• *Cree School Health Project:*

• *Looking Back and Moving On*

• Report prepared for the Cree Board of Health & Social Services of James Bay and the Cree School Board

February 2000

"Good health is essential to children's growth and development, to their ability to take advantage of educational opportunities, and to their future prospects. Children and adolescents must be healthy in order to learn, and they must learn in order to be healthy."

Dr. Louis Sullivan (1992)
Former Secretary of the U.S. Dept.
of Health and Human Services

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• *Executive Summary*

This report documents a collaborative effort between the Cree Board of Health and Cree School Board to provide culturally specific health instruction for Cree community schools in Eeyou Istchee, Northern Quebec. It offers an understanding of the "Miyupimaatisiiuwin" Cree Wellness Curriculum, as well as the instructional approaches used.

The report begins with a needs analysis based on existing community studies and reports. Health priorities voiced by Cree youth, Elders, and others familiar with the situation are summarized, together with social conditions influencing student behavior. Structured around the *Precede-Proceed* Model of health promotion, proposed by Lawrence W. Green and colleagues, this analysis provides a rationale for curriculum planning decisions and a base from which to evaluate successful implementation.

The new curriculum responds to student needs with a specialized type of design. Content is presented with a "holistic" view of health aimed at developing individuals who are well-balanced spiritually, emotionally, physically, and mentally. A mix of "Miyupimaatisiiuwin" values and serious health issues are revisited year after year, each time from a slightly different angle. To encourage a collaborative approach to school health, students share what they learn in an end-of-year presentation to their community. This idea of "giving back" is fundamental to Cree culture, and the ultimate goal of the curriculum.

The curriculum has been developed into a complete set of K-8 lesson ideas and resource materials. Songs, art work, videos, story books, games, hands-on activities, and group projects have been created or selected specifically to promote Cree cultural identity. These lessons and materials have evolved through continuous evaluation efforts with teachers in the communities and health professionals. This public approach to education and respect for variety in learning, as well as the emphasis on "depth over breadth", reflect Howard Gardner's philosophy of education.

The report ends with a synthesis of practical ideas from the literature for implementing the new curriculum at the same time as promoting the idea of shared responsibilities in school health.

• *Part I: Looking Back*

• *1. Introduction*

Health education is a "hot" topic in Native communities across Canada. The reasons for this are regularly reported in the newspapers: diabetes, teenage suicide, alcohol and sexual abuse. A well planned school health curriculum has the potential to protect young people and their families from these health risks. With human life potential at stake, decisions on school health need to be clearly understood so that money is allocated and spent on priority actions agreed upon by all the people who can collaborate to make things happen.[1] The following report is written to inform future collaborations on the Cree School Health Project. It may also be of use to other Native and non-Native schools where health curriculum can be adapted to local circumstances.

• 1.1 Project History

The project got started in 1996 after a meeting in Mistissini between Emmett Nolan, former Cree Superintendent of Schools, and Bob Imrie and Jill Torrie, health professionals with the Public Health Module (PHM), affiliated with the Cree Board of Health (CBH). Information exchanges between health professionals in the communities and Montreal had revealed that health-related programs outlined by the Quebec Ministry of Education were not corresponding to the specific needs of Cree students. The CBH and Cree School Board (CSB) agreed to collaborate on the development of culturally specific health instruction for Cree community schools in Eeyou Istchee, Northern Quebec.

• 1.2 Project Goals

The main goal of the project was to produce Cree specific classroom instruction on serious issues threatening Cree health today, such as obesity, diabetes, family violence, aggression, abuse, sexually transmitted diseases, motor vehicle injuries, and suicide attempts. Many of these issues are at least partially preventable if people adopt safe and healthy

[1]WHO Expert Committee on Comprehensive School Health Education and Promotion. (1997). *Promoting Health Through Schools.* Geneva. Technical Report 870:23-35.

ways of living, for example, eating healthy food, being physically active, practicing safe sex, and respecting themselves and their neighbors.

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1.3 Project Scope

The project was planned in three phases:

- During Phase 1 (1996-97) relevant theory and existing health education curricula were reviewed to guide decisions. An independent review of the existing protocol between the CSB and CBH was also undertaken.

- During Phase 2 (1997-98) a prototype curriculum was developed that included design principles, a scope and sequence content matrix, lesson plans, student work sheets, and resource materials.

- During Phase 3 (1998-99) pilot testing and validation of the curriculum and materials took place in the communities.

- **1.4 The Development Team**

The new curriculum was developed by three education consultants with experience in Inuit and First Nations education who worked in collaboration with professionals from the PHM. Below is a brief introduction to the development team.

- Education Consultants

Janette Barrington (M.Ed.) was responsible for all aspects of design and development. She has experience as a university course developer in Native Education, and is currently working on a Ph.D. in Educational Technology. She (I) also took charge of researching and writing this report.

Joan Brackenbury (B.A. in progress) was involved in all aspects of design and development. She has experience as a primary school teacher in Ontario and a workshop facilitator in Native communities, and is currently studying for a degree in Family Life Education. She also produced an original set of student work sheets for the curriculum.

Barbara Reney (B.A.) was involved in all aspects of design and development. She has experience as an English language teacher and tutor of Cree students in Montreal, and is currently studying for a masters degree in Educational Technology. She also produced the Miyupimaatisiiuwin *Let's Live Well* song tape and took charge of the curriculum validation and revision process.

- Collaborators

Bob Imrie (B.A.), Former Health Promotion Agent with the PHM, was responsible for all major decisions on the project during 1996-1998. He has experience as a school principal and teacher in Native communities, and also coordinated the development of the Northwest Territories School Health Program.

Elizabeth Robinson (M.D.), Director of the PHM, supervised progress on the project. She also involved herself directly in the validation of content and the revision process.

Jill Torrie (M.A.), Research Consultant with the PHM, initiated a literature review on health promotion theory to guide the curriculum planning process. She also provided information on risk factor research in the communities.

- **1.5 Theoretical Framework**

Planning a health promotion intervention involves pulling together a variety of ideas from rapidly developing disciplines.[2] The Cree School Health Project involved both health promotion and curriculum planning in a Native school context. As such, decisions on the project were influenced by ideas from Health Promotion Theory, Curriculum Design, Native Education, Learning Theory, and the School Health literature.

Current thinking in Health Promotion Theory is best exemplified by the *Precede-Proceed Model* of health promotion planning and evaluation proposed by Lawrence W. Green and colleagues. This model is described in Section 2 on Needs Analysis. The main idea behind this approach is that health goals and problems are identified by people at different levels in the situation. It offers both a rationale and a vision for developing culturally specific health instruction.

Curriculum Design involves applying both a decision-making process and a set of design principles. The decision-making process involves determining needs, stating goals and objectives, choosing a type of design, selecting learning content, identifying the means of assessment, determining and organizing learning experiences, and evaluation.[3] How this process was applied during the Cree School Health Project is discussed throughout

[2] Green, L.W. & Kreuter, M.W. (1991). *Health Promotion Planning: An Educational and Environmental Approach.* California: Mayfield.
[2] Doll, Ronald C. (1996). *Curriculum Improvement: Decision making and process.* USA: Allyn & Bacon:219-229.

Section 3 on *Curriculum Design* and Section 4 on *Curriculum Development & Evaluation*.

The design principles applied during curriculum decision-making are most often ground in Learning Theory and other philosophical ideas. The new curriculum design has been associated with the "holistic" Native Philosophy of the Four Directions; Howard Gardner's thoughts on "transformative" education, as well as his Theory of Multiple Intelligences; and the Tribes cooperative learning technique of talking circles. These ideas are discussed at different points in the report in relation to specific decisions.

The School Health Literature is full of practical ideas relevant to health promotion and curriculum planning. Part II of the report on *Implementation* summarizes a few of these ideas. The intention is to motivate people to see the Cree School Health Project as just beginning, not ending. A lot has been done but there is still much to do to ensure that the new curriculum works effectively to protect the health and well-being of Cree children and youth.

• *2. Needs Analysis*

A literature review on Health Promotion Theory prepared for the CBH concluded that: "However the School Health Project happens, it requires a response, an apparatus, and a commitment grounded in Cree life: that's the bottom line."[4] This conclusion reflects a shift in emphasis from "Just Say No!" prevention interventions to the promotion of wellness and "responsible decision-making."[5] Wars on drugs, prohibition-style legislation, and teaching about the negative consequences of poor lifestyle choices have failed because they do not educate young people to make healthy choices and adopt healthy behaviors throughout their lives.

Educating for responsible decision-making is not a matter of applying previously-developed rules of behavior; it involves developing one's own principles based upon one's own experiences and values.[6] To be effective, health promotion interventions (including health instruction) must be grounded in cultural dimensions of health. Attention must focus on the social conditions in which health problems flourish and the competing health messages that young people receive. The *Precede-Proceed* Model of health promotion planning and evaluation, developed by Dr. Lawrence W. Green of the University of British Colombia and colleagues from across North America, exemplifies this new approach.[7]

The goals of the model are to identify health-related behaviors and to design and evaluate interventions to influence both the behaviors and the social conditions that influence them. The fundamental idea behind the model is that health and health risks are determined by multiple factors, therefore, people at different levels in the situation are engaged in assessing their own needs, stating in their own words what matters most to their community.

No formal needs analysis was conducted on the Cree School Health Project. It was felt that limited funds would be better spent on developing materials than on expensive trips up North. There was also plenty of

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[3] Murphy, C. (1997). *Health Promotion Theory & the Cree School Health Project.* Internal Document:14

[5] Lohrmann, D.K., Gold, R.S., & Jubb, W.H. (1987). School Health Education: A foundation for school health programs. *Journal of School Health.* 57(10):420-425.

[6] Cunningham, C.A. (1999). *What Can Dewey's Theory of Habit Teach Use About Drug Education?* Presentation at AERA, Montreal April 19-23.

