

# Implementing Comprehensive School Health in Alberta, Canada: the principal's role

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## Summary

Comprehensive School Health (CSH) is an internationally recognized framework that moves beyond the individual to holistically address school health, leading to the development of health-enhancing behaviors while also improving educational outcomes. Previous research has suggested that principal support for CSH implementation is essential, but this role has yet to be explored. Therefore, the purpose of this research was to examine the role of the principal in the implementation of a CSH project aimed at creating a healthy school culture. This research was guided by the grounded ethnography method. Semi-structured interviews were conducted with APPLE School principals ( $n = 29$ ) to qualitatively explore their role in creating a healthy school culture. A model consisting of five major themes emerged, suggesting that the principal played a fluid role throughout the CSH implementation process. Principals (i) primed the cultural change; (ii) communicated the project's importance to others; (iii) negotiated concerns and collaboratively planned; (iv) held others accountable to the change, while enabling them to take ownership and (v) played an underlying supportive role, providing positive recognition and establishing ongoing commitment. This research provides recommendations to help establish effective leadership practices in schools, conducive to creating a healthy school culture.

**Key words:** obesity prevention, school based, health promoting schools, culture, Canada

## INTRODUCTION

Childhood obesity is a growing public health problem. According to 2009–11 Canadian statistics, 19.8 and 11.7% of children aged 5–17 years were classified as overweight and obese, respectively (Roberts *et al.*, 2012). Obesity contributes to a variety of co-morbidities (Schelbert, 2009) and negative psychological consequences (Williams, 2005). These conditions may lead to a diminished quality of life and life expectancy, and cost the health care system billions of dollars (Krueger *et al.*, 2014). These findings emphasize the need

to focus on early intervention and primary prevention of childhood obesity (Pelone *et al.*, 2012).

School-based health promotion initiatives have shown to be effective in addressing childhood obesity, especially those focused on physical activity, healthy eating and positive social behavior (Veugelers and Fitzgerald, 2005; Fung *et al.*, 2012). Informed by the Ottawa Charter for Health Promotion (WHO, 1986) in Canada, this approach is defined by the Pan-Canadian Joint Consortium for School Health (JCSH) as Comprehensive School Health (CSH)

and is described as: ‘an internationally recognized framework for supporting improvements in students’ educational outcomes while addressing school health in a planned, integrated, and holistic way’ (Pan-Canadian Joint Consortium for School Health, 2012). JCSH identifies four interrelated pillars of CSH: (i) teaching and learning; (ii) social and physical environments; (iii) healthy school policy and (iv) partnerships and services (Pan-Canadian Joint Consortium for School Health, 2012). Thus, CSH focuses on the whole school community in order to support lifelong behavior change among students (Story *et al.*, 2006). As directed by the socio-ecological approach, CSH is not a time-limited program, and hence, demands organizational and contextual change to meet its principles and aims (Weiner *et al.*, 2009). CSH is synonymous with Health Promoting Schools and Coordinated School Health (Veugelers and Schwartz, 2010). Although some research has been done on the effectiveness and implementation of CSH, further confirmation is needed to warrant its wider use (Veugelers and Schwartz, 2010).

Our study explores specific aspects of a project applying a CSH framework, the Alberta Project Promoting active Living and healthy Eating in schools (APPLE Schools). APPLE Schools aim to improve healthy eating and active living among children by increasing the capacity of the school community, with an ultimate goal to embed wellness into the school culture (Schwartz *et al.*, 2010). Each participating school receives dedicated staff time in the form of a school health facilitator (SHF). This individual actively engages members of the school community to address barriers to healthy eating and active living, working within each of the four pillars of CSH (Schwartz *et al.*, 2010). School community members are actively involved in participating in the decision-making process throughout the duration of the intervention. Thus, the project applies components of a bottom-up approach, whereby a high degree of flexibility enables space for the intervention to be tailored to meet the needs of each school community (Veugelers and Schwartz, 2010). For more information on the APPLE Schools project, please visit their website ([www.appleschools.ca](http://www.appleschools.ca)).

