poster paper or index cards.

All individuals involved with this research will comply with the University of Alberta Standards for the Protection of Human Research Participants. http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualsection66.cfm

Any research personnel not named above will sign a confidentiality agreement prior to any involvement with the data collected through this focus group.

Benefits

Although there will be no direct benefit to you as a result of the focus group, you will have the opportunity to share your learning and thoughts on the BRP and help set future direction for healthy schools in Alberta.

Risks

There are no health risks involved. If you feel anxious or uncomfortable about answering specific questions, you are free to not answer.

Verification/Review

Participants of the focus group can request to review the transcripts of their session for the purpose of verification or review.

Rights

As a participant in this study you have the right:

- To not participate.

- To withdraw at any time prior to the actual focus group meeting without prejudice to pre-existing entitlements.

- To opt out at any time without penalty, however, if you choose to opt out at any time after the focus group had begun your data may not be removed from the study (due to the nature of audio recording and your voice not being identified).

- To privacy, anonymity and confidentiality. Your names will not be associated with any written submissions and audio recordings will not identify individual voices.

- To safeguards for security of data. All data collected will be kept in a secure place for a minimum of 5 years following completion of research project and when appropriate will be destroyed in a way that ensures privacy and confidentiality.

- To disclosure of the presence of any apparent or actual conflict of interest on the part of the researcher(s).

- To a copy of a report of the research findings. If you are interested in receiving a draft summary of the focus groups please share contact information with the focus group facilitator.

Other Uses

The data gathered in this study may be used: to write research articles, inform presentations, influence provincial and school district policy, to teach students, and as a web posting. Data for all uses will be handled in compliance with the Standards.

Informed Consent

In the case of concerns, complaints or consequences please contact:

Douglas Gleddie, PhD Candidate, Secondary Education (780-454-4745)

Nancy Melnychuk, Professor, Secondary Education (780-492-0543)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For

questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751."

I will provide you with two copies of this document, one to be signed and returned and one for you to keep for your own records.

Do you understand that you have been asked to be in a research study?

Yes   No

Have you read and received a copy of the Information Sheet?

Yes   No

Do you understand the benefits and risks involved in taking part in this research study?

Yes   No

Have you had an opportunity to ask questions and discuss this study?

Yes   No

Do you understand that you may refuse to participate, or withdraw from the study at any time, without consequence?

Yes   No

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information?

Yes   No

This study was explained to me by: _____

I consent to take part in this study as explained in the information letter:

_____   _____   _____
Signature of Participant   Date   Printed Name

_____   _____
Witness (if available)   Printed Name

APPENDIX C: SAMPLE FOCUS GROUP QUESTIONS

Proposed Questions

1. School Community

   a. Was your school community supportive to the implementation of the Battle River Project? Why or why not?
   b. What types of supports were provided to your school?
   c. What types of supports were missing?
   d. What was your role in the BRP?
   e. Did the BRP become part of the school's strategic vision?

2. Division

   a. Was your division supportive of the implementation of the BRP?
   b. What types of supports were provided by the division to facilitate implementation of change?
   c. What supports were missing from the division
   d. Has the BRP become part of the way the division operates?

3. Leadership

   a. Describe the leadership you have provided as part of the BRP.
   b. Who were other key leaders in leading change in the school environment?
   c. How did these people create change through their leadership?
      i. Strategies?
      ii. Buy in?
   d. Was the Project Coordinator an effective support for you?
      i. Why?
      ii. Why not?

4. What changes, with respect to healthy eating, physical activity and mental well-being have occurred:

   a. In students?
   b. In the school culture?
   c. In school administration?
   d. In division office?
   e. In parents?

5. To what extent do you feel these changes are a result of the BRP?

6. Have you learned or engaged in any new information, strategies or techniques as a result of being a part of the BRP?

7. What do you perceive as the barriers to implementing a comprehensive school health approach such as the BRP within a school division?

8. What are the advantages of implementing a comprehensive school health approach such as the BRP within a school division?