[7] Green, L.W. & Kreuter, M.W. (1991). *Health Promotion Planning: An Educational and Environmental Approach.* California: Mayfield.

information already available in the form of community studies and reports on health-related issues. This information was known to the development team prior to making design decisions. A needs analysis is reconstructed here to provide a rationale for curriculum planning decisions. It can also serve as a base from which to evaluate successful implementation.

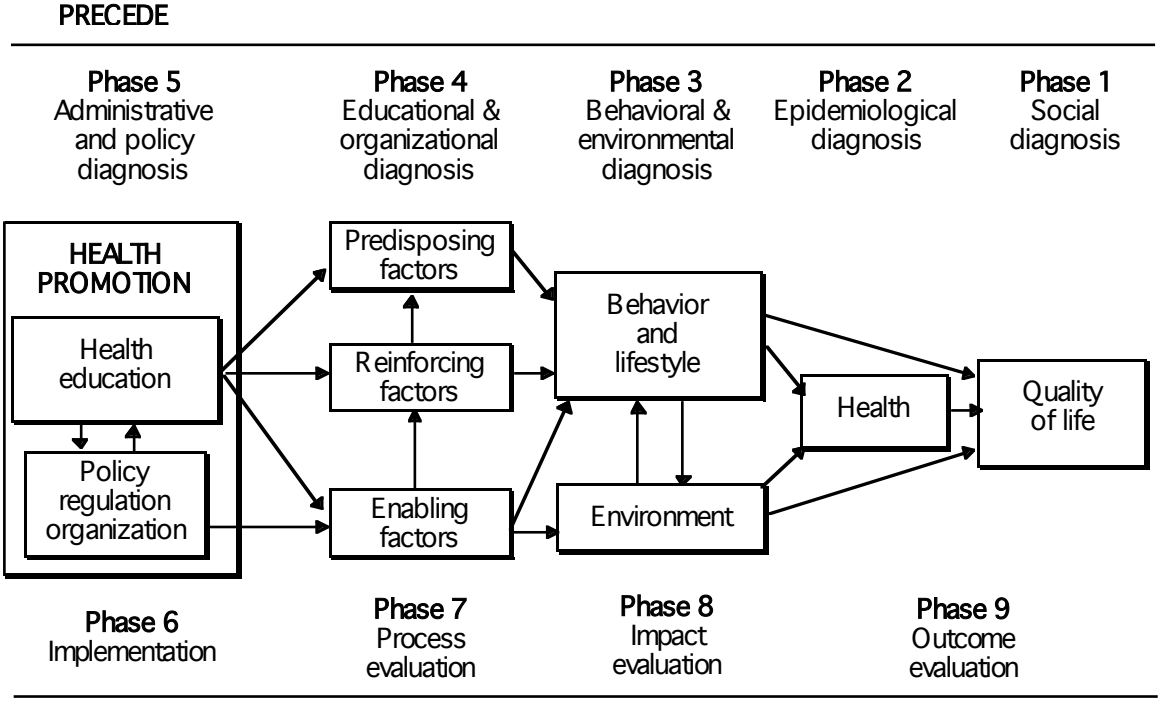


Figure 1: The *Precede-Proceed* Model of Health Promotion Planning and Evaluation[8]

Structured around the *Precede-Proceed* Model, illustrated in Figure 1, the following needs analysis focuses on priority health concerns in relation to what Cree youth have to say; the Cree concept of health; family and community influences; student, teacher and school factors; and CBH and CSB Protocol.

- **2.1 What Cree Youth Have to Say**

The *Precede-Proceed* Model begins with a "quality of life" statement prepared by the people who will be affected by the health promotion intervention. This statement and consequent needs analysis informs both planning and evaluation decisions. Evidence of what Cree youth have to

[8] Idem:24.

say can be found in the 1994 Mistissini Youth Forum Report.[9] As a starting point in improving their quality of life, about 50 youth (an equal number of girls and boys between the ages of 13 and 25) attended a series of discussion forums. No adults were present, except at the last session when Chief Henry Mianscum was invited. Common problems of concern came back throughout the sessions:

- Broken families and homes
  "It's time we admit that we are not providing all the important education at home...Home is often seen as 'not a good place to be', so they go out and try to find friends."
- Poor self-esteem, low capability
  "They are desperate to have someone to be a good friend. So, they do not talk about their difficulties with their friends. They even give in to peer pressure 'to be cool', to do some things they do not really like, like drink and sex, and this leads to more problems."
- Alcohol and drug abuse
  "Alcohol and drugs lead quickly to sexual abuse and rape, and physical abuse (fighting). This occurs most often at parties where there is drinking and drugs."
- Sexual and physical abuse
  "*Youth are very aware that alcohol has created many problems at home – sexual and physical abuse, child abuse, violence – and that some parents (and youth) continue to drink as a way of hiding from their problems. But, this only creates more problems."*
- Loneliness, despair, and suicide
  "*There's nothing to do; it's boring, boring, boring...There is no help; no one to listen to us; and no one to trust. About 10% of the participants admitted they had either thought about suicide, or even tried it."*

When voicing their hopes for a better future, the Youth suggested Healing Circles and workshops so that everyone can work together to resolve these issues. Other suggestions included:

- better role models (parents who encourage them, teachers who respect them, and counselors and police who are capable and trustworthy);
- a radio talk show dedicated to issues the youth want to discuss;

[9] Mianscum, J.V. & Iserhoff, A. (1994). *We Have Something To Say! Will Somebody Please Listen to Us?* Report on the Mistissini Youth Forum.

- a more thorough education on alcohol, drugs, sex, and life skills, including career counseling;
- a curriculum that reflects the Native view and contribution;
- more activities and facilities.

A 1996 community survey on risk factors[10] adds a quantitative dimension to the Youth Forum Report. Two weeks prior to the survey, out of 326 respondents (average age 14):

- 48% had used hash and grass;
- 35% had used other drugs;
- 34% had sniffed solvents.

The biggest problem reported was drinking. The average age when a youth starts to drink or smoke hash or grass was reported as 13. Combining this data with information from Eastmain, Nemaska and Waskaganish showed that a youth who drinks, or smokes hash or grass, or sniffs solvents is more likely to have: a) been picked up by police; b) committed acts of vandalism; and c) admitted stealing. The main factors identified to protect youth from getting into these bad habits were:

- not living in a boarding home;
- doing sports;
- attending school workshops;
- having friends and family who do not drink, smoke or sniff.

Clearly, drinking and drugs are closely linked in the minds of Cree Youth to a poor quality of life. They have some good ideas on what they and others can do to keep young people out of trouble. They also give priority to culturally-specific school health education.

• 2.2 The Cree Concept of Health

The second phase of the *Precede-Proceed* Model involves identifying specific "health goals or problems that may contribute to the social goals or problems noted in Phase 1."[11] The health goals of Cree people can be

[10] Shecapio, R. & Isheroff, I. (1996). *What Protects Youth From Getting Into Bad Habits: A Mistissini Community Study.* Internal Document.
[11] Green, L.W. & Kreuter, M.W. (1991). *Health Promotion Planning: An Educational and Environmental Approach.* California: Mayfield.

found in a study from the early 1990's by Naomi Adelson.[12] Naomi spent 15 months in the Northern Quebec Cree village of Whapmagoostuu studying the Cree concept of health. She asked Elders and community members what being healthy meant to them. Together they identified health with the Cree term "Miyupimaatisiiuwin", which translates literally as "being alive well."

The Cree concept of health is different from the modern world concept. Miyupimaatisiiuwin is a continuous attempt to be an integrated and balanced being, spiritually (through affinity with the Land and the Creator); emotionally (through harmonious relationships with others); physically (through being active and eating well); and mentally (through staying alert for hunting / working). It is a "holistic" view that sees an individual as a set of virtues that are connected. A person is not considered healthy in a balanced and integrated manner unless all four dimensions of their being are involved in the process.

Miyupimaatisiiuwin also incorporates cultural notions of well-being: "'Being alive well' is inseparable from community, history, identity, and ultimately resistance."[13] The traditional values of respect, caring and sharing are fundamental to Cree culture. Thus being healthy means helping others live a good life by "giving back" to your family and community. This sense of well-being cannot be attained by an individual alone but requires the involvement of a whole community.

Some way into the project, it was decided that the new curriculum would be titled the "Miyupimaatisiiuwin" Cree Wellness Curriculum (CWC). The "holistic" view of health became the unifying principle for presenting content, and the Cree concept of health and Cree values became introductory themes at each grade level. The Cree belief in "Giving Back" became the terminal objective and ultimate goal of the curriculum.

- **2.3 Family and Community Influences**

The *Precede-Proceed* Model's third phase involves identifying the social conditions in which health problems flourish and the competing messages that students receive regarding health. These influences "are those external to an individual, often beyond his or her personal control, that can be modified to support the behavior, health, or quality of life of that person

[12] Adelson, N. (1998). Health Beliefs and the Politics of Cree Well-being. *Health.* 2(1).
[13] Idem:7.

or others affected by that person's actions."[14] Cree students are most influenced by their family and the community in which they live.

- Family Influences

  A feeling of parental neglect (children living in boarding homes because their family is in the bush or off reserve) was voiced both in the Youth Forum and the Bad Habits Survey. A Family Violence Needs Assessment Survey conducted in Mistissini[15] also revealed a serious problem of family violence. This finding was based on 229 questionnaires answered from a population of 2600. The types of violence reported were: physical (65%); verbal (47.5%); psychological (31%); and sexual (28%). Women were more likely to be victims of physical and sexual violence compared to men. Male abusers were most often husbands, fathers, sons and boyfriends; female abusers were most often mothers. Violent acts generally started under the age of 10, and when asked if being abused at the present time, nearly 30% answered yes. It would appear, in Mistissini at least, the devastating habit of family violence is being passed on from one generation to another through the family.