The APPLE Schools project has been evaluated through both process and outcome evaluations in the past, whereby the project is often modified and further customized to each school. Previous evaluation findings have suggested that leadership is an essential component of implementation, wherein the uncontested support of the school principal was seen as imperative (Storey *et al.*, 2011; Storey, 2013).

The implementation of any initiative within an organization is a process directly related to change and culture (Bridges, 2003). Fullan described the school principal as a gatekeeper for program implementation at the school level (Fullan, 1992); for a program to become entrenched in the

school culture, the principal must play an active and/or supporting role (Fullan, 2002). Fullan *et al.* found that principal leadership impacted all aspects of the implementation process from entry through to maintenance (Fullan *et al.*, 1980). Many studies have asserted that principal support was important in the maintenance and quality of school-based prevention programs (Rohrbach *et al.*, 1993; Gottfredson *et al.*, 1997; Gottfredson and Gottfredson, 2002; Kam *et al.*, 2003). Remarkably, however, there has been little examination of the role of principal in the implementation of prevention programs, despite regular discussion in the literature (Weissberg and Elias, 1993; Elias *et al.*, 2000). Hence, the leadership role played by the APPLE School principal is hypothesized to be vital and requires further investigation. By making school leadership practices more transparent through the generation of a detailed description of how leaders think and act, leaders can reflect on and adapt their practice (Argyris and Schon, 1974; Hoy, 1996). Therefore, the purpose of this research was to describe the role of the school principal involved in the implementation of a CSH project aimed at creating a healthy school culture.

## METHODS

This study was guided by grounded ethnography, which prioritizes the studied phenomenon or process, rather than a description of a setting (Charmaz, 2006). Grounded ethnographers study what is happening in the setting and make a conceptual rendering of these actions (Charmaz, 2006).

### Participants

Twenty-nine APPLE School principals participated in this study. Among them, 62% percent were women, 68% had obtained at least a masters-level education and 69% had over 7 years of experience in administration. These principals represented 27 of the 40 APPLE Schools located throughout Alberta, Canada, as two schools had both the principal and vice principal participate. Principals were mainly from schools that had kindergarten to grade 6 (85%) and had between 200 and 400 students (56%). Most schools had been recognized as an APPLE School for 2 years (63%), with varying degrees of SHF/champion support, between 0.2 and 1.0 full-time equivalent (FTE). Principals participating in the study had between 1 and 6 years of experience as an APPLE School principal, with an average of 2.25 years of experience with the project.

### Instrument and procedure

A semi-structured interview guide was developed in consultation with APPLE Schools staff. Interviews explored

principal perceptions on (i) their role and critical skills required for implementation, (ii) facilitators and barriers to implementation and (iii) the perceived culture change in their school as a result of the project's implementation. All principals ( $n = 40$ ) were invited to participate. Upon participant agreement, interviews were scheduled and principals were sent a study information letter. Interviews were conducted between April and July 2013 and were audio-recorded.

### Data analysis

Audio recordings were transcribed verbatim. Transcription accuracy was verified, and data were imported into NVivo v10. Initially, latent content analysis (Mayan, 2009) was employed, appropriate within a focused ethnography (Higginbottom *et al.*, 2013). Codes were aggregated into categories, and categories were reflected upon to create themes. Preliminary results suggested that the concept of 'time' was innately part of the data, leading to the subsequent use of a grounded theory constant comparison analysis, with systematic steps of open, axial and selective coding (Charmaz, 2006). In combining focused ethnography with grounded theory, results therefore represent a 'rich description' of a process. Aside from interview data, detailed field notes, memos and personal journaling helped to triangulate findings. Team/peer debriefings, along with the sharing of preliminary findings with stakeholders, occurred throughout all stages of the analysis and enhanced trustworthiness.