APPENDIX D: INTERVIEW INFORMATION LETTER

AND CONSENT FORM

This letter is to inform you about a study I am conducting at the University of Alberta. My name is Douglas Gleddie and I am a PhD student in the Faculty of Education, Department of Secondary Education. The study will be supervised by my academic advisor Dr. Nancy Melnychuk. The information gathered in this study will be used as part of a doctoral dissertation and may be published in professional journals or presented at related conferences in the future.

As you know, the Battle River School Division has been involved in a project with Ever Active Schools entitled, ***The Battle River Project (BRP)***. Part of the BRP involves a research study. The essential purpose of this research is to examine the effectiveness of a district implementation model of the Health Promoting Schools (HPS) approach. Rather than seeking a definitive answer to one leading question, this study intends to explore how a particular district implementation model of the HPS approach works. This process includes asking a number of sub questions such as: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS approach look like at the district level? How did a district implementation model of the HPS approach effect change? What strategies were effective? Are there some common themes to successful implementation at the school level? How is implementation of HPS linked to improved health outcomes for students?

The proposed doctoral research will use case study methodology to examine the BRP with a view towards examining the challenges, triumphs and "on the ground happenings" of implementing the HPS approach within the previously stated parameters. This study could set the groundwork and help rationalize the provincial implementation of a HPS school approach. Although HPS is believed to be effective, and has been proven to some extent, there are still many questions surrounding actual implementation. Most studies examine HPS in the context of a single school or a school grouped with others not in the same local jurisdiction (Mukoma and Flisher, 2004; Mitchell, J. et. al., 2000; Franks, et. al., 2007). To the best of my knowledge, HPS has not been implemented "district wide" in any research study. I believe that for this approach to become embedded and for health and education outcomes to be linked, HPS implementation needs to include district policy, administrative procedure and most importantly, be driven by the school board and supported by district staff. A thorough examination of one particular district implementation model, the BRP, could have a marked effect on program implementation. An organization like EAS could choose to pursue a district model based on the findings of this study. Implementation could be tailored to fit the needs of specific school districts and, over time, common themes and strategies could emerge.

You have been invited to participate in an interview to follow up on your focus group contributions as part of the BRP. Due to my relationship with the project, although I will design the interview questions and structure, another individual will conduct the interview.

Method: Description of research procedures and expected duration and nature of participation

As stated above, you are being asked to participate in an interview. The interview will take between 45 minutes to an hour and will be conducted at the District office or an alternate location of your choice. The interview will be audio recorded and the audio will be transcribed into text. The interviewer will be a Masters student or research assistant trained in interviewing, ethics and confidentiality.

All individuals involved with this research will comply with the University of Alberta Standards for the Protection of Human Research Participants. http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualsection66.cfm

Any research personnel not named above will sign a confidentiality agreement prior to any involvement with the data collected through this focus group.

Benefits

Although there will be no direct benefit to you as a result of the interview, you will have the opportunity to share your learning and thoughts on the BRP and help set future direction for healthy schools in Alberta.

Risks

There are no health risks involved. If you feel anxious or uncomfortable about answering specific questions, you may "pass."

Verification/Review

You may request to review the transcripts of your interview for the purpose of verification or review.

Rights

As a participant in this study you have the right:

- To not participate.

- To withdraw at any time prior to the interview without prejudice to pre-existing entitlements.

- To opt out at any time without penalty prior to the interview and up to 1 week after the interview.

- To privacy, anonymity and confidentiality. Your name will not be associated with any audio recordings or transcripts and the data will be coded.

- To safeguards for security of data. All data collected will be kept in a secure place for a minimum of 5 years following completion of research project and when appropriate will be destroyed in a way that ensures privacy and confidentiality.

- To disclosure of the presence of any apparent or actual conflict of interest on the part of the researcher(s).

- To a copy of a report of the research findings. If you are interested in receiving a draft summary of the study please share contact information with the interviewer.

Other uses

The data gathered in this study may be used: to write research articles, inform presentations, influence provincial and school district policy, to teach students, and as a web posting. Data for all uses will be handled in compliance with the Standards.

Informed Consent

In the case of concerns, complaints or consequences please contact:

Douglas Gleddie, PhD Candidate, Secondary Education (780-454-4745)

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The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751."

I will provide you with two copies of this document, one to be signed and returned and one for you to keep for your own records.