- Community Influences

  A 1996 Community School Educational Project carried out by the Council of Mistissini and the CSB articulates through its statement of goals the social conditions in that community:

  - Promote community involvement in the education of our children (through teaching parenting skills, and regular visits by the Chief and Council);
  - Educate parents on how to be a positive influence (e.g., curfew, nutrition, neglect, hygiene, affection, lateness, discipline, importance of school, reading, and respect);
  - Create an awareness on the effects of Residential Schooling;
  - Promote a community awareness and a feeling of welcome and appreciation for teachers;
  - Teach values, culture and tradition through the use of Elders.

  The following comment was also made on the role of Elders in education: "If today's children can be taught and nurtured in the ways of our Elders

[14] Green, L.W. & Kreuter, M.W. (1991). *Health Promotion Planning: An Educational and Environmental Approach.* California: Mayfield.
[15] Travors, E. & Quesnel, J. (1993). *Family Violence Needs Assessment Survey 1992-1993.* Council of Mistissini Band.

and yet have the ability to learn the ways of the modern world then we can be assured of good leaders in Mistissini's future."[16] Risk factor research conducted during 1990-1995 by the CBH[17] suggests some modern world behaviors that students need to be protected from:

- the yearly average of genital chlamydia was 100 cases;
- 15-19 year olds had the highest rates of chlamydia;
- three of every four 15-24 year olds smoked cigarettes;
- three out of every four males and six out of ten females drank;
- half of the males aged 18-24 were inactive during leisure hours;
- seven out of ten youth aged 18-24 were over weight or obese;
- 9% (almost 1 out of 10) babies were born to mothers under 18.[18]

The above statistics reflect the kind of contradictory messages that students may be experiencing. Juggling the traditional wisdom taught by the Elders with today's influences from family and the community – and the world at large – is a major challenge facing Cree children and youth and something the new curriculum needed to address.

• 2.4 Student, Teacher & School Factors

The fourth phase of the *Precede-Proceed* Model focuses on other factors in the situation relevant to the quality of life goals, health problems, and environmental influences already identified. These have to do with students' knowledge, attitudes, and values (predisposing factors); teachers' attitudes and behavior (reinforcing factors); and the school's available resources, rules, or laws (enabling factors).

• Student Factors

During a visit by the Education Consultants in April 1997 to the schools in Oujé-Bougoumou and Mistissini, one principal commented that the provincial curriculum tendency to focus on reading, writing and arithmetic is a challenge for Cree students. Often there is no time for other courses, such as health, because reading skills are particularly low. Principals across the communities reported a lack of respect as the most serious problem in

[16] Cree School Board and Voyageur Memorial School. (1996). *Mistissini Community School Educational Project.* Internal document.
[17] Cree Board of Health and Social Services of James Bay. (1997). *Comprehensive School Health Program.* Proposal (Technical Version).
[18] Public Health Module, Cree region of James Bay. (1999). *Teen births in the Cree region and communities, 1985-1998.* Internal document.

students. This manifests itself in discipline problems (lateness and homework not being done); violence (a Grade 4 girl was gang raped in school, a young female teacher gang raped in her home); vandalism (the High School in Mistissini was set on fire); and absenteeism. The Mistissini Community School Educational Project also confirms that: "The students' morale to their education is low and the pride of their school is virtually non-existent."[19] By contrast, traditional Cree values of caring, respect, and sharing are held very highly by students.

- Teacher Factors

  The following comments were made about teachers at the Youth Forum:

  "Sometimes the teachers disrespect the students, and it puts the student down…The teachers should try to teach their class in a more interesting way…Students get bored because some teachers talk all the time."

  The reality is that many teachers in the communities are from "down South." Some integrate well into community life, others stay for only one or two years. Referred to as the "revolving door syndrome", these teachers are often fresh out of university, and lack teaching experience and cultural sensitivity.

  During 1996-1997, discussions on the school health project began with the school principals in Oujé-Bougoumou and Mistissini. Both were enthusiastic about the prospect of a school health program in their community. Lessons from the Northwest Territories School Health Program were provided as an example of what a health education curriculum could be like. Feedback sheets were provided for teachers to complete after reviewing and teaching each lesson. The questions focused on how interesting the lessons were for the children; how appropriate the teachers thought the topic was; and what changes they would recommend.

  Generally speaking, the teachers (mostly Grade 7 and 8) had enjoyed working with the materials and found most lessons to be very useful. Lesson topics were rated as appropriate and important. The main commentary was that students were hard to motivate, especially in brainstorming and role-playing activities. They are also not comfortable talking in large class discussions. The main recommendations were for more appropriate examples and materials to go with the lessons, in particular videos, games, and stories about adolescents.

[19] Cree School Board and Voyageur Memorial School. (1996). *Mistissini Community School Educational Project.* Internal document:30.

- School Factors

  Schooling is provided in the communities from Kindergarten through to Grade 8. The class sizes are small and so there are various combinations of linked grades. Wherever Cree teachers are available, the 1st cycle elementary is given in the Cree language. Students then follow either the English or French Quebec Curriculum. These language provisions tend to separate groups of students and teachers from each other. There is also a feeling of isolation among administrators and teachers who do not always feel appreciated and supported. Parents, Elders and other people in the community are not seen as involving themselves enough in school activities.

  Health lessons are provided by Community Health Representatives and other health professionals on nutrition and dental hygiene. NNADAP workers also have lessons on drugs and alcohol available. The new curriculum is intended to complement these existing lessons. It is also hoped that links between the school and health services will be strengthened through an understanding of aims of the curriculum. For example, the health promotion packages (videos and promotional materials provided by Health Canada and others) sent from the PHM often remain at the clinic without school personnel being informed of their arrival.

- **2.5 CSB & CBH Protocol**

  The final phase of analysis in the *Precede-Proceed* Model requires the "assessment of organizational and administrative capabilities and resources for the development and implementation of a program."[20] Funding of the Cree School Health Project by the CSB and CBH shows a commitment at the regional level to developing culturally specific health instruction.

  Moreover, in 1997, Bella Petawabano was hired to review an existing protocol agreement between the two boards. Her findings suggest that: "The majority of respondents are concerned about the low priority given to health education." Problem areas identified were: "...lack of support...lack of materials...lack of time...unavailability of health professionals to supplement health education...and lack of professional development related to teaching health education."[21] One of the main

[20] Green, L.W. & Kreuter, M.W. (1991). *Health Promotion Planning: An Educational and Environmental Approach.* California: Mayfield:31.
[21] Petawabano, B.M. (1998). *Partnership in Health.* Cree School Board Cree Health Board Protocol. Internal Document.

recommendations was for teaching materials to be in Cree for the 1st cycle elementary and to reflect Cree culture and values.

Other recommendations related to school health services (e.g., Sex Education, In-School Screening, Nutrition, Nursing Services, Psycho Social and Mental Health Services, Psycho Tropic Drugs, Detection and Follow-up of Victims of Abuse and Neglect, and Dental Health), and policies (e.g., access to student files, vandalism, safety, sexual harassment, community support, crisis intervention, student referrals, special needs, and home education). This range of services and policies is further evidence of the social conditions prevailing in the communities.

In 1995, the CBH identified two priority areas for special attention: diabetes and mental health. In the past ten years, the diagnosis of Type II diabetes in the Cree population has increased at alarming rates. Twenty years ago Cree communities were quiet, safe places where people rarely bothered each other inappropriately. This has changed with the increasing use of alcohol and other drugs. Alcohol and drug use are associated with dangerous behaviors which lead to preventable injuries, e.g., motor vehicle accidents, sexually transmitted diseases, and drowning. While these new conditions are not curable by the clinic, the CBH feels they are preventable within the communities if people adopt physically active lifestyles, good nutritional habits, and social habits which respect oneself and one's neighbors.

The next two sections summarize decisions taken in response to the priority issues expressed above. It is important to remember, however, that even a specialized school health curriculum cannot by itself solve the serious health and social problems facing Cree children and youth today. The final section of this report returns to the larger picture of school health and the long-term commitment needed to health education at every level.

• *3. Curriculum Design*

The "meat and potatoes" of an education is content, says Howard Gardner, a developmental psychologist at Harvard University. Content decisions are therefore fundamentally important in curriculum design. How should content be presented? How is it best mastered, put to use, passed along to others? To answer these questions, time can be spent on writing up a vast amount of learning objectives specifying the core knowledge that students need to be literate in a given subject area. In fact this is what a curriculum generally comprises. However, Gardner and others claim that coverage is the greatest enemy of understanding. Time is better focused on teaching persistently and earnestly those few important ideas that can really make a difference in life.[22]

When presenting content, the subject itself may lend itself to a particular sequence; or there may be a chronological order to events; or the decision can be based on prerequisite learning; or movement – from simple to complex, parts to whole, whole to parts, present into the past, concrete experience to concepts, or ever-widening circles of understanding. There may also be a combination of ways, or the students themselves may have a particular interest that could be the focal point.[23]

As explained in this section, a "depth over breadth" and "circular design" approach to content presentation was taken on the Cree School Health Project. This approach, combined with results from the needs analysis, guided decisions on curriculum goals, circle of themes, review of existing school health curricula, main content ideas, and K-8 learning objectives.

• 3.1 Curriculum Goals

Curriculum goals are general statements of what students will learn in a subject area based on the priority needs already identified. The following statement appears in the CWC teacher's manual:

The ultimate goal of the curriculum is for students to explore strategies for avoiding serious health risks, such as diabetes, alcoholism, substance and other abuses, as well as sexually transmitted diseases. Inspired by the word

[22] Gardner, H. (1999). *The Disciplined Mind: What all students should understand.* USA: Simon & Schuster.
[23] Doll, Ronald C. (1996). *Curriculum Improvement: Decision making and process.* USA: Allyn & Bacon:184.

"Miyupimaatisiiuwin", which means to live well as Cree, learning activities are designed to promote four recognized aspects of health – personal effectiveness, emotional balance, physical energy, and mental clarity. These aspects of health cannot be achieved by an individual alone but require the involvement of a whole community. This concept of being healthy by helping others live a good life is fundamental to Cree culture and Miyupimaatisiiuwin. Activities are designed into every lesson to contribute towards the ultimate goal which is "Giving Back."

