



Using Focus Group Research to Assess Health Education Needs of Pre-service and In-service Teachers

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ABSTRACT

Background: Few studies have been conducted in Canada to investigate the roles, actions and beliefs of health teachers in school health programs. **Purpose:** The purpose of this study was to explore health education teaching and assess related needs among pre-service and in-service teachers in a British Columbia K-12 school system, and to elicit conclusions regarding how to improve health through schools. **Methods:** K-12 teachers from the participating school district ($N = 16$) and pre-service teachers from the participating university ($N = 14$) participated in four focus groups. **Results:** Guided by the ecological model, seven themes were identified and categorized: (1) Intrapersonal Level (teaching strategies; knowledge/skills; comfort); (2) Interpersonal Level (teaching barriers); and (3) Community Level (health curricula; health programs; role of school). **Discussion:** Seven themes highlight the issues of school health programs from practitioners' perspectives, which also correspond with five sources of problems of school health programs classified by the WHO Expert Committee. This study reinforced the need for initial development of health educator roles and competencies to guide actions in school health improvement. **Translation to Health Education Practice:** The identified sources of problems illustrate the potential role that a health-promoting school approach plays to build school-community connectedness.

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BACKGROUND

Recognizing the link between health and learning, the World Health Organization's Global School Health Initiative¹ has catalyzed a movement towards creating health-promoting schools. Although definitions vary among countries, a health-promoting school can be characterized as a school constantly strengthening its capacity as a healthy setting for living, learning and working. Many studies report the importance of school health education programs in promoting health for students and in preventing the adoption of many high-risk behaviours.²⁻⁴ Whereas, commitment by practicing teachers is a key cornerstone to promote health education through schools, it has

also been suggested that policy development for in-service training and involvement by parents be implemented.⁵ Furthermore, teacher preparation programs can influence teachers' knowledge and perceptions about the importance of health education, their level of comfort teaching health, as well as their intentions to teach health.⁶

Creating Health through the School Setting

The Ottawa Charter⁷ states:

Health is created and lived by people within the settings of their everyday life; where they learn, work, play and love. Health is created by caring for oneself and others, by being able to make decisions and have control over one's life.

Approximately 60% of Canadians (ages 16 and older) lack the capacity to obtain, understand and act upon health information and services to make appropriate health decisions on their own.⁸ With Canadian schools currently addressing one-third of the population (children and youth) across the nation,⁹ they are a potential forum to reach a large number of individuals over

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an extended period of time. Despite good intentions by K-12 schools to reach children and youth health and the associated risk factors, schools and their curricula continue to tackle issues utilizing a traditional crisis-response approach: "Reactive practice is epitomized by responses to a perceived problem or crisis."^{10(p321)} Often, this type of health education involves short-term campaigns and does not allow for evidence-based planning or a skills-based scope and sequence within the curricula.

Health Promoting Schools (HPS): A mechanism for prevention. An understanding by stakeholders of the inter-related framework of health-promoting schools (also known as *coordinated school health programs*) and its contribution to school health promotion is critical. With a greater attention to wellness, by default our teachers and administrators are assuming more health-

related responsibilities. The emergence of social morbidities is linked to academic achievement and health status of individuals. This reality is prompting our schools to re-examine their roles in addressing the health and learning challenges of our youth. The ecological model of health behavior emphasizes the significance of modifying the environment to promote behavior change. It includes five levels of influence: (1) intrapersonal factors; (2) interpersonal factors; (3) institutional factors; (4) community factors; and (5) public policy factors.¹¹ The health-promoting school approach is compatible with the ecological model with its emphasis on individual, social and environmental components.¹²

The intrapersonal level of influence includes individual knowledge, skills, attitudes and beliefs about school health education. The second level, interpersonal

factors, involve the social environment and interactions of health promoting schools. The third level, institutional factors, includes organizational influences on health behaviours within the school setting. The fourth level, community and family factors, helps build supportive and healthy school-community relationships. Public policy promotes positive behavior change through federal, provincial/territorial laws and regulations, provincial/territorial curricula mandates, school district policies and affiliated requirements. An illustration of application of a HPS approach, with an ecological perspective to enhance school health through teacher education is shown in Table 1.