## RESULTS

Upon analyzing all 29 interviews, five major themes emerged from the data, suggesting that the principal played a fluid role throughout the implementation process and described the basic social process of shifting the school culture. Principals (i) *primed for cultural change* by integrating the project into school structure and role modeled expected behaviors; (ii) *advocated for cultural change* by communicating the importance of the project to others; (iii) *negotiated, motivated and collaborated* by discussing project concerns and collaboratively planning; (iv) *monitored and enabled others* by holding others accountable to the change, while enabling them to take ownership over the project and (v) *supported and sustained* the change process by playing an underlying supportive role, providing positive recognition and establishing ongoing commitment to the project. Additionally, several principal characteristics were viewed as foundational requirements prior to implementation. Together, these findings provide a conceptual model that is representative of the cultural change process as experienced by the school principal (see Figure 1).

This model represents the fluid and adaptive role that the principal embodied throughout the implementation of a project guided by CSH. 'Foundation' elements underpin the model; they supported the implementation process and were attended to prior to the initiation of implementation. The principal's role began on the left-hand side of this model and moved toward the right as the process unfolded. Roles blended into subsequent stages, suggesting that earlier roles were still embodied by principals once they entered the next stage. Within each stage, the order in which the principal enacted each role was often important. Roles are listed in the order for which they were enacted in each stage. The final goal of implementation was the principal's transition to become an overarching facilitator of staff in their state of ownership over the project.

### Foundation

In order for principals to assume the various roles involved in the cultural change process, a number of prerequisites were identified. These components were primarily uncovered in speaking with principals who may have felt less comfortable with the project's implementation; either those with a less-favorable attitude toward the project or those new to a particular school or staff position. These elements were broken down into 'project-specific' and 'school-specific' factors. 'Project-specific' factors included having a firm understanding of the APPLE Schools project and ensuring that the project's philosophy and the principal's values were aligned. 'School-specific' factors included having an understanding of the school context, being confident in their leadership abilities, and having pre-established trusting relationships with others in the school. Principals felt they needed time to address these factors before applying the intervention.

### Prime for cultural change

This 'priming' stage served as means for principals to prime themselves, and the school community, for the cultural change. Initially, principals wanted to feel comfortable with the project and its potential benefits prior to actively communicating the message to others in the school. Within the foundational 'project-specific' factors described above, principals acknowledged that their values needed to align with the project's philosophy. The priming stage acted as an opportunity for this alignment to be explored. During this stage, principals saw the project running in real time, and this served as an opportunity for them to build their competency with the project. Principals felt that if they themselves did not support the project, others would notice, and become apathetic toward its implementation. Thus, this priming stage acted as a trial run for principals, allowing them to build their comfort with its