The main criterion for curriculum goals in the Year 2000 is balance: "designs are sure to prove deficient if they attend only to subject matter without putting concurrent emphasis on why learners should and must learn it."[24] The above goal statement is consistent with this principle of balance. The Cree concept of "Miyupimaatisiiuwin" is there, as well as examples of what Cree Youth and others have to say about what threatens their quality of life. Cree values are also emphasized as important reasons for learning to stay healthy.

- **3.2 Type of Design**

As explained, Miyupimaatisiiuwin is a "holistic" view of health that aims to develop individuals who are well-balanced spiritually, emotionally, physically, and mentally. This view can also be associated with the Native symbol of the Four Directions (also known as the Medicine Wheel and Sacred Circle). This powerful symbol has been used in Native Education as the spiritual foundation for social and cultural dimensions of healing education;[25] a model of self-esteem for understanding a child's development within his or her social context;[26] and a pattern to organize and understand qualitative data in traditional Native educational research.[27]

In traditional teaching, the directions of East, South, West, and North are superimposed on a circle, and each direction is associated with different meanings and different phases of human evolution. East is associated with Spring, spiritual energy, new beginnings, and the ability to focus attention on present time tasks; South with Summer, emotional energy, awareness, and sensitivity to the feelings of others; West with Fall, physical energy,

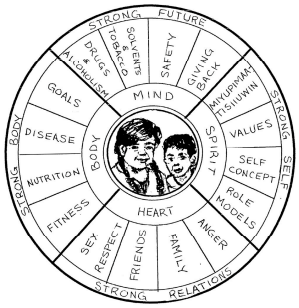
[24] Idem: 253.
[25] Regnier, R. (1995). The Sacred Circle; An Aboriginal approach to healing education at an urban high school. In: *First Nations Education in Canada: The Circle Unfolds*. Marie Battiste & Jean Barman (Eds.)
[26] Pepper, F.C. & Henry, S.L. (1992). An Indian Perspective of Self-Esteem. *Candian Journal of Native Education.* 18(2).
[27] Hampten, E. (1995). Towards a Redefinition of Indian Education. In: *First Nations Education in Canada: The Circle Unfolds*. Marie Battiste & Jean Barman (Eds.)

introspection, and the management of power; and North with Winter, cognitive energy, wisdom, and seeing how all things fit together.[28] Animals also symbolize a particular strength or characteristic in Native philosophy that can be associated with the Four Directions.[29]

As illustrated in Figure 2, the meanings associated with the Four Directions provides a powerful tool for selecting and sequencing content. To model the balanced and connected nature of the curriculum, content themes associated with priority health issues and "Miyupimaatisiiuwin" values are presented in a circular design around the Four Directions. Students revisit the same sixteen themes year after year, each time from a slightly different angle. These themes are described in Section 3.4 below.

NORTH
Winter
Cognitive energy
Wisdom
Seeing how all
things fit together
(Moose = Respect)

WEST
Fall
Physical Energy
Introspection
Management
of Power
(Bear = Strength)



EAST
Spring
Spiritual Energy
New Beginnings
Focus on
Present time
(Goose = Skills)

SOUTH
Summer
Emotional Energy
Awareness
Sensitivity to the
Feelings of Others
(Wolves = Teamwork)

Figure 2: CWC Circle of Themes Associated with the Four Directions

[28] Four Worlds Development Project. (1988). *The Sacred Tree.* University of Lethbridge.
[29] Sun Bear, Wabun Wind, & Crysalis Mulligan. (1992). *Dancing with the Wheel: The Medicine Wheel Workbook.* New York: Simon & Schuster.

Four animals have also been associated with the "Miyupimaatisiiuwin" curriculum journey: the Goose with self-identity, Wolves with relationships, the Bear with physical strength and introspection, and Moose with the future. These animals appear in the curriculum's cover design drawn by Cree artist Jean-Pierre Pelchat (a colour version of the image on the front cover of this report). Each year, the journey begins in the East with Geese to allow knowledge in; moves through the South to visit relationships with the social Wolves; continues West through the physical strength and introspection of the Bear; and comes full circle North to the Moose with the cumulative wisdom achieved to make clear, healthy lifestyle choices for the future.

- **3.3 A Review of Existing School Health Curricula**

Once the circular design and CWC themes were agreed upon, various existing school health curricula were reviewed to assist in the elaboration of content. These curricula included the Ministry of Education in Quebec's (MEQ) Personal and Social Education Program; the Northwest Territories (NWT) School Health Program; Mokakit, the First Nations Alcohol, Drug and Substance Abuse Prevention Curriculum; and other health interventions from the United States and Quebec.

- MEQ Personal and Social (P&S) Education Program

In 1995, the MEQ P&S Education Program offered a conceptually elaborate health curriculum. It comprised a set of general objectives, terminal objectives (grouped for 1st and 2nd cycle elementary), intermediate objectives, work themes, and content topics under five interrelated headings: "Health Education", "Sex Education", "Consumer Education", "Interpersonal Relationships", and "Life in Society." The objectives for Health Education were attained through topics such as:

- proper body functioning and sensations;
- eating habits, hygiene, and mental health;
- pollution, and dangerous objects – tobacco, alcohol, and drugs;
- safe and unsafe behaviors – driving, fire, TV; and
- wealth of the environment and leisure activities.

The program was based on a multidisciplinary approach with various dimensions of health related to social studies, ecology, biology, sociology, anthropology, and philosophy, as well as economics. The relationship of topics both within the program and between the program and other subject

areas was clearly defined but not exemplified. Specific subject matter and lesson ideas were also not included in the curriculum.

The MEQ objectives were broken down into so many component parts they were not easily related to the CWC design. This was considered a task outside of the development team's mandate. It may be just as well since the MEQ has now joined forces with the Ministry of Health and Social Services to promote a new comprehensive school health concept.[30] A new list of essential competencies in health and well-being is to be implemented as part of its education reform for the year 2000.[31] Although these competencies are equally as elaborate as the P&S curriculum, they could usefully be reviewed in relation to the new curriculum, either before or during implementation**.**

- NWT School Health Program

  The NWT School Health Program combines both health education and alcohol and drug prevention. Developed in 1987 by the Department of Health and the Department of Social Services in consultation with the Department of Education, the goals of the program are:

  - to provide factual information on the human body;
  - to enable students to develop skills that, along with the factual information, will allow them to make informed choices related to health;
  - to enhance students' self-esteem through self-understanding;
  - to enable students to develop attitudes which lead to positive lifestyle behaviors; and
  - to promote positive lifestyle practices which are conducive to lifelong health.

  The curriculum has 7 units organized visually as segments of a circle, with up to 7 themes per unit, and between 4 and 12 objectives sequentially organized from Kindergarten to Grade 9. For each objective, there are corresponding teacher and student activities for 3 x 30 minute lessons per week at the elementary level, and 2 x 45 minute lessons per week at the junior high level. The curriculum includes a complete set of student work sheets and teacher background information. The dual purpose of the

[30] École en santé. (1999). *Project d'Orientations pour le Soutien de l' École en Matière de Promotion de la Santé et du Bien- Être.* Document de Travail.
[31] Le Groupe interministériel sur les curriculums Volet santé et bien-être. (October 1998) *Compétences essentielles*. Gouvernement du Québec.

curriculum is to provide students with English vocabulary and sentence patterns necessary to succeed in school, and to learn about health concepts.

Originally it was thought that a quick revision of the NWT School Health Program would be sufficient to meet the requirements of the Cree project. However, when excerpts were pilot-tested with teachers they felt overwhelmed by the pace of lessons. They also confirmed that activity sheets were visually inappropriate for Cree children, and the focus on writing was doomed for failure and detracted from the health messages. Based on this feedback, only the most interesting lesson ideas relevant to CWC themes were extracted to help in planning, and student work sheets were redrawn as necessary. The visual representation of content in a circle also inspired the CWC circle of themes.

- Mokakit

  In 1992, the Mokakit Education Research Association produced a K-8 First Nations Alcohol, Drug and Substance Abuse Prevention Curriculum based on community involvement and approval by educational and government leaders. The curriculum is intended as a national, culturally relevant model. It has four design principles: "interdisciplinary" (fits with various subject areas); "inquiry-based" (active learning and critical thinking); "pro-active" (informed decision-making); and "holistic" (individual, family, community, and First Nations heritage). The content is organized in four units:

  - self-esteem and self-worth;
  - alcohol, drug and substance knowledge;
  - volition and decision-making; and
  - traditional values and culture.

  Mokakit includes a complete set of learning activities, mostly involving reading a story and drawing a picture, or watching a video followed by discussion. There is also a comprehensive list of resources, as well as implementation guidelines. Like the MEQ and NWT programs, the problem lies in its comprehensiveness. It is huge (eight large binders), so people feel overwhelmed by the amount of reading involved. Also, lesson ideas are not always sufficiently developed for practical use in the classroom and the resource list is out-of-date. What Mokakit does provide, however, are examples of how to design health lessons based on traditional

values and culture.

- Other School Health Interventions

  The other main school health curriculum reviewed was "Step by Step to Comprehensive School Health", produced by the Californian group ETR Associates in 1972. It offers a complete set of K-6 health lessons grouped under ten themes: Growth and Development; Mental and Emotional Health; Family Life and Health; Nutrition; Substance Use Prevention; Personal Health and Hygiene; Disease Prevention and Control; Injury Prevention and Safety; Consumer Health; and Community and Environmental Health. The scope and sequence is presented by main topics in a two-page matrix that makes the developmental nature of the program easy to grasp. Although of good quality, the health lessons were culturally inappropriate. The package is also large and expensive.