Few studies have been conducted in Canada to investigate the roles, actions and beliefs of health teachers in school health programs. Currently, no standardized

Table 1. Examples of the Ecological Model Levels as Applied to Health Education

Level	Description	Example
Intrapersonal	Psychosocial and biological factors such as individual knowledge, attitudes, skills, beliefs and behaviors as they interface with the environment.	An in-service health teacher interested in children's eating habits attends a teacher-parent meeting with the belief that parents play a key role in monitoring children's eating habits.
Interpersonal	Immediate physical environment and social networks in which an individual lives such as social support.	Borrow the new teaching material from colleagues to prepare for teaching health as opposed to using out-of-date material.
Institutional	System or organizational influences on individual behaviors.	The school board will approve the implementation of the new program only after all the health teachers involved in this program are fully prepared.
Community	Social systems present between individuals and organizations, such as home and neighborhood influences that promote behavior change.	The community in the neighborhood holds a talk about serious negative consequences of drinking soft drinks.
Public Policy	Larger systems that distribute resources and control the development of their constituent communities through laws, regulations or policies at local, state/provincial/territorial, and federal levels.	The provincial curriculum calls for more parental involvement in health education.

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guidelines exist in Canada, or in British Columbia (BC), which require teachers to receive mandatory health education training. Consequently, most in-service teachers already in the BC workforce were not trained in health education and likely have similar professional development needs as the pre-service teachers. It is important to query both pre-service and in-service teachers in this study to assess professional development needs of all educators (candidates and working), which will help inform both future preservice and in-service training. According to Smith et al¹³ there are challenges in teacher education for school health related to the delivery of health education programs. These challenges common to many countries include: quality and quantity of professional preparation for teachers during their preservice university training; need for in-service of teachers already in the K-12 workforce; university faculty workforce professional development needs; and research to provide baseline data for future standards development.

Using Focus Groups in Health Education

Focus groups are unique in qualitative research due to their group nature generating rich in-depth understanding of a topic based on participants' experiences and beliefs. Focus groups can provide us with richer information about the knowledge, attitudes and experiences of the participants. It also empowers the research participant; they become an active part of the research process as they get an opportunity to voice their opinions. Focus groups are particularly applicable for research which aims to improve services as they facilitate the expression of criticisms (which people may be reluctant to mention in individual situations) and the exploration of advantages and disadvantages of different solutions.¹⁴ The four basic uses for focus groups in academic research include: (1) problem identification (generating research questions); (2) planning (research design); (3) implementation (data collection); and (4) assessment (data analysis), and present both advantages and disadvantages.^{15,16} As McDermott and Sarvela¹⁷ summarize, using focus groups in health education research

encourages group interaction, cover topics quickly, and stimulates multiple responses and gathers opinions at one time. Furthermore, the focus group researcher has the opportunity to follow-up and probe to clarify and expand upon participants' responses, unlike quantitative approach which deals with data post hoc.¹⁶ It is important to note limitations of using focus group interviews which can include a group influence (unless combined with other methods) and it can be expensive.¹⁷ The purpose of this study was to use focus groups as an exploration into health education teaching and assess health education needs among pre-service and in-service teachers in a British Columbia (BC) K-12 school system and to elicit conclusions regarding how to improve health through schools.

METHODS

Participants and Procedure

Data were collected from practicing K-12 teachers from the participating school district (N = 16; 75% were women) and pre-service teachers from the participating university (N = 14; 79% were women) in BC. Pre-service teachers were enrolled in a K-12 professional teacher preparation program, whereas practicing teachers ranged from teaching kindergarten to grade 11. Four groups were conducted with 6-7 participants in each group. Ethical approval was obtained from the participating academic institution and all participants gave written informed consent prior to each focus group.