Do you understand that you have been asked to be in a research study?

Yes   No

Have you read and received a copy of the Information Sheet?

Yes   No

Do you understand the benefits and risks involved in taking part in this research study?

Yes   No

Have you had an opportunity to ask questions and discuss this study?

Yes   No

Do you understand that you may refuse to participate, or withdraw from the study at any time, without consequence?

Yes   No

Has the issue of confidentiality been explained to you? Do you understand who will have access to your information?

Yes   No

This study was explained to me by: _____

I consent to take part in this study as explained in the information letter:

_____   _____   _____
Signature of Participant   Date   Printed Name

_____   _____
Witness (if available)   Printed Name

APPENDIX E: SAMPLE INTERVIEW QUESTIONS

Proposed Questions

1. Questions related to the efficacy of the BRP within the interviewee's school community.

2. Questions related to the efficacy of the BRP within the interviewee's school division

3. Questions related to leadership in the BRP
    a. Personal
    b. Institutional: BRSD, EAS, AHS

4. Questions relating to positive changes in healthy eating, physical activity and mental well-being:
    a. In students.
    b. In the school culture.
    c. In school administration.
    d. In division office.
    e. In parents.

5. Questions related to increased learning and opportunities for professional development.

6. Questions examining the barriers to implementing a comprehensive school health approach such as the BRP within a school division.

7. Questions examining the advantages of implementing a comprehensive school health approach within a school division.

Emerging Themes from the Focus Groups

1. Describe the impact of the BRP at your school
    a. Division
    b. Parents
    c. Students
    d. Staff

2. How have staff adapted to changes brought about by the BRP

3. What are the barriers (were the barriers?) to change for healthy schools?
   a. More than time and money?
   b. How were you able to or are you overcoming those barriers
   c. What supports from the BRP enabled those barriers to be overcome?
   d. What additional supports are needed?
4. How did the shared research (SHAPES, REAL-Kids) assist with change?

5. Comment on the role you feel the new BRSD Policy (Healthy Schools and Workplaces) played in the BRP?
   a. How was it accepted at your school?
   b. Resistance issues?
   c. Good in theory but.

6. Comment on the development of Administrative Procedures pertaining to the Policy
   a. Role of Board?
   b. Role of Superintendent?

APPENDIX F: RELEASE FORM, ALBERTA

TEACHERS' ASSOCIATION

The Battle River Project: A Case for District Implementation
of the Health-Promoting Schools Approach

January 18, 2010

Mr. Michael Podlosky
Coordinator, Professional Development
Staff Officer to the Ever Active Schools Program
Alberta Teachers' Association

Dear Mr. Podlosky,

I would like to inform you about a study I am conducting at the University of Alberta. My name is Douglas Gleddie and I am a PhD student in the Faculty of Education, Department of Secondary Education. The study will be supervised by my academic advisor, Dr. Nancy Melnychuk. The information gathered in this study will be used as part of a doctoral dissertation and may be published in professional journals or presented at related conferences in the future. The purpose of this letter is to obtain your permission to include information gathered through the Battle River Project in the proposed case study.

As you know, Ever Active Schools has been involved in a project with the Battle River School Division entitled, ***The Battle River Project (BRP)***. Part of the BRP involves a research study. The essential purpose of this research is to examine the effectiveness of a district implementation model of the Health Promoting Schools (HPS) approach. Rather than seeking a definitive answer to one leading question, this study intends to explore how a particular district implementation model of the HPS approach works. This process includes asking a number of sub questions such as: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS approach look like at the district level? How did a district implementation model of the HPS approach effect change? What strategies were effective? Are there some common themes to successful implementation at the school level? How is implementation of HPS linked to improved health outcomes for students?

The proposed doctoral research will use case study methodology to examine the BRP with a view towards examining the challenges, triumphs and "on the ground happenings" of implementing the HPS approach within the previously stated parameters. This study could set the groundwork and help rationalize the provincial implementation of a HPS school approach. A thorough examination of

one particular district implementation model, the BRP, could have a marked effect on program implementation. An organization like EAS could choose to pursue a district model based on the findings of this study. Implementation could be tailored to fit the needs of specific school districts and, over time, common themes and strategies could emerge.