  ETR Associates also offer a comprehensive school health package for the middle grades which focuses on (at Grade 6) Peer Relationships; Tobacco; Family Relationships; Communication and Anger; Environmental Health; (at Grade 7) Self-esteem; Drugs; Fitness and Health; Puberty and Reproduction; and Injury Prevention; and (at Grade 8) Violence; Abstinence; Nutrition and Body Image; Consumer Health; and HIV and STD. Both ETR programs inspired some lesson ideas in the CWC.

  Another health intervention considered was the Nil Mahk ilniun (Life and I) Project.[32] This community health project addresses the absence of educational materials designed specifically for Quebec Native people. It is designed based on a holistic approach aimed at fostering the four dimensions of an individual's development: physical, emotional, cognitive, and spiritual. In 1997, courses of study were available for Grades 4, 5 and 6. Each topic has one learning activity or more. The activities have snappy titles and a similar format: beginning with a brief introduction, followed by factual information and then a student activity, usually a role-play or skit. Social and community workers from a variety of spheres, rather than teachers, lead the activities.

  The Nil Mahk ilniun Project provided inspiration by its one topic, one activity approach, and by its use of lesson titles to translate main curriculum ideas into words that children and youth can identify with. The pedagogical use of role-play, however, was not seen by teachers in the

[32] Centre Amishkuisht. (1990). *Programme Nil Mahk ilniun (La vie et moi).* Health and Welfare Canada.

communities as an appropriate strategy for Cree youth. The project was also discovered too late in the development process to justify its purchase.

A further model considered was conceived by the Centre de Psycho-Educatif du Québec for intervening in schools where violence is unacceptably high.[33] The objective of this model is to develop respect in students for a set of fundamental values identified through a consultation process with parents, students, teachers, and administrators. A simple questionnaire is sent to parents asking them to list five things in their home they value most highly and five things they do not accept. The same questionnaire is administered to students and teachers with respect to life in school. A team comprising parents, students, and teachers analyze the results. The five things most highly rated become a new set of school rules.

Once identified, these values are posted in the school and protected through a process of reparation – a consequence for students who do not respect the values, as well as a reward for those who do. The values are reinforced by monitoring student behavior. After three infractions, a personal intervention plan is decided upon through discussion with the student, the parents, and a committee of student representatives and teachers. The plan must involve a demonstrated change of behavior over a two week period. Students with less than three infractions are invited to a special end-of-term activity. Initial consultations for the intervention can take 4-6 months. Time must be devoted at the beginning for ownership and promotion. Supervisors must also be designated to regulate the system.

Although not a health curriculum as such, it is possible that aspects of this intervention model could be implemented with the CWC. Many curriculum themes translate into family values, and even new school rules, that could be protected and monitored in a similar way.

- **3.4 Main Content Ideas**

Once the decision was taken to develop a specialized curriculum, the CWC Circle of Themes was gradually elaborated into main content ideas. The following outline explains the idea behind each curriculum unit and theme.

Unit 1: "Strong Self" corresponds to Spiritual Wellness – an individual's relationship with the Land and the Creator.

[33] Guy Ste-Marie. (1997). Directeur service aux élèves, Pensionnat des Sacrés-Coeurs. Personal Interview.

- Theme 1: "Miyupmaatisiiuwin" introduces students to the Cree "holistic" view of health through the design of the curriculum design. Students engage in cultural activities to strengthen their identity with the new curriculum.
- Theme 2: "Values" promotes the Cree values of respect, sharing and caring, as well as the traditional values of love, courage, trust, humility, and wisdom. A different value is focused on at each grade level through the reading of children's stories.
- Theme 3: "Self-concept" builds students' self-esteem through self-awareness activities. The idea is for students to discover their unique talents and how they can help each other feel good about themselves.
- Theme 4: "Role Models" introduces students to the National Native Role Model Program through video. A different profile is shown each year. Opportunities are also given for students to identify positive role models in their community.

Unit 2: "Strong Relations" corresponds to Emotional Wellness – the place of the heart, generosity, and sensitivity to the feelings of others.

- Theme 5: "Anger" deals with conflict issues. It encourages awareness of different feelings. Students also explore strategies for defusing stressful situations that lead to confrontations and violence.
- Theme 6: "Family" teaches about family responsibilities and the importance of family traditions. Lessons in the older grades emphasize that teenage pregnancy is a responsibility not to be taken lightly.
- Theme 7: "Friends" teaches about the qualities of a true friend and reinforces the importance of friendship. Strategies are also explored for avoiding negative peer pressure.
- Theme 8: "Sex Respect" teaches about how babies are made, as well as changes in the body through puberty and adolescence. The idea is to provide opportunities to discuss influences on sexual decision-making, in particular the sensitive topic of sexual abuse.

Unit 3: "Strong Body" corresponds to Physical Health – the different ways we can maintain a healthy body and prevent physical illness.

- Theme 9: "Fitness" promotes the importance of being active through sports activities and cooperative games. Students explore different ways of avoiding the problem of being a "couch potato."

- Theme 10: "Nutrition" promotes the importance of eating healthy food. Respect for traditional foods and the idea of food choices are both emphasized, as well as the link between diet and diabetes.
- Theme 11: "Disease" teaches about the link between disease and life-style choices. At the younger grade levels, lessons focus on basic hygiene, the older students learn about how to prevent the spread of sexually transmitted diseases (chlamydia and AIDs).
- Theme 12: "Goals" encourages students to set personal health goals and to help each other achieve their goals. The idea is to look back reflectively over previous lessons and to set goals for improvement.

Unit 4: "Strong Future" corresponds to Mental Health – the need to overcome roadblocks to clear thinking and healthy living.

- Theme 13: "Drugs & Alcohol" teaches the facts about drinking and drug abuse (marijuana). Students learn about the harmful effects of poisonous substances and alcohol on the body.
- Theme 14: "Solvents & Cigarettes" teaches the facts about sniffing and smoking. Students learn about the effects of solvents on the brain and the body, and the harmful effects of cigarette smoke.
- Theme 15: "Safety" emphasizes the need to prevent injuries on the Land and in motor vehicles. Students discuss safe practices, as well as the sensitive topic of suicide prevention.
- Theme 16: "Giving Back" revisits every lesson by having students prepare an end-of-year summary presentation to the community. The idea is for students to engage in health promotion by passing on what they have learned about Miyupimaatisiiuwin values to others.

It is important to note that the above content evolved over time. A matrix of themes and grade levels was printed on a large piece of paper and pinned to the wall. The matrix was gradually filled in as resources and lesson ideas came together creatively into a final product. It is expected that they will continue to evolve in the future.

• 3.5 K-8 Learning Objectives

A well designed health curriculum provides a coordinated set of developmentally appropriate learning objectives built upon a distinct health education philosophy of prevention.[34] Specifying learning objectives

[34] Davis, R.L., Gonser, H.L., Kirkpatick, M.A., Lavery, S.W., & Owen, S.L. (1985). Comprehensive School Health Education: A practical definition. *Journal of School Health*.. 55(8).

involves other aspects of sequencing to do with continuity, scope, and balance. Continuity relates to sequencing across grade levels in the school system; scope relates to sequencing across each school year in terms of the number of lesson periods devoted to a subject; and balance relates to the developmental needs of learners.[35]

The scope and sequence of the CWC comprises a set of themes for teaching across grade levels, together with a set of learning objectives associated with each theme across each school year. These objectives develop from simple, language-based objectives, to more complex and thought-provoking objectives. The CWC matrix of K-8 learning objectives is included in Appendix I. The objectives are written in concise language so that the holistic and cumulative nature of the curriculum can be easily grasped.

As explained, using an existing school health curriculum in its entirety was not a feasible option on the Cree School Health Project. Lesson ideas were extracted and associated with the CWC themes, but the conceptualization of content could not be photocopied from another program. The curriculum design needed to be Cree-specific, both in a cultural and philosophical sense. It also needed to be pedagogically sound, while being easily understood by students, teachers, parents, administrators, community health representatives, and the curriculum development team.

[35] Doll, Ronald C. (1996). *Curriculum Improvement: Decision making and process.* USA: Allyn & Bacon.

• *4. Curriculum Development & Evaluation*

Often, the curriculum decision-making process ends with an elaborate set of learning objectives for classroom teachers to develop into lesson plans themselves, taking into account the needs and developmental level of their students. The unique feature of the CWC is that this time-consuming work has been done by the development team. The new curriculum includes a complete set of ideas on how teachers might best present health messages and how Cree students might best interact with the subject matter.

A variety of resource materials have also been selected or created specifically with Cree students in mind. This respect for variety is in recognition of individual differences in learning. Howard Gardner has developed this idea of intellectual diversity into a Theory of Multiple Intelligences. This theory claims that some people see the world around them analytically; others define things with words; others feel reality "in their bones"; and so on. These different ways of learning are defined as follows:[36]

- the *linguistic* learner likes to listen and play with words in reading, writing, and speaking;
- the *logical-mathematical* learner likes to play strategy games and experiment with and explore numbers and patterns;
- the *spatial* learner likes to learn from visual presentations and putting visualizations into drawing, building, designing, and creating;
- the *musical* learner likes to sing, hum, play instruments, and generally respond and learn to music;
- the *kinesthetic* learner likes to move, touch, dance, play sports, do crafts, and learn through movement and touch;
- the *interpersonal* learner has lots of friends and likes to share, compare, cooperate, and learn with and from others;
- the *intrapersonal* learner likes to work alone at his/her own pace, producing original, unique work.
- the *naturalist* learner (an eighth intelligence recently added to the list[37]) likes to identify and classify patterns in nature.