Data Collection

A semi-structured interview guide was developed for the focus groups. The principal investigator developed a focus group interview guide based on literature reviews in the areas of focus group research,¹⁸ health education teaching strategies, BC health curricula and health educators' beliefs toward health education (Figure 1). The questions in the guide were firmly built on the general aim of the research, guaranteeing its theoretical validity.¹⁹ Apart from the questions that related to their experiences with the current curriculum and health education; participants were also asked to comment on

the teaching strategies and health programs in their schools. The principal investigator and one research assistant facilitated each of the focus groups. Each interview session began with an opening icebreaker question to allow each participant the opportunity to briefly share information within 30 seconds (i.e. Can you share with us a health topic or health strategy that you remember from when you were a student?). The interview sessions promoted a natural flow of conversation and utilized probes to give participants a concept of the scope of the discussion. Focus group discussions ran, on average, for 1.5 hours and were facilitated by an experienced qualitative researcher. The sessions were audiotaped and transcribed for later analysis to ensure descriptive and interpretive validity.¹⁹ The facilitator's observations and comments were noted immediately after each focus group session. Two researchers independently conducted a content analysis of the transcripts to identify themes.

Establishing Themes

At the close of each focus group discussion, the interviewer summarized the principal themes and issues in relation to the topics in an effort to verify accuracy in interpretation, and to obtain group confirmation of these. A multi-step process was used in preparing for data analyses.^{16,20,21} To begin, the interview notes from the four focus group discussions were read by the interviewer and a research assistant. General themes emerged after carefully examining context of discussion, word choice and participants' comments throughout transcripts.¹⁶ Recurring themes were noted using colored coding in the transcript margins and grouped into theoretical constructs. Headings by which to describe all aspects of the data collected were then generated from these themes. Headings were then grouped into major themes and categories, which best described the group members thinking. To assure reliability and validity of these themes,^{22,23} the second author reviewed all transcripts and interview notes independently to verify categories and themes. The two authors met for consensus on the themes, discussed their analysis to



Figure 1. Focus Group Guide Key Questions and Probes

A. Practicing Teachers

1. a. Please describe strategies/methodologies that have worked well for you when teaching your students about health?
 - Peer educators; Guest speakers; Videos/Music; Assigned projects; Fieldtrips; Technology
- b. Where do you get your lesson plan material from?
2. What strategies/methodologies have not worked quite as well for you?
3. What is your opinion of the BC curriculum in addressing the health needs of students?
4. In your opinion what is the role of the school in addressing the health needs of students?
 - Can you share with us an example of how they can do that?
5. What strategies do you feel would be helpful to allow you to teach the BC health curricula more effectively?
 - University programs/preparation; Workshops; Peer sessions (in-service seminars); Online learning courses
6. What specific topics/themes or units make you feel uncomfortable teaching?
 - Can you tell us more about that?
 - Can you provide us with an example from your class?
 - What would have helped you to teach this health unit/theme more comfortably?
7. What health topics/themes would you like additional training in to effectively teach the BC curriculum?
8. What specific skills would you like to learn in order to effectively teach the BC curriculum?
9. Can you describe other health-related initiatives that your school or other schools use to promote student and community health?
 - Health Promoting School (HPS) model
 - Coordinated school health program (CSHP) model
 - Action School BC
 - Milk run
 - Terry Fox run
 - Walk to school day
 - Removing/limiting use of vending machines
 - Involving parents
 - Staff wellness
 - BC Safe Schools Strategy

B. Pre-service Teachers

1. a. Have you ever had the opportunity to teach a health lesson?
 - What topic did you teach?
 - How did you choose this topic?
 - Where did you get your lesson plan material from?
 - What strategies/methodologies did you use?
- b. Have you ever observed your supervising teacher teach health?
 - What topic did he/she teach?
 - How did the class respond?
 - What strategies/methodologies did the teacher use?
 - Where did he/she get their material from?
2. What barriers or challenges do you anticipate if you were to teach health in schools?
 - Time
 - Comfort
 - Knowledge