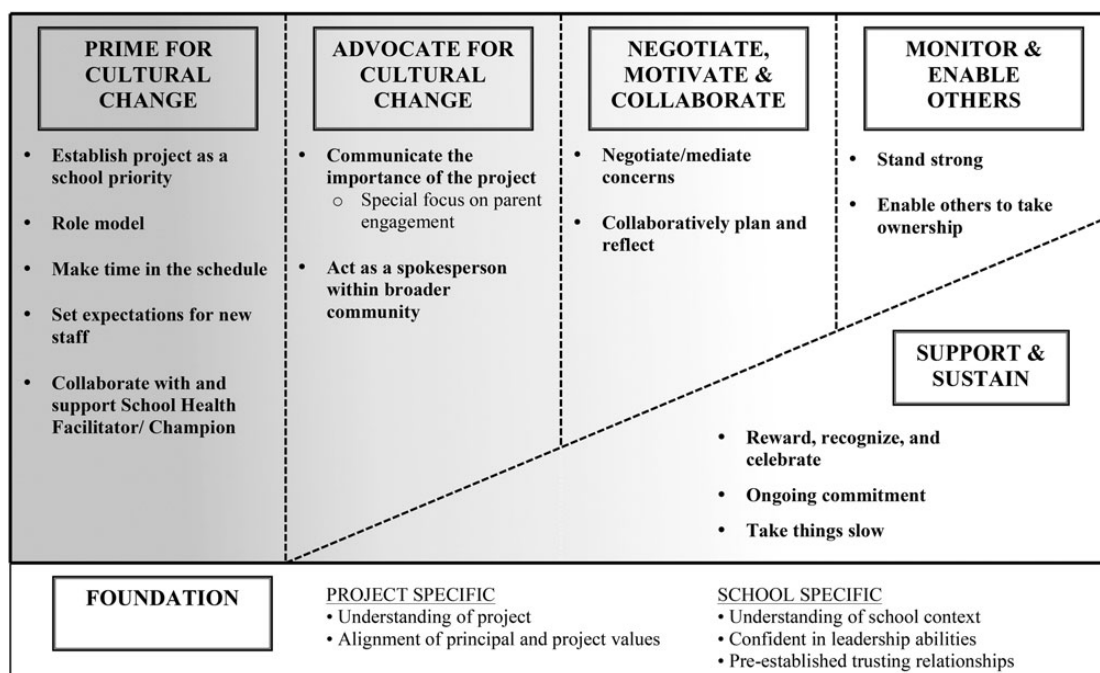


Fig. 1: A conceptual model.

operations in order to fully support and advocate for the initiative within their school.

In priming the school community for the implementation of APPLE Schools, principals worked to establish the project as a school priority. This was done primarily through the incorporation of the project's philosophy into the school vision/plan/goals, formalizing the school's commitment to the project. As one principal stated: '... it's a huge role because you really set the vision... everybody is watching you for the leadership so you have to choose carefully the direction that you want to head'. Further, principals ensured that their support for the project was clearly displayed primarily through their ability to role model behaviors associated with the desired cultural change. For example, principals ensured that they themselves were bringing healthy meals to school as well as participating in active sports and games during family fun nights. This set the tone for the rest of the school. Many principals revealed that role modeling was a unique role associated with being an APPLE Schools principal; it was this role that distinguished them most prominently from their position as a principal in general.

Principals integrated the project into the school structure by allocating time in the schedule, primarily in staff meetings, to showcase its importance. Principals also made changes to human resource protocols by setting

expectations for new staff within the hiring process. Potential new hires were informed of the newly established healthy school policies/procedures during their interview. As one principal stated: 'It's also part of my hiring process for new staff. I talked to them about what that means and that in order to be a staff member there's a commitment required'. These restructuring activities emphasized the project's permanency within the school. Principals also provided support in addressing challenges, as well as collaborated with and acted as a sounding board for their SHF/champion during this time.

#### Advocate for cultural change

Once the tone of becoming a healthy school community was set, principals clearly communicated, educated and shared the new direction with others. Here, principals ensured that staff, parents and students understood the APPLE Schools project and its associated behavioral expectations. Of note, principals felt that it was their role to meaningfully engage with the parent group, as well as to act as a project spokesperson to the broader community. During this stage, the principal acted as a key advocate for cultural change. As summarized by one principal: 'I think it's reminding everyone about the philosophy of the school, that this is who we are... Just being relentless in talking about who we are'.

Principals integrated cultural messages into formal and informal conversations and used a variety of media to widely distribute the message, including announcements, assemblies, school events and newsletters. As highlighted by one principal: ‘I think that any time we have a school-wide event . . . use that as your commercial time to highlight the things that are going on in the school and making those connections’.

### Negotiate, motivate and collaborate

This stage occurred after the message of becoming a healthy school was communicated to students, staff, parents and the community. At this point, it was likely that some members of the school community began to demonstrate resistance toward change. Here, principals were open to listening, mediating and negotiating with others, while still keeping the overall direction clear. As one principal asserted: ‘. . . you have diametrically opposed views and you need to know how to acknowledge everybody’s views but yet still keep the message clear’.