[36]Jasmin, J. (1996). *Teaching with Multiple Intelligences.* USA: Teacher Created Materials Inc.:38.
[37] Multiple Intelligences: Theory and Practice in the K-12 Classroom @ http://edweb.gsn.org/edref.mi.th8.html

Gardner further believes that we are all born with these various intelligences but no two people have the exact same mosaic. Students are more likely to succeed, that is to be "at promise" rather than "at risk", when they are aware of what motivates them to learn and focus their attention and efforts in that direction. He also believes accepting and truly valuing diversity means spending time on developing an individual's strengths rather than wasting time on remediating their weaknesses. His view of an ideal school is "a place where individual students will have their intelligences recognized and where they will be placed in a position to use those intelligences, and where their achievements will be evaluated in the context of the same intelligences."[38]

In this section, Gardner's theory and other pedagogical techniques offer a rationale for decisions made on lesson plan format, resource materials, and the assessment of student learning. The evaluation process engaged in so far when pilot-testing and validating the new curriculum is also summarized.

- **4.1 Lesson Plan Format**

The CWC includes a complete set of lesson ideas for each of the K-8 learning objectives specified in Appendix I. Like content design at the macro level, the predominant decision in lesson planning has to do with format. How are content ideas best presented? Is there an ideal sequence? Which pedagogical method is most appropriate? Answers to these questions depend for the most part on the type of learning outcome desired. The main focus in the CWC is on promoting an understanding of the concept of "Miyupimaatisiiuwin", therefore, each lesson is divided into four parts corresponding to a recommended process for concept development:[39]

- Wellness Message (labeling the partial concept)
- Focus Attention (arousing interest and content presentation)
- Activity (students interact with examples or develop their own)
- Reflection (discussion of the activity in relation to main concept)

[38] Jasmine, J. (1996). *Teaching With Multiple Intelligences.* USA: Teacher Created Materials:13.
[39] Smith, P.L. & Tillman, J.R. (1993). *Instructional Design.* Maxwell Macmillan Canada:194.

Within this format, various pedagogical techniques have been selected specifically with Cree children and youth in mind. To help students remember what they have learned, each lesson has a snappy title and "hands on" activity. Very often the title is the same as the resource used or learning activity in the lesson. For example, at Grade 6, Lesson 2 is called "Dreambirds" because this is the title of the book to be read on the value of humility. Lesson 9, on the importance of keeping in good physical shape, is called "Move it or Lose it!"

The Tribes Cooperative Learning technique of "talking circles"[40] has also been incorporated into many lessons. This approach builds collaborative skills in three stages: inclusion (getting to know one another); influence (valuing differences); and community (working together creatively). As the name implies, students sit in a circle and share their own experiences and how they feel about content-related issues. Key to the success of this strategy is respect – students must be given the choice to speak or not, and nobody must be allowed to interrupt or criticize anything that is said by another student. This is the same kind of process used in traditional healing circles.

Given the personal nature of some of the discussions, it is intended that lessons span several class periods to allow for unhurried discussion. It is also intended that teachers manipulate the lessons depending on the interests and experience of their students, as well as their own comfort level with the teaching approaches recommended. Extension ideas are also included to encourage experimentation and follow-up should time permit.

- **4.2 Resource Materials**

Most lessons in the CWC are designed around a variety of motivating resource materials. Two products created specifically for the younger grade levels are the Miyupimaatisiiuwin *4 Kids Activity Book* and the Miyupimaatisiiuwin *Let's Live Well* song tape and song book. The activity book, drawn by Cree artist Jean-Pierre Pelchat, includes an animal sketch for each of the sixteen curriculum themes, corresponding to the four animals associated with the Four Directions. These sketches provide a visual way of introducing curriculum ideas in Kindergarten and Grade 1, regardless of the language used. Figure 3, for example, shows the sketch for the lesson on Family.

[40] Gibbs, J. (1994). *Tribes: A new way of learning together.* USA: Irwin.

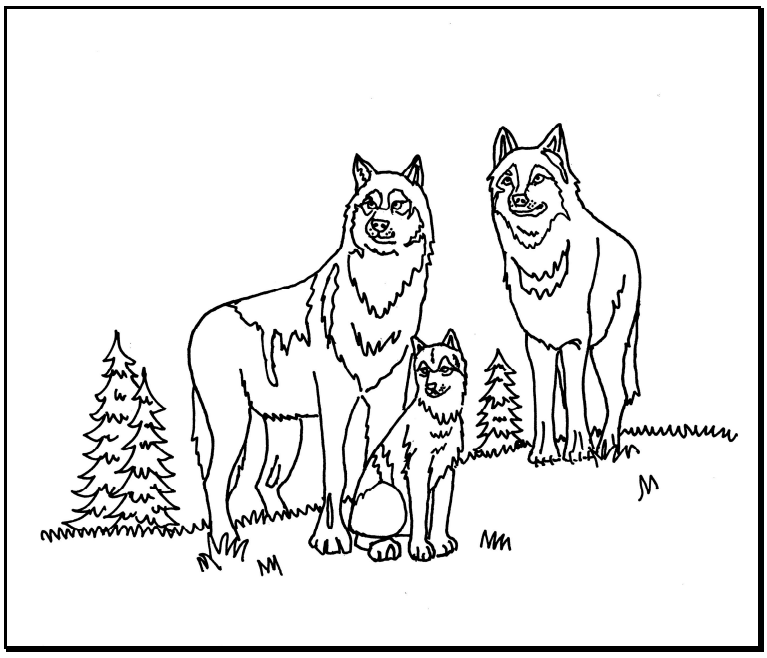


Figure 3: Extract from the Miyupimaatisiiuwin 4 Kids Activity Book

The Miyupimaatisiiuwin songs, composed and sung by Barbara Reney, introduce in Grades 1 and 2 the values students will encounter as they move up through the grade levels. For example, the song on "Sharing" used in Lesson 7 on "Friends" has the lyrics:

Sharing

My family shares the meat
So that we all can eat.
At home we share our love
That's what helps keep us strong.

We all help out at school
Sharing the jobs we do.
I share my toys with you
'Cause it makes me feel good.

Elders tell stories of
Eeyou (a)long time ago.
Sharing so we grow strong
Teaching where we come from.

Other resources recommended for inclusion in the curriculum are videos, mostly available free of charge from Health Canada and other not-for-profit organizations, e.g., *the National Role Model Program, Spirit of the*

Forest, Moccasin Flats, Children of the Eagle, A Hit for Mike, Mi'Kmaq Family, Chlamydia: A Silent Academic, Strong Futures, Kecia: Words to Live By, Circle of Warriors, Call of the Drum, and *Balance*. There are also illustrated children's story books on Values: *I Believe in Me, All I See is Part of Me, Nothing Ventured Nothing Gained, Secret of the Peaceful Warrior, Quest for the Crystal Castle, Grandfather 4 Winds and Rising Moon,* and *Dreambirds*; and on Sex Respect: *Where did I Come From? What's Happening to Me?*

There are a variety of games, such as the puzzle, *Hand-in-Hand;* the card games *51 Alternatives to TV, 52 Ways to Make a Difference, Medicine Cards,* as well as an adaptation of *Diversity* for teaching about the multiple intelligences. There is also the board game, *Caring Together,* produced by the Native Physicians Association that teaches about drug and alcohol prevention through the traditional values. There are out-of-class projects suggested, as well as computer-based projects, such as exploring the *Aboriginal YouthNet* web-site on solvent abuse, and (if funds are available) the interactive CD-ROM *Mauve* that covers youth issues of suicide, love, and school. In addition, each grade level has student work sheets adapted or created specifically for the CWC.

All this variety is what makes the CWC unique. The potential benefit in terms of motivation to learn, and teach, health education content should far outweigh the moderate additional costs involved.

- **4.3 Assessment of Student Learning**

Any new curriculum needs to be pilot-tested before implementation to check that it successfully achieves its goals. This kind of evaluation is discussed later in Sections 4.4 and 4.5. Another way of evaluating a curriculum is through the assessment of student learning by teachers in the classroom. The main criterion for selecting assessment techniques is that they relate closely to the curriculum, they must "reflect books read, ideas discussed, essays written, discoveries made, problems solved, art objects created, and music composed – all by the test subjects themselves."[41]

There are two ways of viewing assessment – as a necessary evil or as a positive aspect of learning. Howard Gardner favours a positive "student-centred" approach. He believes that any skilled practitioner involved in regular assessment can over time observe their own increasing skills as

[41] Doll, Ronald C. (1996). *Curriculum Improvement: Decision making and process.* USA: Allyn & Bacon: 268.

they discover problems and invent solutions on their own. From this perspective, students ought to be introduced to assessment at an early age, and encouraged themselves to join in the process of self-assessment.[42]

It is understood that health education is not being formally assessed in Cree community schools. The CWC therefore does not concern itself with how teachers will make either quantitative or qualitative judgements about student learning. There are no test items developed for the new curriculum or any guidelines on how to measure learning outcomes. Rather, the teacher's attention is drawn to the final lesson and ultimate curriculum goal of "Giving Back."

Similar across all grade levels, the "Give Back" lesson reinforces an important component of traditional culture. Students are offered the opportunity to put all they have learned into practice by inviting the community to participate in a year-end gathering in which the students present examples of what they have learned in their health lessons. Teachers are encouraged to have students decide together how they will go about doing this, and reflect afterwards on how well they worked together as a team. It is suggested that teachers distribute a Certificate of Achievement to all students to celebrate the efforts they have made to be healthy over the year.

This final lesson of the CWC and award ceremony should be tied in with any evaluation of the new curriculum. The level at which students, teachers, and the community (and the CSB and CBH) engage in this opportunity to share Miyupimaatisiiuwin values will reflect how well the curriculum is working towards its goals.

- **4.4 Pilot-Testing**

The curriculum development process has been strongly rooted in continuous evaluation efforts with teachers in the communities and health professionals. Curriculum decisions evolved through several rounds of pilot-testing with teachers in the Voyageur Memorial School in Mistissini and the Waapihtiiwewan School in Ouje-Bougoumou. These schools were selected because they offered a different perspective on community size and school structure. They are also in the same inland area where the development team could visit at reduced cost.

[42] Gardner, H. (1999). *The Disciplined Mind: What all students should understand.* USA: Simon & Schuster:38.