**Figure 1. Focus Group Guide Key Questions and Probes (continued)**

- Skill level
 - Finding resources
3. What is your opinion of the BC curriculum in addressing the health needs of students?
4. In your opinion what is the role of the school in addressing the health needs of the students?
- Can you share with us an example of how they can do that?
5. What strategies do you feel would be helpful to allow you to teach health?
- University programs/professional preparation; Peer sessions (preservice seminars); Online learning courses
6. What specific topics or units do you think you would feel uncomfortable teaching?
- Can you tell us more about that?
 - What could help you to teach this health theme/unit more comfortably?
7. What health topics/themes would you like additional training in to effectively teach health?
8. What specific skills would you like to learn in order to effectively teach health?
9. Can you describe other health-related initiatives that your school or other schools use to promote student and community health?
- Health Promoting School (HPS) model
 - Coordinated school health program (CSHP) model
 - Action School BC
 - Milk run
 - Terry Fox run
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 - Involving parents
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improve reliability of their interpretation and refined theme inconsistencies through discussion. Discrepancies were resolved by reaching consensus through discussion between the coders. A final step involved the identification of sub-themes, identifying actual quotes that capture participant sentiments, views and opinions, which appear in italicized print within the text of this paper. Moreover, coded data within each category were further analyzed for the responses' emerging and recurring themes and descriptive summaries of each section were written to offer interpretation and/or recommendation for each theme.¹⁶

RESULTS

We identified seven themes: Effective and ineffective teaching strategies; barriers to

teaching; comfortableness in teaching; self-perceived gaps in knowledge and skills; adequacy of BC health curricula; knowledge of and participation in school health initiatives; and role of school. Guided by the ecological model, we categorized the seven themes based on the three major levels represented in the model: intrapersonal, interpersonal and community, as they are most concerned with our context.

Intrapersonal Level

Theme 1: Effective and ineffective teaching strategies. Both in-service and pre-service teachers cited a series of effective and ineffective teaching strategies based on their classroom teaching experiences. Class discussions, field trips and inviting guest speakers were the most frequently mentioned effective strategies. Additional

helpful strategies were incorporating multimedia (video/music), learning outside classrooms, encouraging critical thinking, strengthening training facility, keeping nutrition logs, and placing question boxes in classrooms. Also, giving more voice to students, organizing more classroom activities, using graph/chart to improve instruction, delivering morning message, etc. have been reported instrumental for successful teaching. According to them, teaching training workshops, topic guideline preparation and communication with experts in these fields would also be beneficial. In contrast, seeking support from parents and following step-by-step rules in teaching health education were reported to be ineffective. Other commonly used teaching methods were deemed unsuccessful



such as using worksheets, assignments and letters-to-parents.

Theme 2: Self-perceived gaps in knowledge and skills. Self-perceived knowledge gaps have been acknowledged across the four focus groups in difference areas of health education. In particular, participants articulated a need for additional training in two aspects: how to keep domain knowledge updated and how to promote a healthy environment. The former emphasized the knowledge not only in the health curriculum, but also in broader topics (e.g., drugs, sex education, bullying, discrimination, emotional health, self-esteem building in children) by referring to other credible information sources to have a better preparation for teaching health education. The latter included such issues as: (1) cooperation from parents and families (e.g., stress management regarding family relations; (2) conflict mediation); (3) regular activities that foster healthy living styles (e.g., avoid soda, nutritious lunch, yoga class); and (4) necessary skills such as first aid; and the need for teachers to stay healthy.

Theme 3: Comfort. Certain situations presented uncomfortable feelings about teaching health education in school. The reasons can be found both externally and internally. Both in-service and pre-service teachers consistently reported that they experienced less comfort in teaching certain topics, such as sex education. Some teachers also expressed discomfort in teaching sensitive topics such as child abuse, drug use, etc. The reasons ran the gamut from insufficient openness of students to discuss sensitive issues and lack of strategy of teaching safe behaviour without causing fear, to inaccuracy of Internet information. Internal attributors to discomfort were associated with teachers' "lack of updated knowledge and effective skills to educate students and participate in school health programs," to quote an in-service teacher.

Interpersonal Level

Theme 4: Barriers/Challenges to teaching. The greatest challenge perceived by the participants was the lack of support they received from external sources, such as parents, school and community. They voiced the

difficulties in inviting guest speakers, receiving informative evaluations of their teaching effectiveness (what worked and what did not), contacting people to organize workshops, and not being informed of the role of their school district to support school-wide health programming. All of these perceived barriers constitute a broken link between health teachers in the classroom and associated parties, as health education is not to be restricted to the classrooms, but viewed to be linked to families and societies. Further, the diversity of students in classrooms presented another challenge with which the participants were confronted. They needed to cope with students with different cultural values and life styles. This issue was particularly salient in British Columbia, with a mixed population from all over the world. The rest of the barriers reported by the participants illuminated concerns about the current curriculum. The amount of content required teaching in class diminished the opportunity of alternative forms of learning, and at times was in conflict with current political/educational agenda. Lack of resource and access to updated information made the situation even worse.