I would like to have your permission to release the following information gathered through the BRP from September 2007 to June 2010:

- Steering committee minutes and notes

- Written materials gathered at Champions meetings and planning sessions

- Edits and process of the Healthy Schools and Workplaces policy and administrative procedure development

- Written reports developed from the BRP including grant reports and presentations

- Other written information and observations pertinent to the case study research on the BRP

The information released in this letter to the case study research process will be used as partial elements to help paint a broad picture of what happened in the project. No individual names or schools will be shared, however, I would like to recognize the role of the Ever Active Schools program in this research.

All individuals involved with this research will comply with the University of Alberta Standards for the Protection of Human Research Participants. Any research personnel not named above will sign a confidentiality agreement prior to any involvement with the data collected through this focus group.

http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualsection66.cfm

Informed Release

In the case of concerns, complaints or consequences please contact:

Douglas Gleddie, PhD Candidate, Secondary Education (780-454-4745)

Nancy Melnychuk, Professor, Secondary Education (780-492-0543)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751."

I will provide you with two copies of this document, one to be signed and returned and one for you to keep for your own records.

I consent to release the information as explained in above letter:

_____	_____	_____
Signature	Date	Printed Name

_____
Position

APPENDIX G: RELEASE FORM, BATTLE RIVER SCHOOL DIVISION

The Battle River Project: A Case for District Implementation of the Health Promoting Schools Approach

January 18, 2010

Dr. Larry Payne
Superintendent of Schools
Battle River School Division

Dear Dr. Payne,

I would like to inform you about a study I am conducting at the University of Alberta. My name is Douglas Gleddie and I am a PhD student in the Faculty of Education, Department of Secondary Education. The study will be supervised by my academic advisor, Dr. Nancy Melnychuk. The information gathered in this study will be used as part of a doctoral dissertation and may be published in professional journals or presented at related conferences in the future. The purpose of this letter is to obtain your permission to include information gathered through the Battle River Project in the proposed case study.

As you know, the Battle River School Division has been involved in a project with Ever Active Schools entitled, ***The Battle River Project (BRP)***. Part of the BRP involves a research study. The essential purpose of this research is to examine the effectiveness of a district implementation model of the Health Promoting Schools (HPS) approach. Rather than seeking a definitive answer to one leading question, this study intends to explore how a particular district implementation model of the HPS approach works. This process includes asking a number of sub questions such as: How did the school and district culture change as a result of implementation? What does successful implementation of the HPS approach look like at the district level? How did a district implementation model of the HPS approach effect change? What strategies were effective? Are there some common themes to successful implementation at the school level? How is implementation of HPS linked to improved health outcomes for students?

The proposed doctoral research will use case study methodology to examine the BRP with a view towards examining the challenges, triumphs and "on the ground happenings" of implementing the HPS approach within the previously stated parameters. This study could set the groundwork and help rationalize the provincial implementation of a HPS school approach. A thorough examination of one particular district implementation model, the BRP, could have a marked effect on program implementation. An organization like EAS could choose to pursue a district model based on the findings of this study. Implementation could be tailored to fit the needs of specific school districts and, over time, common themes and strategies could emerge.

I would like to have your permission to release the following information gathered through the BRP from September 2007 to June 2010:

- Steering committee minutes and notes

- Written materials gathered at Champions meetings and planning sessions

- Edits and process of the Healthy Schools and Workplaces policy and administrative procedure development

- Written reports developed from the BRP including Supt's Memos

- Other written information and observations pertinent to the case study research on the BRP

As well, I would like to conduct focus groups with the champions from participant schools in the Battle River Project, administrators and district staff/board members. These focus groups would be followed up with targeted interviews of selected participants.

The information released in this letter to the case study research process will be used as partial elements to help paint a broad picture of what happened in the project. No individual names or schools will be shared, however, I would like to recognize the role of the Battle River School Division and Board as entities.