As mentioned in the needs analysis, in April 1997, the Education Consultants visited the two communities to meet with principals, teachers, and guidance counsellors to discuss their views on health instructions. Some classroom observations were done at the same time. Having used the MEQ P&S Program, and reviewed the NWT School Health Program, everyone was unanimous on the need for a more culturally appropriate health education curriculum. It was made clear that lessons for Kindergarten would need to be in Cree. The teachers in the French section said they would be keen to use health lessons once they are translated. Some teachers said they would be uncomfortable teaching sex education lessons without the complete backing of the administration. The principals also felt this should be an optional unit.

Having decided that a new curriculum should be conceived based on a review of other models of excellence, development of the Cree Wellness Curriculum (CWC) began. A new scope and sequence evolved with more appropriate content ideas and teaching strategies, as well as an increased emphasis on community resource personnel. Specific resources were selected, and the *Miyupimaatisiiuwin Let's Live Well* song tape was produced for the younger grade levels.

Pilot-testing of this first version of the CWC (blue cover) was initiated in December 1997 in the same two schools. At an orientation session, participating teachers (11) were generally enthusiastic. Former participants were pleased with the overall appearance of the new curriculum. The new principal in Mistissini liked the design but pointed out that these programs essentially "have a life of their own." The resource materials were greatly appreciated. The song tape was seen as very useful because it is new and upbeat. There was general agreement that parents and other community members should take responsibility for sex education, if they so desired. Since Kindergarten must be taught in Cree, these lessons were not included in the pilot test.

Evaluation sheets were provided for teachers to complete after each lesson. The evaluation questions focused on how interesting the lessons were for the children; how appropriate the teachers thought the topic was; and what changes they would recommend. Very few evaluations were returned. During this period the Mistissini school was closed down because of vandalism so withdrew from the pilot test. The teachers in Ouje-Bougoumou were also unable to test all lessons. The lessons they did teach were well received by students. The song tape in particular was a big success. Teachers asked for more resources like this. They also advised giving more attention to community lifestyles and concerns. During this

same period, copies of relevant sections of the curriculum were sent to the CBH Nutritionist and Dental Hygienist for their comments.

Based on this feedback, a new and improved version of the CWC (green cover) was developed. A Cree artist was hired to draw a front cover image for the curriculum that Cree children would identify with, as well as pictures for the *Miyupimaatisiiuwin 4 Kids Activity Book*. New lessons were created using preferred teaching methods, in particular small group work and discussions based on children's story books, videos, games, and popular songs. An original set of student activity sheets was produced. Many more lesson ideas were suggested, including opportunities for creativity, guest speakers (e.g., Elders, CHR's, NNADAP Workers, Peacekeepers), and exploring the Internet.

The new curriculum was well received by school principals at a meeting in Montreal. They expressed the need to adapt the songs into Cree, as well as lessons at the younger grade levels. Rather than engaging in another round of pilot testing in the classroom, it was agreed that the curriculum would benefit more from a process of validation with the principals and subject matter experts.

- **4.5 Validation**

In Spring 1999, a formal validation of the CWC was undertaken to ensure lessons and materials were culturally specific and age appropriate, as well as accurate and feasible. The validation took place with school principals, teachers, and health professionals in Chisasibi, Eastmain, Namaska, and Ouje-Bougoumou. Curriculum specialists, a school psychologist, and other health professionals with experience working in the communities also gave their comments. Below is a summary of the results from a detailed validation report.[43]

One of the main observations was that the holistic nature of the curriculum design and the original materials produced for lesson delivery are highly valued. As far as content accuracy and feasibility is concerned, the nutrition lessons were the most criticized. They were rewritten to be more consistent with the existing Nutrition Program used in the communities. Various other adjustments to lessons were necessary to be more culturally relevant and practical for teaching. It was also felt that the parents' guide

[43] Reney, B. (1999). *Miyupimaatisiiuwin Curriculum Validation Report.* Internal CBHSSJB Document.

to the Sex Education component needs rewriting to be more easily understood. These revisions to the curriculum have been made.

It was also reported that the curriculum would be more culturally appropriate with adaptation by Cree artists of the song tape and student work sheets. Given the language rules, adaptation of the work sheets is especially important for Grades 1 to 3. To maintain consistencym, however, adaptation across all grade levels is recommended. This adaptation will not be possible without further funding. Also, to be truly validated, the Cree culture teachers and Cree culture advisors in each community school, as well as Elders and community leaders, need to publicly approve the new curriculum.

It was beyond the scope of the validation to judge the age appropriateness of lessons and resource materials. The reason for this was because principals did not have the curriculum in hand soon enough to meet the deadline. They also felt that teachers needed time to teach the lessons and use the materials with their students before offering their feedback. Further testing with teachers will be necessary either before or during implementation for the developmental sequence of the curriculum to be validated.

Principals and teachers also expressed the need for training and support to teach the curriculum effectively. The many people referred to in lesson plans (Elders, parents, Peace Keepers, Community Health Representatives, NNADAP workers, etc.) will also need to be made aware of the important role they can play in achieving the curriculum goals. A public health promotion campaign is suggested for this purpose.

During the validation process some people expressed hurt feelings at not being involved in the curriculum development process earlier. Only teachers in two inland communities had participated in pilot-testing. The coastal communities may unfortunately feel their contribution has been ignored or rejected. It is therefore strongly recommended to involve as many people and communities as possible in the next phase of the project.

At a meeting in September 1999, the new curriculum was presented by Dr. Elizabeth Robinson and Barbara Reney to Clarence Tomatuk, Director of Education Services, CSB; Lynn Shallit, Co-ordinator of Instructional services, CSB; and Joe MacNeil, Supervisor of schools, CSB. The following comments were made concerning the materials:

- To fulfill the objectives of the MEQ Personal & Social Program and possibly some objectives from other programs like Moral & Religious

Education, the CSB could go to the MEQ and say "this is our program." This was done with Geography and History, and accepted by the MEQ. (This was the original idea of Emmett Nolan.)

- The CWC could be presented to teachers as "required material" for the MEQ program. Each lesson in the CWC would then need to include some information about what objectives in the MEQ program it helps to fulfill.

- The MEQ is working on a new education program for all grades that includes Moral & Religious Education, Physical Education, and Health. This new curriculum will start in Grades 1 and 2 in the Year 2000, and the same year or the year after, in grades 3 and 4. It will be necessary at some point to look at how the CWC fits in with this reform.

- The CSB is developing a new Kindergarten curriculum this year. The people working on this project should have a copy of the CWC Kindergarten level material so they can include it if they choose.

- The new curriculum would have to be translated into Cree to be taught in Grades 1 to 3, and into French to be available for grades 4 and up. It is not clear who would finance this.

- The CBH should send someone around to each community to teach teachers about the new curriculum. The CSB pedagogical counsellors are too busy to do this. This training would have to take place on pedagogical days. When the Mokakit (another health curriculum from a few years ago) came out, this is what was done.

At this point in the history of the Cree School Health Project, there are important decisions still outstanding to do with approval of the new curriculum within the school system; integration with other curriculum initiatives; adaptation of materials; and professional training. All these decisions hang on larger decisions to do with vision-building and financial support. The second part of this report has been written to help inform these larger decisions surrounding implementation.

• *Part II: Moving On*

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5. Implementation

Classroom instruction in health, including teacher preparation, can be implemented as a single innovation or as part of a collaborative school approach. Many people, including the World Health Organization (WHO), see health education as only one component of school health. Other components have to do with health services in schools (including school psychological, counselling and social services, as well as food services and safety), and a healthy school environment (the physical and psychosocial environment, as well as integrated efforts between schools and communities to improve the health of young people).[44]

A school health model used widely in the U.S. extends this definition to emphasize staff wellness and physical education. Health Canada's Comprehensive School Health Model further defines social support in the community as family, peers, positive health role models, and appropriate public policy.[45] The Quebec Government's "healthy schools" concept focuses on the need for collaboration (consensus, financing, and leadership) between public health and education at the national, regional, and local levels.[46] Common across all these definitions is the need for collaboration among the many people who serve the same individual children and youth: "Children should not be solely responsible for having to reconcile the vast array of health-related messages which bombard them regularly."[47]

The literature is full of practical ideas on how to support and encourage a collaborative approach to school health. Part II of this report summarizes ideas for consideration when implementing the "Miyupimaatisiiuwin" Cree Wellness Curriculum. These ideas are presented in relation to five areas of concern: a common vision, financial support, leadership, professional development, and family and community involvement.

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[44] WHO Expert Committee on Comprehensive School Health Education and Promotion. (1997). *Promoting Health Through Schools.* Geneva. Technical Report 870:10-12.
[45] http://www.hc-sc.gc.ca/hppb/children/english/sec1-1.htm.
[46] MSSS et MEQ. (1999). *École en Santé.* Document de Travail.
[47] Elias, M.J. (1990). The Role of Affect and Social Relationships in Health Behavior and School Health Curriculum and Instruction. *Journal of School Health.* 60(4):159.

- **5.1 A Common Vision**

As well as an understanding of the new curriculum and instructional approaches used, a collaborative approach to school health requires consensus on who and what is involved. Consensus means agreeing on a common vision that can act like a magnet to pull people together. To empower people to act, this vision is best conceived by, communicated to, and accepted by, the many agencies and professionals who can collaborate to implement it. Successful implementation depends to a large extent on investment in this first step.[48]

An example vision of collaboration is the "sled concept" of education proposed by Willie Ottereyes, a teacher in Mistissini. In his analogy, the school, teachers and administrators are likened to the sled – the means of transport. Their responsibility is to serve the driver well by protecting the belongings on their way to the destination. The children are the belongings – the teapot, tent, blanket, axes and utensils, all with a unique and essential purpose. Their responsibility is to stay on the sled, and to get back on should they fall off. They are needed to help build a new and better future. The parents are the driver of the dog team – the ones who give direction. Their responsibility is to hold onto the reins so they know where the sled is headed, to maintain the sled in good working condition, and to help keep the belongings on board.[49]

By connecting children's future with the idea of shared responsibilities in education, this vision exemplifies a collaborative approach to school health.[50] It also reflects Cree culture and heritage, highlights common current constraints, and promotes health education as part of something larger that people can identify with. However the new curriculum is implemented, it requires a commitment grounded in Cree life: that's still the bottom line.