Thereafter, the principals jointly prioritized with community stakeholders how to best incorporate the project into school routines and policies, including lunch programs, fundraising efforts and nutrition policies. In a collaborative manner, principals facilitated the revision and adaptation of policies and practices to continually meet the school’s evolving needs. For example, as one principal indicated:

. . . in order to come up with a good nutrition guidelines policy, there needed to be input from the various stakeholders that includes parents and school council and teachers . . . then there’s feedback that might inform some changes or some tweaking of language and then the policy is finalized . . .

### Monitor and enable others

The final stage of the model represented the principal’s role in monitoring the change, as well as enabling others to take on project responsibilities. In monitoring the change, principals continued to ensure that everyone was clear on the vision of becoming a healthy school community. Principals fostered ongoing dialog surrounding established expectations and revisited and enforced school plans and policies. Others were held accountable to the vision, with principals providing guidance where needed. Although not a favorable role, principals recognized that they needed to be this enforcer. As one principal mentioned:

. . . I’ll become more of a police—policing the visions and rules that we implemented at the advent of APPLE Schools—I’ll be more making sure that these things are being implemented and we’re providing a healthy atmosphere for the kids.

Also within this stage, principals provided space for others to act and take ownership over the project. Principals organized the enthusiasm of others by building teams, involved others in important tasks and created a sense of distributed leadership over the project. This bottom-up approach was emphasized by one principal, who described:

. . . if you want people onboard and supporting what you feel is important, you need to approach it from a bottom up direction, not a top down directive. You need to empower the people and inspire the people around you so that they too feel it is their responsibility and their accountability and take full ownership of that.

### Support and sustain

This component of the model represented a fundamental role of the principal and underpinned the majority of the implementation process, becoming more pronounced in the final stages. Once the tone was set and the school was primed for change, principals acted in this capacity throughout subsequent steps of implementation. Here, principals emphasized the importance of taking the change process slowly in order for it to become embedded within the school. This was a common sentiment among principals, as asserted by one:

Take it slow. Because as soon as you come in and you start preaching and telling everyone what we’re going to do, and giving roles and responsibilities, there’ll be a lot of resentment and you won’t get the support or buy-in. People won’t see the value in it and see just how important it is . . .

Principals also showed that they were serious in their commitment to the change by being consistent in their actions and communications related to the project. As per one principal’s account:

We’re trying to help our staff understand that this is not something that we can play with. This is not something that’s going to go away. This is something that we want to see sustained and we want to see work in this building ten years from now.

Lastly, principals continually applauded the positive efforts of others by celebrating progress in a transparent manner, building momentum for change. This was important in ensuring the continued engagement of others in the school community.

While this model represents the principal’s role within project implementation throughout a variety of different stages, it must be noted that the cultural change process is not finite. Student and staff transitions are ongoing, suggesting that the culture of a school is in constant flux. As such, the principal needs to stay in tune with what is



happening within their school and adjust their behaviors accordingly, continuing to cycle between the different stages of this model to support the overall cultural change.

## DISCUSSION

Given the presumed importance of the principal in implementing CSH (Rowling and Samdal, 2011; Samdal and Rowling, 2011; Storey *et al.*, 2011; Storey, 2013), we sought school principals' perspectives on their role in the implementation of a project, guided by a CSH framework, aimed at creating a healthy school culture. To our knowledge, this is the first study of its kind to explore the role of the principal in this context.

Analysis revealed that principals enacted a dynamic role throughout the process of implementation, which is consistent with previous research indicating that effective leaders are responsive to a school's changing context (Hallinger, 2003). However, there appeared to be a time-order to the principals' role. This finding initially appeared to contradict previous school-based health promotion work, wherein a cyclical and iterative process of implementation was recommended (Boot *et al.*, 2010). It must be emphasized, however, that within the current findings, this time-dependency did not imply that the principal's role was inflexible. Principals continued to cycle back and incorporate previous roles into subsequent stages of implementation, remaining adaptive to local circumstances.