Community Level

Theme 5: Adequacy of BC health curricula. To explore health teachers' perceptions of current health curricula in BC further, all four focus groups were asked about their awareness of, and opinions on the provincial curricula (Health & Career Education K-7/8&9, and Planning 10). Both in-service and pre-service teachers expressed their opinions in a somewhat negative way. One pre-service teacher noted "it feels like leftovers after years of teaching in the same way." Another pre-service teacher was not quite satisfied with the large amount of content to teach as required in the curricula. One in-service teacher wondered, "Who determines what critical topics are?" Another in-service teacher even called for a "curriculum police." For them, the first task was not to teach health knowledge to students, but to promote the significance of health education so that students would be able to see the value of learning health

knowledge. In the various situations wherein health teaching and learning occurs, health educators need to determine what to teach to accommodate local needs of the students, which would make learning processes more valuable and enjoyable.

Theme 6: Knowledge of and participation in school-wide health programs. Although some teachers were concerned with receiving little support from school, a series of health-related activities and community/provincial-based initiatives were reported during the interview, which evidenced the consideration of adding more healthy experiences in school besides lecturing in class. A healthy breakfast/lunch program appeared to be popular in the participating schools and running/walking events (e.g., "school marathon" and "Terry Fox Run") also ranked on the top of the list. Other health-related activities highlighted included "Action Schools BC" (provincial initiative helping schools integrate physical activity and healthy eating for students), peer mentoring initiatives, events to build interpersonal skills (making friends from other grades), etc.

Theme 7: Role of school. There was no disagreement among the participants that school is a good place for scientific knowledge delivery, but health education is not all about knowledge construction. It also matters if students "do" and "practice" as they are instructed. Schools were considered as an "information outlet" (to quote an in-service teacher) for students and parents, by delivering scientific knowledge, by infilling students with health information, by modeling how to make their own decisions in this process, by providing health activities and exercises, and by providing a framework for parents to get involved. Nonetheless, there were still some expectations regarding how schools as a common forum could help with health education in different ways for community and societal change. For example, a pre-service teacher believed that schools should provide local community and regional support to make teachers comfortable in teaching about sensitive topics such as drugs, alcohol, sex, etc. More importantly, another pre-service

**Table 2. Areas of Competencies for Entry-Level Health Educators – Competencies Update Model, 2004**

Area	Responsibility
I	Assess individual and community needs for health education
II	Plan health education strategies, interventions and programs
III	Implement health education strategies, interventions and programs
IV	Conduct evaluation and research related to health education
V	Administer health education strategies, interventions and programs
VI	Serve as a health education resource person
VII	Communicate and advocate for health and health education

Source: Gilmore GD, Olsen LK, Taub A, Connell D. Overview of the national health education competencies update project, 1998-2004. *Health Educ Behav.* 2005;32(6):725-737.

teacher highlighted the need to attend to childrens' emotional health in addition to their physical health needs. This point was echoed by an in-service teacher's comment that "*the developmental shift and peer pressure in the classroom have become an issue that cannot be ignored any longer.*" As well, the environment in school is not always in favor of health teaching, for example, vending machines in schools have been deemed as a specific factor for establishing unhealthy eating styles.

DISCUSSION

This study provided a rich account of health teachers' beliefs, perceived challenges and barriers in health education in the British Columbia K-12 school system. Although not aiming to be representative of perspectives of all health teachers around the globe, many of the themes identified are likely to be evident in other curricula. These seven themes identified highlight the issues of current school health programs from health educational practitioners' perspectives – the challenges to meet, the amount of support to expect, and the problems to tackle. Teachers and school personnel must be properly trained and supported, which involve universities and teacher-training colleges in preparing new teachers, school staff and school administrators to promote

the health of school communities.²⁴ The issues identified from the current study also correspond with five sources of problems to the development and improvement of school health programs classified by the 1997 Expert Committee on Comprehensive School Health Education & Promotion:²⁴ (1) inadequate vision and strategic planning; (2) inadequate understanding and acceptance of school health programs; (3) inadequate collaboration and coordination among responsible parties; (4) lack of sense of ownership, responsibility and accountability for actions to improve school health programs; and (5) lack of resources (financial, human, and organizational infrastructure). In the following, we attempt to explore in-depth the roots of those issues and the implications for health education.