All individuals involved with this research will comply with the University of Alberta Standards for the Protection of Human Research Participants. Any research personnel not named above will sign a confidentiality agreement prior to any involvement with the data collected through this focus group.

   http://www.uofaweb.ualberta.ca/gfcpolicymanual/policymanualsection66.cfm

Informed Release

In the case of concerns, complaints or consequences please contact:

   Douglas Gleddie, PhD Candidate, Secondary Education (780-454-4745)

   Nancy Melnychuk, Professor, Secondary Education (780-492-0543)

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension, Augustana and Campus Saint Jean Research Ethics Board (EEASJ REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEASJ REB at (780) 492-3751."

I will provide you with two copies of this document, one to be signed and returned and one for you to keep for your own records.

I consent to release the information as explained in above letter:

_____   _____   _____
Signature   Date   Printed Name

_____
Position

APPENDIX H: ETHICS APPROVAL

Notification of Approval - Delegated Review

Study ID:	Pro00007679
Study Title:	The Battle River Project: A Case for District Implementation of a Health Promoting Schools Approach
Study Investigator:	Douglas Gleddie

	Approval Date	Approved Document
	12/17/2009	Interview Info and Consent
Date of Informed Consent:	12/17/2009	Focus Group Info and Consent

Funding/Sponsor (free text):	Alberta Healthy School Community Wellness Fund	
Funding/Sponsor (validated):	Alberta Sport, Recreation, Parks and Wildlife Foundation	ASPOR

Thank you for submitting the above ethics application to the Education, Extension, Augustana and Campus Saint-Jean Research Ethics Board (EEASJ REB). Gregory Thomas has reviewed your application and, on behalf of the EEASJ REB, approved it as of December 17, 2009. The approval will expire on December 16, 2010.

A renewal report must be submitted prior to the expiry of this approval if your study still requires ethics approval at that time. If you do not renew before the renewal expiry date, you will have to re-submit an ethics application.

Sincerely,

Dr. Ingrid Johnston, Chair
Education, Extension, Augustana and Campus Saint-Jean Board (EEASJ REB)

Note: This correspondence includes an electronic signature (validation and approval via an online system).

APPENDIX I: STATEMENT OF CO-AUTHORSHIP: PAPER 1

Title: An Introduction to the Battle River Project: District Implementation of a

Health-Promoting Schools Approach

Journal: Physical and Health Education Journal

Published: 2010. Volume 75, Issue 4, Pages 24-29.

Principal Author: Douglas L. Gleddie

Secondary Author: Nancy E. Melnychuk.

    Contribution: 10%

    Roles and responsibilities: Primary editor - suggestions and edits on initial

    drafts as well as responding to peer reviewers' comments and requests.

Signature: _____

Professor Nancy Melnychuk, PhD

Date: May 18, 2010

APPENDIX J: STATEMENT OF CO-AUTHORSHIP: PAPER 2

Title: The Battle River Project: School Division Implementation of the Health

Promoting Schools Approach

Journal: Global Health Promotion

To be Published: March 2011, Volume 18, Issue 1

Principal Author: Douglas L. Gleddie

Secondary Author: Erin P. Hobin.

Contribution: 5-10%

Roles and responsibilities: Primary editor - suggestions and edits on initial

drafts as well as responding to peer reviewers' comments and requests.

Signature: _____

Erin Hobin, PhD candidate.

Date: May 30, 2010.

APPENDIX K: ACCEPTANCE LETTER: GLOBAL HEALTH PROMOTION

IUHPE GLOBAL PROGRAMME ON HEALTH PROMOTION EFFECTIVENESS
VOL II: THE EFFECTIVENESS OF USING EVIDENCE
PART 2: CASE STUDIES
Manuscript #10:
Gleddie, D. The Battle River Project: School Division Implementation of the

Health Promoting Schools Approach

Dear Doug,
Your paper has now been reviewed by two external reviewers. The reviews were strong and supportive of your case.
On behalf of the editorial team, I suggest that you take a look at their comments, which highlight some questions for you to address. Reviewer 1 shares two comments for consideration for revision. Reviewer 2 made a number of suggested edits throughout, and posed a couple of concrete questions for you to expand upon mainly in the evidence and discussion section.
You will these separately attached in two documents where the questions and edits are included directly in track changes.
Please revise your case accordingly, and ensure that your case stays in the word count and format originally provided.
Finally, please take note that you must send the next version by e-mail, directly to me, before May 17th. It would be appreciated if you would also include a brief cover message that recaps how you have addressed the reviewers' suggestions in that version. This will ensure a timely publication of our special issue in March 2011, including cross-analysis of the papers and some translation.
The work on our special issue is progressing . I am happy to report that it will consist of up to 27 cases from all over the world covering a wide range of health promotion intervention issues. We are confident that the originality and quality of the contributions in this issue is such that it will be very useful and widely used by health promotion practitioners around the world.
On behalf of the editorial committee,
Regards
Catherine Jones