The 'priming' stage within the current findings served two purposes. This stage acted as a way for principals to slowly introduce the change to the rest of the school community, setting the tone and establishing a new school vision without overwhelming others. In other words, they established project 'readiness'. This stage also provided an opportunity for principals to 'self-prime' in order to feel comfortable with the project. While the need to establish 'readiness' is well established (Sabatier, 1986; Elias *et al.*, 2003; Leurs *et al.*, 2007; Weiner *et al.*, 2009), the desire of principals to 'self-prime' within this phase is unique to our findings and has not been discussed within the literature. Principals asserted that they themselves needed to feel comfortable with the project and see it in action before they were able to gain confidence in fully backing it and moving forward with implementation.

Within this study, role modeling emerged as a unique element of the principal's role. It is speculated that this was because the desired culture change was specific to health and lifestyle, very personal features of one's behavioral practices. Other studies have outlined role modeling as an important feature of the principal's role in health-specific programming (Smith *et al.*, 1988; Barnett *et al.*, 2006), and when shaping the culture of the school

(Norris, 1994; Barnett and McCormick, 2004; Fiore, 2004; Yukl, 2006). We believe, however, that this study is the first to emphasize this role within a CSH framework.

The principal also advocated the change inside and outside of the school, communicating the project message to all stakeholders involved, which is not surprising considering that holistic engagement is part of the CSH approach (WHO, 1986; Nutbeam, 1992). This is also consistent with findings surrounding the effectiveness of APPLE Schools in creating positive behavioral changes both inside and outside of school hours (Vander Ploeg *et al.*, 2014). Hence, engaging parents is a key component of school-based health promotion efforts (Taylor *et al.*, 2012) and is also seen as one of the most challenging parts of implementation (Inchley *et al.*, 2007). While previous studies indicate that parent engagement is key, none have operationalized the role of the principal in engaging this group within the implementation of an initiative guided by CSH. Interestingly, previous reports from the APPLE Schools project revealed that teachers and SHFs also felt responsible for engaging parents (Storey *et al.*, 2011; Storey, 2013). This overlap suggests that it might be important for stakeholders to clearly negotiate their roles to minimize redundancy.

Principals emphasized the need to be willing and open to hear other's project-related concerns while still keeping the message clear. Although the traditional role of the principal includes the ability to mediate between different interests and expectations (Dadaczynski and Paulus, 2015), we posit that because the principal played an intermediary role between their staff and SHF, their role as a negotiator became ever more prominent in the face of CSH implementation. Thus, our study demonstrates that the principal's role in enforcement and value shifting is important, the details of which may be a focus for future research.

Policy development has been deemed critical for the implementation of CSH initiatives (Samdal and Rowling, 2011) and is important in helping principals provide justification to change practices (McIsaac *et al.*, 2013). The role of the principal in enforcing these policies and practices, however, is less clear. Within this study, principals felt uncomfortable acting as an enforcer, but understood that this role was necessary in order for the project to be instilled and sustained within the school. Cargo *et al.* discussed teachers' hesitancy in acting as an enforcer of nutrition and physical activity changes within the school, yet the literature is sparse with other examples (Cargo *et al.*, 2006). Thus, the role of the principal in monitoring the CSH implementation process through enforcement of project policies and messages, providing guidance when needed, is uniquely highlighted herein.

In our study, the role of the principal in setting the stage for distributed leadership was also essential in order to enable others to take ownership. Distributed leadership is a highly noted practice within the literature (Ryan, 2006; Hargreaves, 2009) and is described as a leadership structure wherein school personnel are active participants (Spillane, 2006). Here, notions of collegiality, joint-ownership and joint-responsibility are emphasized (Spillane, 2006). While previous research has highlighted the importance of distributed leadership practices within the implementation of CSH (Larsen and Samdal, 2008), no earlier studies have highlighted its importance in the presence of another on-site health champion.

Others have emphasized the need to take CSH implementation slowly (Moon *et al.*, 1999; Mitchell *et al.*, 2000; Stewart-Brown, 2006; Cushman, 2008; Veugelers and Schwartz, 2010; Stolp *et al.*, 2014). Principals stressed the importance of taking the change one step at a time to avoid overwhelming the school community with the proposed change, making it more likely to be accepted and engrained. The gradual nature of implementation is clearly depicted in the layout of our model.

Lastly, principals felt that they had to emphasize their commitment to the project in order for change to be engrained. Others have highlighted the need for leaders to show their commitment to the organizational vision/goals through their behaviors, fostering the support and ownership of followers (Bass, 1998). This active principal commitment to change has not been previously emphasized within the CSH literature.

## LIMITATIONS

As this study had a qualitative and exploratory focus, the findings are not necessarily generalizable to the whole population. Despite this, the APPLE Schools intervention was applied across different school contexts, and interviews were conducted across different degrees and stages of implementation. Regardless of these contextual differences, results surrounding the role of the principal within the implementation of the project were consistent, emphasizing the transferability of the present findings. An additional limitation is that principal self-selection bias could have occurred, wherein those more invested in the project, or those that more positively supported its implementation were perhaps more likely to have considered participation in this research. However, as the qualitative nature of this study relied on obtaining information-rich cases (Kvale, 1996; Patton, 2002), it was important to recruit participants who were eager to share their experiences. Additionally, as this study is one of the first to examine the role of the principal in the context of CSH,

future studies may be needed to flesh out the details behind each of the principal's specific roles within implementation. For example, gaining insight into how principals 'mediated and negotiated concerns' could greatly facilitate principals' understanding of CSH implementation. It may also be valuable to gain a sense of how much time principals spent in each implementation stage. Data were not collected on this timing within the present investigation. Again, findings emphasize the importance of role flexibility, as principals cycled between stages and implementation timing was dependent on the unique circumstances within each school. Lastly, it would be beneficial to collect the viewpoints of other school stakeholders in order to gain a well-rounded perspective of the principal's role. This was out of the scope of this study and would be recommended for future research.

## CONCLUSIONS

Our findings indicate that principals play a critical role in providing direction for their schools and in determining the culture. They are also key players in the implementation of projects that strive to make environmental-level changes within the school. The principal's role in enabling others and building capacity to sustain the change is also imperative. The findings within the literature have been somewhat mixed as to whether principal support for project implementation is necessary in the presence of another health champion within the school. To our knowledge, APPLE Schools is the only project that employs an on-site SHF at a high intensity within the school, up to 1.0 FTE. Despite the presence of this champion, however, principal support was seen as imperative for project implementation (Storey *et al.*, 2011; Storey, 2013) and the findings from this study defined and operationalized their role. We believe that this provides the ultimate evidence to suggest that regardless of other actors within the school, the principal plays an invaluable role in CSH implementation.

## Implications

These findings speak to the importance of the principal within the implementation and cultural change processes in the school. It is recommended that health promotion initiatives in schools focus on the principal as an existing resource to facilitate the implementation and sustainability of environmental-level changes. Our findings suggest that it is important to train principals in the area of CSH so that: (i) they are better prepared to take on its implementation and (ii) are provided with an opportunity to 'self-prime' by ensuring their values align with CSH. This training could be provided within formal education,

or through professional development training sessions and networking opportunities with other CSH-informed principals. The model developed herein could act as an excellent training resource for these purposes. Furthermore, because change in administration is common within education, it would be recommended that new principals be prepped in CSH prior to entering the school, as positive school changes could easily be lost as a result of unsupportive leadership. Thus, from a resource-management perspective, a proactive and supportive principal would be a key consideration for any school-level change. Lastly, change should be initiated and implemented one step at a time as to not overwhelm staff, further increasing the likelihood that changes are sustained.

## HUMAN SUBJECTS APPROVAL STATEMENT

Approval for this study was obtained from the Health Research Ethics Board at the University of Alberta. All participants provided informed consent.

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