Vision and Strategic Planning and Understanding and Acceptance of School Health Programs

Philosophies can guide practices. Currently, school health education is informed by a number of individuals and often contrasting philosophical viewpoints.²⁵ The field appears to be moving from a content-based approach towards a skills-based approach to promote health literacy skills. Inadequate vision and strategic planning can stem from inadequate understanding and acceptance of school health programs,

self-perceived knowledge gap in the subject, as well as insufficient information source for teaching preparation.

Governali et al²⁵ suggest a need for a critical examination of school health education philosophy to determine goals and purposes for the growth and sustainability of the profession. These authors suggest that health educators should represent a socio-ecological perspective, which recognizes that health behaviours are part of the larger social system (or ecology) of behaviors and social influences. Changes in health behaviors require supportive changes in the whole system. They advocate for individual health, for the promotion of healthy environments, safe workplaces, and public participation, and for the development of public policy; which includes a community partnership approach. "Changing the culture of institutions is the real objective, not implementing single innovations. Strategies for change in school health programs need to take account of the school as a system and be applied in the context of the broader community and society."^{24(p26)}

Both pre-service and in-service teachers in this study revealed similar effective and ineffective strategies from their health teaching experiences. These are important considerations for everyone as agents of change in the strategic planning phases of



school health programs. Furthermore, the limited scope related to knowledge and understanding of school health that was found in the current study can also be seen in the educational literature. Hawks et al²⁶ evaluated the content focus of health education research in health education literature over a six-year period (2000-2005), which addressed over 1365 articles.

The majority of the papers (78%) focused on the physical dimension of health, thus failing to harmonize with the multidimensional-defined nature and scope of health education. The goal for health educators of empowering students towards positive behavior change and promoting health literacy seems less attainable without consideration of all dimensions of health (i.e., social, emotional, spiritual, intellectual, environmental and occupational).

Collaboration and Acceptance of School Health Programs and Collaboration and Coordination among Responsible Parties

Both pre-service and in-service teachers revealed barriers to teaching and levels of comfort while teaching health education, and acknowledged similar reasons for self-perceived gaps of health-related knowledge and skills. These themes are influenced by the inconsistent collaboration and acceptance of school health programs and inadequate collaboration and coordination of responsible parties involved as suggested by World Health Organization (WHO) barriers above.

There is a need to integrate health education skills and competences within our professional development programs. Real learning of individuals occurs when the content and associated practical experiences are integrated.²⁷ According to Governali et al,²⁴ practice and relevance of health education competencies are important by teachers and require implementation of coordinated school health programs and collaboration with stakeholders in school districts. Integrating service learning in professional teacher education programs is an effective means of building an infrastructure of partnerships and collaboration for health educators advocating for coordinated school

health programs. Service learning links health educator competencies, builds critical consciousness to school health education and integrates a whole-school approach utilizing social networks within schools and school districts. The relationship between higher education, professional institutions and our communities need to establish closer relations to assume joint responsibility in important areas for collaborative ventures in the acquisition of knowledge, development, dissemination and know-how.²⁸ Creating a positive community culture is a strategy, which coordinates stakeholder involvement and encourages institutional school-level and school-based support systems.

Sense of Ownership, Responsibility, and Accountability for Actions to Improve School Health Programs; Relevant Resources

An implication from the findings of this study pertains to the roles and competencies of health educators. Although there was a mutual agreement among both teacher groups regarding the importance of the school setting for health educators, there were some differences in their level of participation and health-related roles identified. Our study found that many teachers revealed a desire to assess individual, school and family needs, and wished to communicate and advocate for health education to both students and families. This point is further observed from their eagerness to voice their opinions regarding dissatisfaction with the curriculum, yet conveyed feelings of being obligated and accountable to the Ministry mandates. This desire from our participants for a multilevel approach represents health education as exemplified by health promoting schools and a way for schools to function where educators are investing in both short-term (often individual) educational goals and renewing the focus on the social goals of education.²⁹