Reviewer 1 Very good article; definitely publishable in all aspects of assessment

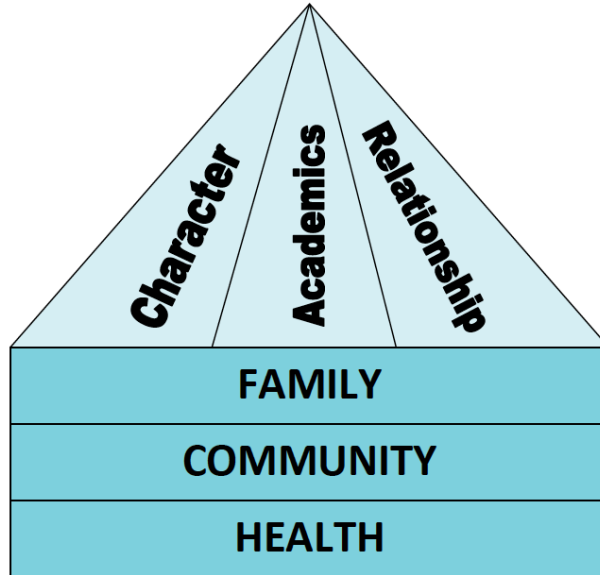criteria. Two comments on paper for slight revision.

Reviewer 2 Comments and questions included in paper for consideration.

APPENDIX L: ADMINISTRATIVE PROCEDURE 190

BACKGROUND DOCUMENT

Building Healthy School Communities and Workplaces
Battle River School Division Pyramid of Success

"Health" added to Pyramid of Success foundation in 2009

Battle River Project: Building Healthy School Communities (2007-2010)

Origins...	Year 1 (2007-08)	Year 2 (2008-09)	Year 3 (2009-10)	Sustaining...
Perceptions and trend of 'banning junk food' in broader educational context Battle River Project Steering Committee struck Partnership with Ever Active Schools and AHS to create Battle River Project	Building awareness Recruiting schools and champions Connecting to 3 Year Plans Supporting ideas about how to change habits, actions and attitudes	Building understanding Creating action plans Aligning within 3 Year Plans Cross-pollinating ideas and strategies Supporting actual changes in practice Incorporating Health in Pyramid of Success foundation Healthy School Communities & Workplaces Policy 19 passed (June 2009)	Changing practice Networking with each other and accessing support (e.g. AHS) Formalizing intentions in policy and procedure Supporting and ensuring change at the school and workplace level Healthy School Communities and Workplaces Administrative Procedure 190 drafted	Implementation of Policy and Admin Procedure 190—ensuring changes in practice / culture Communicating data & conclusions from BR Project Incorporating key questions in BRSD surveys

BRSD School Participation in BR Project (Voluntary): 21 schools representing 85% of the student population

APPENDIX M: BRSD POLICY 21

Policy 21

HEALTHY SCHOOL COMMUNITIES AND WORKPLACES

The Board believes that the quality of student learning and the quality of student health are interdependent. Educational research supports this connection and acknowledges the school system's role in creating and supporting healthy school communities as foundations for optimal learning. Battle River School Division values the benefits of healthy lifestyles and supports environments that promote healthy living choices.

The Board believes that the Health Promoting Schools approach contributes to the realization of the BRSD vision and mission through its support of the Pyramid of Success. Academic, character and relationship development rests on the base of family, community and health (2009).

As follows, BRSD's Health Promoting Schools' holistic approach focuses on three specific tenets: mental well-being, physical activity, and healthy eating, and acknowledges the causal relationship among the three.