- **5.2 Financial Support**

Once there is a common vision of school health, a mechanism for ensuring on-going financial support can be built into the program. In addition to primary funding, a number of other sources can be investigated: the

[48] WHO Expert Committee on Comprehensive School Health Education and Promotion. (1997). *Promoting Health Through Schools.* Geneva. Technical Report 870:27.
[49] Cree School Board and Voyageur Memorial School. (1996). *Mistissini Community School Educational Project.* Internal document.
[50] Haynes, N.M. (1998). Promoting Holistic Child Development: A collaborative school health approach. *Journal of School Health.* 68(9).

community, income-generating activities in the school, private enterprises, and international agencies. Multisource funding helps to ensure long-term support and sustainability. It is further recommended that funders be asked to consider funding fewer but more collaborative projects at larger amounts of funding over longer periods of time, to allow implementation of innovative "systems change" approaches to school health and rigorous evaluations.[51]

- **5.3 Leadership**

There is no single approach to leadership recommended for school health programs. They can be managed by individual coordinators or work teams with a mandate for school health leadership[52], or through coalitions of interested parties and community leaders, or by a coordinating council.[53] Given the Cree context, a "holistic" notion of community teams based on the Hollow Waters Healing Centre might also be considered.[54] Working in collaboration with the Justice System, the mandate of these teams is to identify values and methods for fostering them, and then to focus on processes for responding to people who have lost or denied the traditional teachings. The teams include: community-based child welfare workers, NNADAP workers, community health representatives, mental health workers, band family service workers, nurses and nurses aides, and teachers and teachers' aides. A community team approach requires:

- breaking all the separate chains of confidentiality that keep each worker sharing information;
- designing common training in all the issues they face as a team (alcoholism, suicide, family violence, sexual abuse);
- having external professionals learn about and support the holistic team approach;
- securing the time and resources to embark on continuing team and individual healing.

[51] DeGraw, C. (1994). A Community-based School Health System: Parameters for Developing a Comprehensive Student Health Promotion Program. *Journal of School Health.* 64(5):192-195.
[52] Davis, T.M. & Allensworth, D.D. (1994). Program Management: A necessary component for the comprehensive school health program. *Journal of School Health.* 64(10):401-403.
[53] Kirby, D. (1990). Comprehensive School Health and the Larger Community: Issues and a possible scenario. *Journal of School Health.* 60(4):170-177.
[54] Ross, R. (1996). *Returning to the Teachings: Exploring Aboriginal Justice.* Canada: Penguin Books. 248-252.

It is further recommended that the people who take on coordinating and training functions in a community team approach are not from the community they serve.

- **5.4 Professional Development**

Another excellent way to bring people together to identify problems and propose solutions for improving health education is through professional development activities. There is research evidence to show that meaningful training and ongoing reinforcement in health promotion can increase how confident and prepared teachers feel when implementing new school health curricula, particularly those with sensitive subjects, e.g., sexuality education,[55] and complex designs, e.g., small group work.[56] Offering personal growth and wellness opportunities can also positively affect the level of fidelity teachers have to a new curriculum.[57]

An example of this kind of training is the Seaside Conference Model developed in Oregon. Organized as a week-long institute where school teams live the "wellness lifestyle", it includes stress management, exercise, good nutrition, and a variety of lectures and workshops. The Vermont School Board has also designed a highly successful school wellness program called Planned Action Toward Health (PATH). This program is organized so that schools can receive (on a competitive basis) small grants of up to $500 to support various health promotion activities, such as day-long in-service programs throughout the year, training for program coordinators, after-school programs, the purchase of exercise equipment, and monthly wellness breakfast meetings. In addition, PATH sponsors a bi-monthly newsletter that provides timely health-related information, as well as facilitates regional communication.

Both of these examples of professional development are based on the premise that teachers who feel good about themselves will transmit this to their students, thus enhancing the emotional climate of their school: "If we are serious about improving the quality of education, we must commit

[55] Hausman, A.J. & Ruzek, S.B. (1995). Implementation of Comprehensive School Health Education in Elementary Schools: Focus on teacher concerns. *Journal of School Health.* 65(3):81-86.
[56] Smith, D.W., McCormick, L.K., Steckler, A.B. & McLeroy, K.R. (1993). Teachers' Use of Health Curricula: Implementation of Growing Healthy, Project SMART, and the Teenage Health Teaching Modules. *Journal of School Health.* 63(8):349-354.
[57] Renaud, L., Chevalier, S, Dufour, R., O'Loughlin, J. Beaudet, N., Bourgeois, A. & Ouellet, D. (1997). Évaluation de l'implantation d'un curriculum scolaire: Pistes d'interventions pour optimiser l'adoption et l'implantation de programmes d'éducation à la santé dans les écoles primaires. *Canadian Journal of Public Health.* 88(5):351-353.

ourselves to improving the 'quality of life' that is experienced moment by moment by those who inhabit or are affected by schools."[58]

An innovative approach to encouraging this sense of community and interaction around school health is through an Internet-based learning forum. Teachers can exchange views and support each other, as well as receive up-to-date health information, in a specialized on-line "news group." The technology acts as a vehicle for teachers to talk about reflections on lesson plans and examples of students work. It can also provide interesting research possibilities for understanding stimuli for fostering, encouraging, and sustaining interaction around pedagogy.[59]

It is further recommended that professional development be preceded by a pre-service health education course required for obtaining teaching and community health credentials.[60] A model course, including the CWC outline, resources, and student activities, could be developed and implemented as a demonstration.

- **5.5 Family and Community Involvement**

Last, but by no means least, an important component of collaborative school health is the expectation of a close working relationship between the school and the community. Findings from research in the U.S. indicate that teachers, administrators, and parents have different expectations on parent involvement in school health education. Administrators and teachers want parents to come to the school, provide them with information, and assist their children with homework. Parents, on the other hand, think the school's role is to collaborate with them. They want a joint decision-making partnership. For this partnership to work effectively, it is essential to clarify expectations. This means agreeing on the basic obligations of parents and schools; parent involvement at school and in learning activities at home; and parent involvement in governance and advocacy.[61]

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[58] Schultz, E.W., Glass, R.M., & Kamholtz, J.D. (1987). School Climate: Psychological Health and Well-Being in School. *Journal of School Health.* 57(10):435.
[59] Duffy, T.M. (1999). *Fostering a Community of Practice Among Teachers: The Internet Learning Forum.* Presentation Notes.
[60] Allegrante, J.P. (1998). School-Site Health Promotion for Faculty and Staff: A key component of the coordinated school health program. *Journal of School Health.* 68(5):193.
[61] Epstein, J.L. (1987). What Principals Should Know About Parent Involvement. *Principal.* 66(3):6-9.

To ensure community awareness of the collaborative nature of school health, specific marketing strategies are also recommended:[62,63,64]

- create a calendar identifying school and community health-promoting events;
- highlight different components of the program each month of the school year, e.g., display students' work and public information, publish health-related puzzles in community newsletters, publish interviews with staff working in the component;
- organize work teams around specific health issues;
- provide a market kit with a sample press release, suggested timeline for promoting parental involvement, and a clearly written letter that explains the value of community involvement in health education;
- ensure information to parents and the public at large is written at Grade 8 reading level, and beware of the vocabulary used - metaphors best capture people's attention.

Another way to publicize and promote school health is by offering periodic awards and other forms of recognition for schools and teachers who achieve the goals and objectives of the program. An example is the "Healthy Me" award sponsored by the Metropolitan Life Foundation. Such recognition calls attention to the global nature of health education and provides useful role models for others.[65] This strategy also helps in monitoring what students are learning.

Concluding Remarks

To sustain initial enthusiasm and funding for the new curriculum and to monitor accountability, the manner in which the curriculum is implemented and the outcomes it achieves need to be documented. If implementation is successful, it is important to know how to replicate the process elsewhere; if not, it is important to understand which elements need changing. This is the role of evaluation and research. By collecting data before, during, and

[62] Davis, T.M. & Allensworth, D.D. (1994). Program Management: A necessary component for the comprehensive school health program. Journal of School Health. 64(10).
[63] Brock, G.C. & Beazley, R.P. (1995). Using the Health Belief Model to Explain Parents' Participation in Adolescents' At-Home Sexuality Education Activities. *Journal of School Health.* 65(4):124-128.
[64] Elias, M.J. (1990). The Role of Affect and Social Relationships in Health Behavior and School Health Curriculum and Instruction. *Journal of School Health.* 60(4):157-163.
[65] DeFriese, G.H., Crossland, C.L., MacPhail-Wilcox, B. & Sowers, J.G. (1990). Implementing Comprehensive School Health Programs: Prospects for Change in American Schools. *Journal of School Health.* 60(4):187.

after implementation and comparing results with similar programs implemented in different places, it will be possible to make appropriate and cost-effective corrections.[66]

The Miyupimaatisiiuwin Cree Wellness Curriculum is a dynamic collection of ideas for teaching about health and well-being that will continue to evolve as teachers and others in the communities interact with it. As the foundation of a well planned and collaborative school health program, it has the potential to influence young Cree people, their families, and the future health of the Eeyou Nation of Eeyou Istchee. However, it is vital to remember that the responsibility for health instruction does not rest solely with individual teachers. It will take more than an individual community too. What is needed is a long-term commitment to the idea of shared responsibilities in health education at every level.

[66] WHO Expert Committee on Comprehensive School Health Education and Promotion. (1997). *Promoting Health Through Schools.* Geneva. Technical Report 870:29-30.

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