Health and learning are both an individual and social matter. This point is evidenced by a recent literature review which showed more studies that identify the effectiveness of health education and promotion strategies in the broader community context.³⁰ In this

review, it is argued that health promotion processes involving active participation of school community members and structures such as school policies, teaching and learning approaches, and physical school environment collectively have the ability to promote the health-promoting school and contribute to school connectedness in the school setting.³⁰ More specifically, this school connectiveness characterized by strong social bonds and levels of interpersonal trust between multiple social groups in the school community (i.e., students, school staff, families) and allied health groups in broader community is also known as social capital.³¹ Social capital refers to the connections among individuals and social networks. From an ecological perspective, it is important to further investigate the characteristics of the bonds that develop between groups where social capital influences health in a school/community context.

Whole approaches embodied by a health-promoting school framework include a component of curricula, *teaching and learning*, which considers pre-service and in-service training to promote the health and well-being of the school community.³² This study raised the question and need for integrating mandatory health education health coursework and training in all professional teacher professional programs. Just as the National Health Education Competency Update Project 1998-2004³³ addressed what health educators currently do in practice, not how well the health educator performed on the job (Table 2), this study aimed to explore pre-service and in-service teachers' roles and actions in health education.

A lack of standardized guidelines existing in Canada, and in BC, requiring teachers to receive mandatory health education training can be problematic for educators. There is a need for professional preparation programs to provide skill development for teachers to teach health behavior skills in the classroom, as well as an introduction to health education and methodology laying a context for future in-service training and professional development.¹³ Furthermore, Canada does not have previous work from



health-related national organizations and institutions to define professional practice and to contribute to the professionalism of health education like is done in the United States.³⁴⁻³⁶ This study, in conjunction with a previous study which assessed in-service and pre-service teachers' self-perceptions of preparedness to teach health education in BC school systems,³⁷ reinforces the need for the initial development of health educator roles and competencies to guide actions in school health improvement.

Study Limitations

The current study was based on a small sample of health educators from a few schools in one city. Because of the study's qualitative nature, we were unable to draw inferences about the individual- and organizational-level variables that might affect perceptions and practices in health education. However, the aim of the present study was to obtain information from a broad perspective — to obtain viewpoints from diverse strata. Focus group interviews are only a first step to gather thoughts, ideas and opinions about the topic of discussion from participants and are not meant to gather quantitative data from a representative sample.¹⁶ This paper enabled first insight in the production of in-depth ideas and opinions through qualitative assessment, with a small number of people. The participants in our focus group interviews differed in teaching experiences, which brought different views into this discussion. Limitations of using focus groups also include the tendency for certain types of socially acceptable opinion to emerge, and for certain types of participants to dominate the research process.³⁸ It is possible that teachers who chose to participate could be more willing to voice their opinions and thoughts. The focus group strategy should be used in combination with other data-gathering techniques, such as logs of teaching, survey responses, observational studies, etc. This study was exploratory in nature and results revealed the qualitative approach generated valuable data that can be further tested in future studies.

TRANSLATION TO HEALTH EDUCATION PRACTICE

The identified sources of problems by the Expert Committee were clearly reflected in our study, which illustrated the potential role that the health-promoting school approach plays to build school-community connectedness. This connection can only be accomplished through major mechanisms, processes and structures, such as: (1) teacher training (qualified health educators consistent with health promoting school approach and interdisciplinary, collaborative strategies for teaching and learning); (2) active participation of community members (drawing on health promotion among the broader community stakeholders); and (3) supportive school structures (promote strategies, policies, values, resources that promote school health promotion).²⁵ A visual depicting a synthesis and linkage between study themes, barriers and mechanisms supporting networking and collaboration among interested stakeholders and structures contributing to positive health education practices among health educators is shown in Figure 2. Higher education can take steps to address these areas with their pre-service and in-service teacher training programs to support progress and challenges in policy, curricula, initiatives, and research associated with health-promoting schools.

Recognizing that the health promoting school is compatible with the ecological model allows for clearer insight into the levels of influence, which impact the well-being of our children and youth and the effectiveness of school and its community. A greater comprehension of this relationship can guide and inform teaching and learning strategies for teachers in the school setting and stakeholders to develop supports and promote community-based active participation. Furthermore, it is hoped that this paper will guide future empirical research to contribute to an unstudied area in school systems, which can influence health and learning of individual.