1) Mental Well-Being

- Definition: Creating and supporting positive social, emotional and moral development among students and the adult role models in their lives. Mentally well individuals are able to realize their abilities, can cope with the normal stresses of life, work productively, and contribute to their communities.

- Rationale: Students who have strong senses of self, belonging and who feel cared for at school are more likely to achieve greater academic success, have successful and rewarding relationships, and exhibit positive social behaviour and character traits.

2) Physical Activity

- Definition: Developing knowledge, skills and attitudes in a variety of physical activities and environments that strongly correlate with leading a healthy, active lifestyle.

- Rationale: Students who are physically active are more likely to exhibit on-task behaviour, academic success, and social inclusion. Engagement in physical activities encourages students to make health-enhancing choices and reduces the risk of obesity.

3) Healthy Eating

- Definition: Understanding and making nutritious food and beverage choices to sustain the body's physical, emotional and intellectual processes and development.

- Rationale: Nutrition plays a significant role in student growth, development, disease resistance, and physical and mental health. Students who make healthy nutritional choices reduce the risk of obesity and health issues. A successful school-wide approach includes the entire school community and works toward establishing healthy eating habits while limiting non-nutritious food and beverage choices in the school.

All Battle River schools, division sites, and departments will implement Administrative Procedure #190 in accordance with this policy and the following principles. Staff will:

- Ensure healthy learning environments for students and staff.

- Recognize the importance of students' emotional, social, intellectual and physical wellness to their success at school.

- Acknowledge that mental well-being, physical activity, and nutrition play significant roles in children's overall health.

- Acknowledge that students learn from role models at school, at home, and within the broader school community.

- Encourage students to think critically about the impact of their choices on their current and long-term health.

- Promote lifestyles that support healthy attitudes toward mental well-being, physical activity, and nutrition.

- Meet all provincial and curricular requirements with respect to daily physical activity (DPA), Physical Education, and Health \ CALM 20.

APPENDIX N: ADMINISTRATIVE PROCEDURE 190

Healthy School Communities and Workplaces Administrative Procedure 190

Based upon the philosophy of the Health Promoting Schools (HPS) Approach, Administrative Procedure 190 accompanies Healthy School Communities and Workplaces Policy 21. The HPS Approach addresses health in every aspect of the school environment, recognizing that health and quality learning are interdependent.

<u>**Mental Well-Being**</u>

Mentally well individuals have the knowledge, skills, attitudes and opportunities to:

- realize their abilities

- cope with the normal stresses of life

- learn and work productively, and

- contribute to their communities.

The following are characteristics of **mentally well individuals**:

- Understand, manage and express thoughts and emotions in constructive ways

- Feel connected, safe and valued

- Establish positive relationships and support networks

- Practice reflective and metacognitive thinking skills

- Develop mindfulness

- Demonstrate resiliency and coping skills

- Understand the benefits of mental well-being for individuals and for communities

- Make connections between their mental well-being, physical activity, healthy eating choices, and learning

Physical Activity

Physically active individuals have the **knowledge, skills, attitudes** and **opportunities** to lead active lifestyles.

The following are characteristics of **physically active individuals**:

- Engage in physical movement and activity on a daily basis

- Vary the intensities and purposes of physical activity (e.g. conditioning, strengthening, enjoyment, flexibility, etc.)

- Make positive choices to support the growth, development and care of their bodies

- Value and participate in lifelong physical activity

- Understand the benefits of physical activity for individuals and for communities

- Make connections between their physical activity, healthy eating choices, mental well-being, and learning.

Healthy Eating

Individuals committed to healthy eating have the **knowledge, skills, attitudes** and **opportunities** to make appropriate food and beverage choices.

These individuals possess the following characteristics:

- Support, through healthy food and beverage choices, the growth and development of their bodies and minds

- Think critically to discern the accuracy of messages about food and beverages

- Are able to prepare and choose healthy food and beverages for consumption

- Understand and act on the information rights and personal buying power of consumers

- Commit to healthy food and beverage choices in personal, school and community environments

- Make connections between their healthy eating choices, mental well-being, physical activity, and learning.

School and Site Procedures

In all BRSD schools and workplaces:

- BRSD employees act from the understanding that staff advocacy and role modeling influence wellness and learning.