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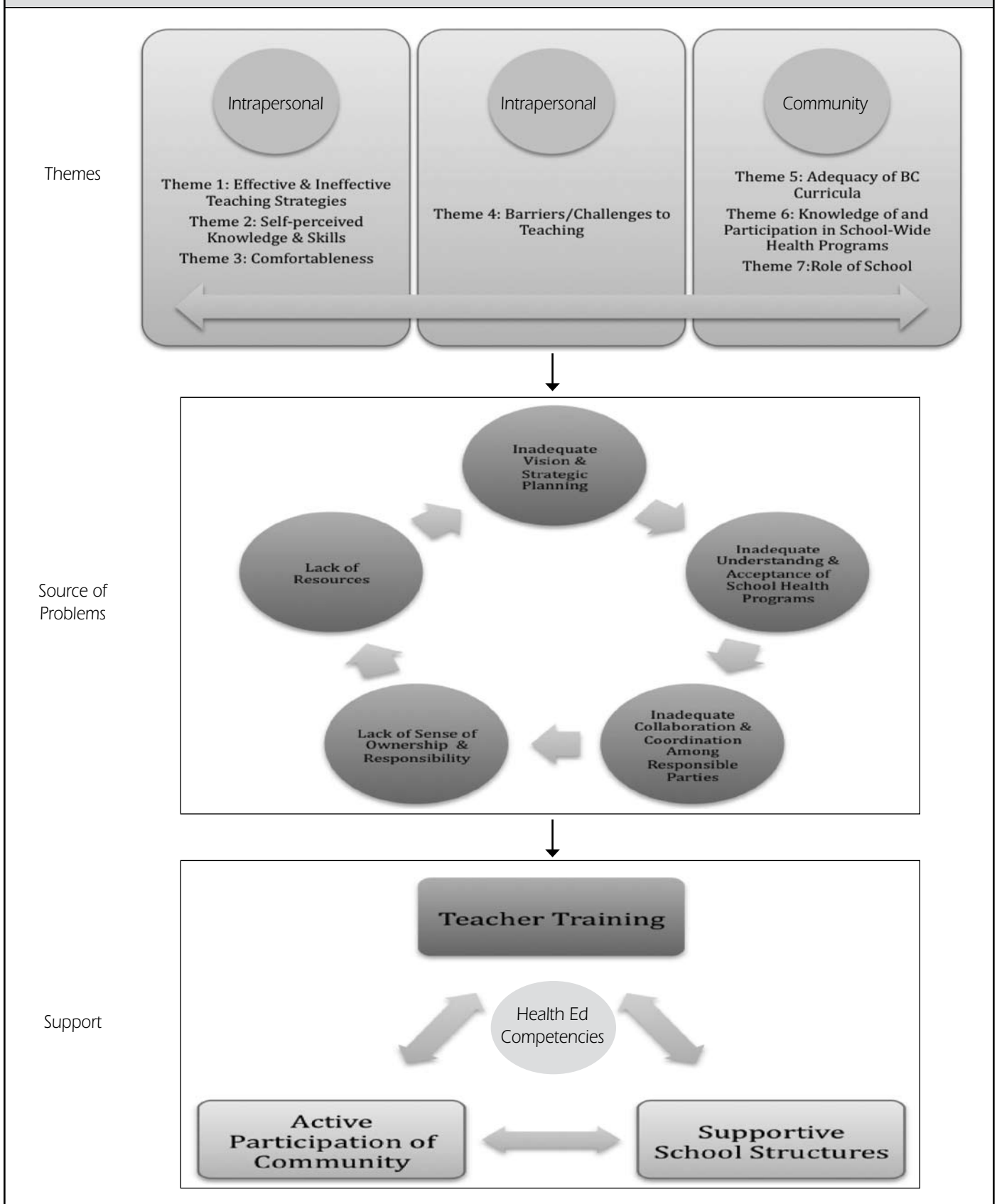
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Figure 2. Relationship Between Study Themes, Source of Problems and Supports for Health Educators





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