- School or site leaders, together with staff and stakeholders, will establish environments that support, ensure and integrate mental well-being, physical activity and healthy eating (e.g. via an annually established committee or other strategy).

- Principals, together with staff and community partners, will implement the Pyramid of Success (i.e. proactive, responsive and intervention levels) to meet the needs of students in the areas of mental well-being, physical activity, and healthy eating.

- The Alberta Program of Studies and approved locally developed courses will be used in the delivery of curriculum related to mental well-being, physical activity, and healthy eating (i.e. including, but not limited to, Health and Life Skills, Physical Education, CTS—Health, Recreation & Human Services, Daily Physical Activity, Arts Education, Career and Life Management, etc.).

Mental Well-Being – *BRSD schools will:*

- Actively develop the relationship between students' sense of connectedness and their mental well-being.

- Support and embed character education programs (e.g. Developmental Assets, Dare to Care, Expect Respect, Circle of Courage, etc.) to support mental well-being.

- Create learning environments where mental well-being is role modeled and developed in students.

- Access resources and services (e.g. Family School Liaison Workers, Career Transitions, CHAMP, etc.) to help students develop the skills to be aware of and monitor their mental well-being.

- Access and link with community agencies, partners and support networks (e.g., FCSS, police, Alberta Health Services, etc.).

Physical Activity - *BRSD schools will:*

- Implement Alberta Education's Daily Physical Activity (DPA) initiative, recognizing that:

    o DPA is most effectively implemented through the timetabling of daily Physical Education

    o Breaks (e.g. lunch, recess) provide opportunities for activities and interactions that are creative and student-initiated. These times are not intended for the delivery of DPA.

- Strive for the following minimum time allocations for quality Physical Education:

    o Kindergarten to Grade 6: 30 minutes daily

    o Grades 7 to 9: 45 minutes daily

    o Grades 10 to 12: Offer Physical Education 10 for 5 credits and offer diverse health-related programming (e.g. Health, Recreation & Human Services CTS courses, locally developed courses, etc.)

- Demonstrate the philosophical and curricular shift to skill-based learning experiences that ensure successful, meaningful participation in physical activity and encourage lifelong fitness (i.e. K to 12 Physical Education Program of Studies, 2000).

- Encourage students to engage in physical activity inside and outside of regular curriculum (e.g. community events, clubs, special events, teams, intramurals, etc.) to support their development as healthy, active learners.

Healthy Eating – *BRSD schools will:*

- Create an environment where healthy foods are available, affordable and promoted as the best choice.

- Develop school-level procedures pertaining to snack, meal and fundraising programs, extra-curricular activities, and the role modeling of healthy choices.

- Meet the following provisions for all food and beverages distributed, provided by or sold at the school for any school-related purpose (as per *Alberta Nutrition Guidelines for Children and Youth*):

    o 65% (minimum) meet the characteristics of the *Choose Most Often* category

- o 35% meet the characteristics of the *Choose Sometimes* category

- o 0% meet the characteristics of the *Choose Least Often* category.

- Beginning in September 2010, fundraisers and activities must focus on and include food and beverage items that meet the characteristics of the *Choose Most Often* and *Choose Sometimes* categories. Up to two activities or fundraisers in each school year may include an item from the *Choose Least Often* category.

- Ensure that the beverages consumed by students during instructional time are water or other healthy choices as set by individual school policy.

- Role model healthy food and beverage choices during instructional and co-curricular time with students.

References

- BRSD Healthy School Communities and Workplaces Policy 21

- BRSD Admin Procedure 107 - Fundraising

- Alberta Nutrition Guidelines for Children and Youth

- Guide to Education 2009-10 (Alberta Education)

- Framework for Kindergarten to Grade 12 Wellness Education (Alberta Education, 2009)

- Kindergarten to Grade 12 Alberta Programs of Study

- DPA Initiative

APPENDIX O: ACTION PLAN TEMPLATE FOR

THREE-YEAR SCHOOL PLANS

Healthy School Communities and Workplaces Action Plan		
Goal(s):	1. 2.	
Indicators of success:	● ● ● ●	
Strategies:	By When:	Person Responsible: