Preschool Vision Screening and Mentoring Programs: A Complementary Approach to Eye Care for Aboriginal Peoples in British Columbia

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Aboriginal Preschool Vision Screening is a multi-year, partnership-based, and community-oriented early childhood vision screening initiative for Aboriginal peoples in British Columbia. It is funded by a grant from the Provincial Government and is hosted by the National Collaborating Centre for Aboriginal Health (NCCAH) at the University of Northern British Columbia (UNBC) in Prince George, BC.

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Executive Summary

Vision screening is a quick, efficient method of identifying eye disease or conditions. It is considered part of a continuum of care in that a positive screening test will result in referral to appropriate health providers and services. Vision screening is a widely accepted practice and is often incorporated into preschool or kindergarten programs because certain eye conditions such as strabismus (crossed eyes), amblyopia (lazy eye), and refractive errors (myopia, hyperopia or astigmatism) are time sensitive. Children should have their vision screened by age three in order to prevent permanent vision loss or learning impediments. To optimize this critical period of early childhood development, the Province of British Columbia announced an integrated, cross ministry universal hearing, dental, and vision screening strategy in March 2005 for every child in the province under the age of six.

In 2006, the National Collaborating Centre for Aboriginal Health (NCCAH) at the University of Northern British Columbia (UNBC) received funding from the Provincial Government to support the implementation of an Aboriginal-specific preschool vision screening strategy. The program is hosted by the NCCAH under its Aboriginal Preschool Vision Screening (A-PVS) program. The NCCAH is one of six National Collaborating Centres funded by the Public Health Agency of Canada. In partnership with the First Nations Health Society (FNHS), the Provincial Preschool Vision Steering Committee, and the Human Early Learning Partnership (HELP), the NCCAH is working to develop innovative, culturally appropriate, and sustainable approaches to vision screening for Aboriginal preschool children in BC.

The purpose of this report is to provide a summary of best practices in preschool vision screening programs and training models and to provide an analysis of how mentoring can contribute to successful, sustainable preschool vision screening to Aboriginal peoples in BC. Too often, programs are developed from the 'outside' with little engagement from the 'inside' at the community level. A review of the literature

indicates that engagement of the community at all levels of practice – setting priorities, strategic planning, decision-making, implementation, and evaluation - increases the likelihood of project sustainability. Incorporating mentoring in training programs has also been shown to contribute to sustainability, the establishment of lasting and professional relationships, and stronger community networks.

Study Programs for Vision Screeners: An Overview

The concept of vision screening, seeking to identify a disease or condition related to the eye, is a widely accepted practice in most of the developed world. Used wisely, it can be a powerful tool in the prevention of vision loss if certain criteria are followed (Holland, Stewart, & Masseria, 2006). The overall purpose of vision screening is to identify vision defects and refer the patient on to a vision care professional, such as an ophthalmologist or optometrist, for diagnosis and/or treatment. Due to its increased popularity, there is also a considerable amount of information that has been published regarding vision screening versus vision testing (C Green Health Info, 2005). This paper will define vision screening, vision testing and the service providers who are involved in each type of examination, review why vision screening is sometimes chosen over vision testing, and discuss vision screening programs that are in practice today. In addition, a review of advantages and challenges in program delivery will be presented and recommendations made for consideration in the development of the NCCAH's Aboriginal Preschool Vision Screening initiative in British Columbia.

Relevant Definitions

Screening is a process by which "a large number of persons are assessed by a fast, efficient method in order to separate them into different groups" (BC Ministry of Healthy Living and Sport, 2009: 7). Vision screening is administered by trained lay personnel or health professionals who have received training in screening methods. If a visual disturbance is identified, the patient is referred to trained ophthalmic person-

nel for diagnosis and treatment. Vision screening is differentiated from eye examinations which are administered by an ophthalmologist or optometrist who measure vision and general eye health. Ophthalmologists are medical doctors who specialize in the diagnosis and treatment of refractive, medical and surgical problems related to eye diseases and disorders (www.eyeglossary.net/). Optometrists specialize in vision problems, treating vision conditions with spectacles, contact lenses, low vision aids and vision therapy, and prescribing medications for certain eye diseases (www.eyeglossary.net/). Lay health personnel for vision screening are trained for specific screening programs, are often volunteers, and generally have had some experience working in a medical setting and/or with children. Depending on the program and the background of the potential screener, training can be provided either online, through instructional videos or print materials, or through face-to-face workshops. Hands-on training in a face-to-face format with instructor demonstration, participant practice, and immediate instructor feedback has been shown to enhance learning and retention of vision screening knowledge (Nottingham Chaplin & Bradford, 2007). While screening is an acceptable practice for vision evaluation, it is an identifying tool only and should not be confused with a complete eye examination (Holland et al., 2006).

In recent years, and especially in under-serviced communities, there has been an increased use of vision screening. These areas typically experience sporadic service delivery from visiting optometrists due to limited access (geographic isolation) and low population counts (average population on-reserve is 200). A needs assessment was conducted in March, 2008 by the NCCAH's Aboriginal Preschool Vision Screening program. Community Health Representatives and Public Health Nurses from First Nations communities province-wide identified concerns with the lack of care available in these communities for vision screening/ vision testing, as well as other types of health services such as dental and hearing screening/testing. Concerns were also expressed about the low continuum of care resulting from a high turn-over of health professionals. Patients often felt uncomfortable telling their medical histories to different health personnel at each

visit. As Minore, Boone, Katt, Kinch & Birch (2004) argue, continuum of health care delivery results in healthier communities because of an increased likelihood that people will receive the health services they require in a proper sequence and within a reasonable time frame. Based on Minore et al.'s model of health care delivery, the NCCAH is promoting a continuum of care and sustainability of a vision screening program in rural, remote and isolated communities in an effort to improve health outcomes.

General criteria for vision screening that is followed in all training are condition, diagnosis, treatment and cost (Holland et al., 2006). For example, the condition should be an important health problem with a history that is adequately understood with symptomatic stages; a suitable diagnostic test should be available, safe, and acceptable to the population concerned. In terms of the process of diagnosis, treatment should be sustainable, there should be an acceptable and established treatment or intervention for individuals who have been identified as having a visual concern, and the cost of diagnosis and treatment should be affordable regardless of socioeconomic background (Holland et al., 2006). These criteria are significant factors in the vision screening programs discussed below.

Vision Screening Programs

This section provides a review of preschool vision screening programs both nationally and internationally, many of which serve as best practice models that can help to inform the implementation of a successful, sustainable preschool vision screening program to Aboriginal peoples in BC.

Iowa KidSight Program (2007)

The Iowa KidSight program is administered by Lions Club volunteers to conduct vision screening to children between 6 and 48 months of age in the general population. The volunteers receive training on the use of the MTI Photoscreener to photograph the child's eye. This screening tool is objective and was chosen

because many young children are not able to verbally communicate vision problems they may have. The training can be either one-on-one or group training and is provided by a more experienced vision screener. Once the photograph is taken, it is sent to trained staff at the University of Iowa Department of Ophthalmology and Visual Sciences for interpretation and results. The results are then returned to the families within a two week period. If a visual defect is noted, the caregivers are provided a letter of referral and list of ophthalmologists and optometrists in their area so that they can take their child to an eye care professional of their choice. Caregivers are asked to take an evaluation sheet to their eye care professional, and if this is not received back to the KidSight program within a reasonable period of time, a part-time coordinator charged with the responsibility of monitoring referral follow-ups will contact the family to identify any obstacles that may be preventing them from obtaining a complete eye examination for their child.

This method of vision screening has come under debate in recent years. The MTI photoscreener advertises it can detect all refractive errors, media opacities (such as cataracts), anisometropia, strabismus and astigmatism (http://www.photoscreener.com/), however evidence from two studies suggests that the photoscreener performs unsatisfactorily in children aged 1-4 with low prevalence of amblyopia (Cooper, Gole, Hall, Colville, Carden, & Bowling, 1999; Berry & Simons, 2001). Although methods of analysis varied in each study, the results were similar in that they found very high sensitivity and specificity were required to avoid over or under referral, but the photoscreener was not capable of such detail. False-negative results would therefore incorrectly reassure caregivers and health professionals that vision is normal and low sensitivity would result in children at risk of amblyopia not being detected at an age where detection is important.

Prevent Blindness America Vision Screening Program (2005)

Prevent Blindness America (PBA) is the only organization in the United States that offers a national vision screening and certification program for people to conduct vision screening in preschool and school-age

children. Screening procedures adopted by PBA are recommended by many of the nation's leading children's eye care professionals and researchers. Prevent Blindness' professional advisors recommend screening tests designed to accurately detect specific vision problems. This training and certification program ensures screeners are competent in multiple screening tool use and are comfortable working with a wide range of ages, and that screening services are consistent and highly effective.

There are three steps to this screening program. The first step is observational. The screener will look at the child's eyes for swollen or crusted lids, watery eyes, extensive rubbing of the eyes or tilting of the head. Comments from teachers and parents are also considered in this part of the evaluation. The second step involves the screener testing for distance visual acuity from a focus of 10 feet away. The third step involves stereopsis screening which can identify the presence of amblyopia. The comprehensive manual provided to all vision screeners provides information on types of screening equipment, space requirements for particular types of screening, room and equipment set-up instructions, and detailed guidelines for conducting screening tests. It also has activities to enhance learning, tips for screening, a glossary and other useful reference material. The screeners are all volunteers and are offered this training opportunity simply by registering with PBA. There are approximately 35,000 volunteers throughout the United States.

Project Universal Preschool Vision Screening (PUPVS) (2007)

This online training program for vision screeners is based out of West Virginia University (WVU) and builds upon an existing program established by the Pediatric Ophthalmology Section of the Department of Ophthalmology at WVU. The training program provides a chart format of the 'how to' of vision screening (http://www.medicalhomeinfo.org/screening/vision.html). The goal of this program is to train child health care providers, and while it would be straightforward if previous training in ophthalmology had been received or if the screener was a health professional, this program is not in a user friendly format for lay screeners due to

the vocabulary and structure of the chart. This program would prove ineffective for general training purposes but could be incorporated into continuing education once initial training and practical experience was received.

Vision for All Screening Program

The Vision for All Screening Manual was developed in 1995 by a group of non-profit optometrists and interested individuals who provide vision screening in the developing world (Godoy, 2005). The manual is designed for people with little or no knowledge about eye pathology and no experience working in the field of health. It is a thorough manual for the beginner vision screener and has a brief glossary of terms, discusses general eye pathology, and provides a detailed screening protocol including forms that require completion when the screening is done. The focus of screening is on strabismus, amblyopia, and astigmatism but also extends to diabetic retinopathy, trachoma, river blindness and cataracts. As a result of this broad spectrum of screening, there is no particular age group targeted.

The Vision for All Screening Manual is a great resource to use when considering screening in areas where there are logistical challenges in service delivery. It focuses on the needs of developing countries and the challenges they may face with organizing and implanting vision screening clinics. For example, the section on the administration of tests states the eye chart must be 5 meters away from the subject. The photo shows the eye chart tacked onto a tree and the child standing in the field at the required 5 meters. This is an excellent demonstration of the importance of being creative when working in rural or remote communities where space may be limited and a standard size room may not be available. In addition, this organization takes a train the trainer approach in that one person will be trained to do vision screening and will, in turn, train others in their own communities.

Head Start Vision Screening Program (2004)

The Head Start Vision Screening Program was developed in conjunction with the University of Arizona and the Tohono O'Odham Nation to examine astigmatism and amblyopia in Head Start preschool children. This was a four year project and all children enrolled in the Head Start program were eligible to receive free vision screening and eyeglasses, when necessary. There are three phases to this program: initial vision screening for ages 6 months to 2 years; an eye examination component for preschool, kindergarten, and grade one; and follow up vision testing for the same age group (preschool to grade one).

At the beginning of the project, the effectiveness of four screening tools was evaluated: autokeratometer, autorefractor, lea symbol acuity and photoscreener. Based on the results of a study by Miller, Dobson, Harvey, & Sherrill (2003), a hybrid approach to screening was adopted, which incorporated both autokeratometry and visual acuity testing (one line of letters) with the Lea Symbol acuity method. Vision screening is typically conducted by trained staff at the preschool. If the child passes the autokeratometry screening, the visual acuity test is administered. If the child fails the autokeratometry, he/she is re-screened on another day. If the child passes the autokeratometry test after the re-screening, he/she is not referred. If the child fails, he/she is referred to an ophthalmologist at the University of Arizona for examination, and eyeglasses are then prescribed if needed. The eye examination component of the program is for older children from preschool to grade one. The vision testing follow up examination is conducted with corrective lenses to ensure vision is improved with the spectacle prescription provided earlier. This examination is often carried out by the ophthalmologist but also can be administered by the one on-staff trained Tohono O'Odham Nation vision screener (http://www.eyes.arizona.edu/Research/VisualDevelopment/TOVSP/abouttovsp.html). Finally, the vision screener is also trained in fitting eyeglasses. Eyeglasses are available on site and repairs can be made when required.

There are several limitations to this program. While the University of Arizona has published widely on this program stating that four methods of examination are used, specifically the Marco Nidek KM-500 Autokeratometer, the MTI Photoscreener, the Nikon Retinomax K-Plus autorefractor, and the Lea Symbol visual acuity chart, the training manual only provides an overview on the use of keratometry and Patti Pics (Lea Symbol) visual acuity test for screening. A review of the available online manual states that "all children enrolled in the Tohono O'Odham Head Start program were eligible to receive free eye examinations…" (University of Arizona, 2004:4) which suggests that the screening is a complete eye exam. However, there is no reference made to a three tier type of screening process that includes an initial screening followed by two examinations. In addition, other vision programs use the terms 'pass' or 'refer' when speaking with the children or their caregivers about the results of their screening. These terms are appropriate in that there is no cause for alarm for the child or caregiver until a full visual assessment is complete. In contrast, the Tohono O'Odham Vision Screening program uses the term 'fail' instead of 'refer,' which can cause undue stress or apprehension about visiting an eye doctor as requested.

Unfortunately, the focus of screening in this program is on astigmatism and amblyopia. While Tohono O'Odham Vision Screening program argues they are screening for a wide range of ocular conditions, the strong focus on astigmatism and spectacle correction overshadows any other conditions. Also, the target audience allows for a broader range of screening and use of screening tools. The only methods of screening used was a keratometer that measures the curvature and reflection of the anterior surface of the cornea and the Patti Pics test. A keratometer is primarily used to diagnose the presence of astigmatism and to determine its degree and treatment (http://www.wisegeek.com/what-is-a-keratometer.htm). The Patti Pics test is used to determine visual acuity. While these testing methods can identify the presence of strabismus or amblyopia, the focus of this project seemed to be on screening for, identifying, and treating astig-

matism alone. Due to this limitation on the screening focus, one is left to wonder if the true goal of this program was to prescribe eyeglasses to children.

Rapid Vision Screening Tests for Schools – The Keystone View (2007)

Keystone View promotes the use of the VS-V Pediatric Vision Screener to examine visual acuity, visual fields, and colour defects, as well as the presence of phorias and amblyopia, in pre-school and school aged children, and disabled adults. The manual, titled *Rapid Vision Screening Tests for Schools*, is a very basic 'how to' of vision screening that only provides a general explanation of how to screen for stereopsis, visual acuity, and strabismus. This program is limited in its delivery due to the omission of photographs to provide a visual explanation of defects, the lack of a glossary of terms to use as a reference, and the omission of an introduction or discussion that outlines the importance of vision screening, who conducts screening, and the required training. The one benefit of this program is that is provides the proper question to ask the patient as well as the correct response required for a pass grade, and remarks and recordings the screener may review to ensure completion of each step of the screening process.

The Keystone View Rapid Vision Screening Tests for Schools does not appear to be affiliated with any vision screening program but is a stand alone vision screening option for purchase. The manual it provides is limited, considerable additions would need to be made to the training protocol, and further research of the instrument design would be required before this program could be recommended

Colorado Department of Education: Visual Screening Guidelines - Children Birth through Five Years (2005)

The Visual Screening Guidelines for the Colorado Department of Education were developed for Child Find Personnel targeting children from age 0-5, as well as children in school and children considered dropouts or not attending school on a continuous basis. As Child Find Personnel were already working with children

up to the age of 21, it seemed a logical step to train their staff in vision screening. The manual provides an excellent four point outline of why vision screening should be considered and defines the role of the Child Find Personnel in vision screening. This is the only screening program that highlights the role of the screening staff, which is an excellent point to consider in the development of screening programs as it decreases the chances of role confusion or error in the vision screening process.

The manual is generally well designed and easy to use. Photographs that describe the tests are used very effectively and the quantitative format of data collection (i.e. yes/no responses from the participants) is an efficient method for analysis. In addition, the manual provides a matrix of vision screening equipment and a screening management protocol that, if followed properly, significantly decreases the likelihood of errors or the omission of an important screening component. Finally, there is an appendix of forms for the vision screener that begins with parent questionnaires and ends with a referral letter to an ophthalmologist/optometrist. This complete list of forms is a wonderful resource for comparison purposes with other programs or to use as a template in the development of new training programs.

Minnesota Department of Health Vision Screening Program (2006)

Child and Teen Check ups, Head Start, Early Childhood Screening, and the School Program are the target groups for vision screening in the Minnesota Department of Health (MDH) Vision Screening Program. This program is administered by trained medical personnel such as medical assistants and/or nurses. For example, muscle balance screening (observation, corneal light reflex, cross cover and external ocular movements) is done by the nurse, and the medical assistant conducts the visual acuity test using a visual acuity chart. While the target age is 0–20 years, the majority of youth are screened by the age of 3. Organic health defects are always examined by a health professional with an ophthalmoscope, but general screening is done by volunteer screeners trained by experienced professionals. The online training program is

broken down into seven modules. After screeners have worked through this online manual, they should be able to describe the importance of vision screening and early identification of eye conditions, identify the procedures for vision screening, document screening results, and differentiate between subjective and objective components of vision screening. As well, general consideration is given to room size requirements, necessary equipment, and the importance of history taking, and planning and organizing a training program. Providing this information is an essential component to the success of any program, although it is generally an oversight in most program guidelines or workbooks that were examined. Incorporation of this manual or the use of this manual as a template for development of any preschool vision screening program would be recommended.

This manual is a best practices approach to vision screening programming. The recommendations provided on the types of tests that should be administered and when are endorsed by the American Academy of Ophthalmology, American Association for Pediatric Ophthalmology and Strabismus, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Association of Certified Orthoptists. The collaboration between these child care experts in vision assessment ensures the likelihood of successful program development and implementation. In addition, the Minnesota Vision Screening program works on the train the trainer model: training is provided at workshops by the Minnesota Department of Health (MDH) Hearing and Vision Conservation Program, with resources provided by the MDH. The newly trained screeners are then encouraged to train staff and volunteers located in the sites where services will be delivered. Overall, this manual is a thorough, precise, step by step guide that promotes vision screening to preschool children and youth. It offers initial training requirements, provides a detailed description of vision screening procedures, and offers online resources for continuing education.

Manitoba Vision Screening Program (2003)

This vision screening program is available for 5 to 17 year old children in Manitoba's school system. Vision screeners for this program are chosen based on the availability of local human resources, often recruiting parent volunteers, school staff, resource teachers, and educational aides for training and program implementation. Screening tools used for preschool children include the Random Dot E and Insta-Line Tests. Kindergarten and higher grades are screened using the Random Dot E, Insta-Line Tests, and the biopter test (Manitoba Vision Screening Program, 2003).

The main advantage of this program is that it is one of the few that have specifically trained staff at First Nations schools to administer vision screening using the Random Dot E and the Insta-Line Tests. One of the significant challenges is that the manual is not user friendly and would be of more benefit if a video accompanied it or if hands-on training was provided. Sole reliance on this manual for educating vision screeners would raise concerns about the reliability of results.

Alabama Eye Screening Program (Vision Research Corp, 2006)

The Alabama Eye Screening Program incorporates the use of the VisiScreen OSS-C which screens for a wide range of ocular problems specifically in children under age 6. This machine can detect conditions such as refractive errors, anisometropia, strabismus, opacities, and other visible eye abnormalities. Since this machine is portable and can be used by non-technical personnel, it would be an asset for under serviced areas. Another advantage is that the process is as fast as taking a regular photograph and requires no response from the patient. The VisiScreen OSS-C is based on NASA image processing technology which takes a photograph of the eyes. The photograph is then sent to ophthalmic personnel for evaluation. No eye drops are required, and the test is completely objective, which makes it an ideal testing method for young patients or patients with special needs. In 2005-06, the Alabama Eye Screening Program visited a

total of 834 locations, screened 97,000 children, and identified 3.3% with significant conditions requiring treatment by an ophthalmologist or optometrist.

Discussion

Preschool vision screening aims to detect vision disorders at an early age with the assumption that early detection will improve visual outcomes (Dunfield, 2006). The types of tests used, the age and underlying health of the children screened, and the training provided to the personnel may also play a significant role in the effectiveness of programs. Some argue that vision screening of any kind should only be administered by a licensed eye care professional (http://www.optometrists.bc.ca/), while others argue that vision screening is an appropriate method of a preliminary eye testing and when lay people are properly trained, results are similar to screening administered by registered nurses or other health personnel (Schmidt et al., 2004).

The effectiveness of preschool vision screening programs is variable. The programs presented in this paper are broad in scope but have many similarities in program delivery. Most of the programs discussed targeted the 0-5 age range, while others targeted the 0-21 age group. It is common practice in ophthalmology and optometry to recommend children have their vision assessed by the age of three to prevent long term vision loss if ocular conditions are present. The inclusion of older children in screening is also beneficial when assessing for visual acuity or the presence of astigmatism. Another positive aspect of these programs is that they all drew on volunteer resources. In some examples, screeners with on the job experience trained new screeners while in other examples, health personnel trained in vision screening trained volunteers. All programs promoted a strengths-based approach to available human resources in their communities and/or organizations. The train-the-trainer approach evident in many of these programs is a tool for ensuring program sustainability especially in rural, remote, and isolated communities. For example, in the Vision for All program, the train-the-trainer model was highly recommended due to the program focus of

working in rural and remote communities. Funding was provided to bring one person to head office for initial training and in return, that person was expected to train others in their community upon completion of training. Likewise, the Minnesota Department of Health program recognized the importance of the train-the-trainer model in program sustainability and offered funding to provide training with the expectation that person would return to his/her community and train others. Funding for in-community training was also provided by the Department of Health.

The availability of training manuals was another advantage of the outlined vision screening programs. These manuals varied in relevance to applied vision screening in that some provided very brief overviews of the vision screening process alone, while others were comprehensive manuals that provided information well beyond what was necessary for general vision screening. Manuals that would not be recommended for first time vision screeners with no ophthalmic background would be the Rapid Vision Screening Tests for Schools, the Vision Screening in Manitoba Schools, and the Project Universal Preschool Vision Screening program. These manuals were ineffective in promoting the need for vision screening or would require prior ophthalmic experience due to the generality of vision screening methodology. The program that was identified as having the most comprehensive training for volunteer screeners was Prevent Blindness America (PBS). PBS is the industry leader in vision screening training and their promotional material is widely distributed and easily accessible.

Although there are many similarities in program delivery, there are also significant differences. The only program that strives to ensure follow-up with caregivers once children have been referred to an eye care specialist is the Iowa KidSight program. Follow-up care is an important indicator of program success but a determinant that is often overlooked. Some programs reported follow up examinations with eye care specialists (i.e. Alabama Eye Screening program), but there was no information available on how follow-up

was ensured. This is an essential step in ensuring the sustainability of vision screening programs, yet the majority of programs reviewed did not address this.

Another challenge to successful program delivery is the type of screening method utilized in the program. For example, while the Iowa KidSight program incorporated good training methods with their volunteer program and ensured follow-up care was an essential part of training, screening was undertaken using the MTI photoscreener, a method of screening that has not been considered as effective as other methods in much of the published literature. There are other more effective, and cost effective, screening methods that provide more accurate results than those found with the MTI photoscreener. On average, the photoscreener yields 37% sensitivity on children less than 44 months of age, which increases the risk of children with amblyopia not being identified (Cooper et al., 1999). When compared to other types of screening that incorporate the HOTV, Random Dot E, or stereopsis testing, the results are more positive with sensitivity ranging from 60%-71% (Robinson, Bobier, Martin, & Bryant, 1999). Other than the Iowa KidSight program, recommended methods of vision screening were used by other reviewed programs, including an autorefractor, HOTV, Random Dot E test, Lea Symbol, and/or equipment designed specifically for vision screening such as the VisiScreen OSS-C using NASA technology.

Recommendations

The Provincial Vision Screening Steering Committee of British Columbia has determined that the best methods for vision screening to incorporate in the Preschool Vision Screening program in British Columbia is the SureSight vision screener, HOTV visual acuity chart, and the Randot test for stereopsis assessment. These methods of vision screening have proven to be reliable methods of vision screening with high sensitivity ratings and low incidences of missed diagnoses of children with serious eye conditions. While these methods of service delivery have been validated for vision screening in all populations, there are special

considerations for Aboriginal uptake of a PVS program that are outside of the quantitative assessment of methodology and that require collaboration/engagement and community cooperation.

Working with Aboriginal communities in program development, engaging gatekeepers in the communities in the earliest stages of development, and working together to develop a program that is culturally appropriate and in accordance with the needs of the community is critical to program success and sustainability. The specific needs of Aboriginal communities vary between and within regions, and program development must be recognized for a community based program to be successful. Historically, there has been little reason for the Aboriginal community to trust outsiders offering health services but with proper engagement, the community becomes a part of the development and implementation of the program and not simply looking in at the program from the outside. Cooperation involves the collaboration of both the Aboriginal community and the service provider. For example, costs associated with equipment, training, and administration should be provided by the service provider, while the community in turn can contribute support, accommodation for screening, and the willingness to accept the train-the-trainer approach to building capacity. In addition, the hiring of a community contact to follow up with referred children within a six month time period would assist with ensuring program sustainability. Discussions should be encouraged early in the engagement process to highlight expectations from both parties so that the roles of both the service provider and the community as a whole can be clarified.

Furthermore, many of the programs that have been reviewed in this paper targeted the use of Head Start children or other easily accessible groups of children. While this is a resourceful method of recruitment for a short term pilot project, it will not benefit all rural, remote, or isolated children in Aboriginal communities. Consideration must be given to communities that do not have Head Start programs or other clustered target populations such as day care centres. The Vision Screening in Manitoba Schools Project was the only program that specifically trained vision screeners in First Nations communities. Although the

program has not been evaluated, there are indications that there has been some measure of success. Further evaluation of this training and program delivery would be of great benefit to the PVS program in British Columbia.

Overall, there are many successful vision screening programs available throughout North America, however few have attempted to include program adaptations that would make these programs culturally appropriate for an Aboriginal population. Only one program in the United States attempted to target an Aboriginal population, and only one program in Manitoba recognized the need to train on-reserve vision screeners to ensure successful vision screening in First Nations communities in Canada. The literature available suggests that more work needs to be done in the area of Aboriginal preschool vision screening however, despite the types of tools used to collect data, collaboration/engagement and cooperation are essential for successful program delivery in Aboriginal communities (Wardman, Clement, & Quantz, 2005; British Columbia, Provincial Health Officer, 2002: 85-88).

Mentorship: An Effective Approach to Learning

Mentorship programs have become a valuable asset to schools, post-secondary institutions, government agencies and businesses across North America (McCluskey & Torrance, 2005; Sinclair & Pooyak, 2007). There are various types of mentorship programs with both a mainstream and Aboriginal perspective and although there are significant differences, there are also many similarities in program delivery (Klinck, Cardinal, Edwards, Gibson, Bisanz, & da Costa, 2005). Mentorship programs can be used to build capacity, enhance networks or communities of practice, support training and skills development, overcome program delivery challenges (i.e. lack of trained personnel in rural and remote areas), and help individuals and organizations to realize their full potential (Banister & Begoray, 2006; Bartik & Dixon, 2005).

This next section will begin with a review of some of the various definitions and types of mentorship programs, followed by a discussion of how and where mentorship programs are typically used, specifically in project delivery. As culture plays a significant role in mentorship programs, ethnic diversity and the mentor/mentee relationships will also be explored. Finally, an overview of successful mainstream and Aboriginal mentorship programs, including their successes and challenges, will be provided. The paper will conclude with recommendations and considerations for the successful development and implementation of mentoring in vision screening training in British Columbia.

Definitions of Mentorship Programs

A mentor can be defined as a trusted counselor, guide, tutor, or coach (Altman, 2005). Mentorship programs have been used to pass on skills and cultural information, and assist with personal development (Bisanz, Cardinal, da Costa, Gibson, & Woodard, 2003). One of the most well known mentorship programs is the Boy Scouts of America. Boys and girls from the ages of seven to twenty one are taught to become responsible, participating citizens and leaders through personal development and community involvement (http://www.scouting.org/nav/enter.jsp?s=mc&c=mv). Aside from the Boy Scouts of America, the objectives of mentorship programs in general reflect societal values. They can also evolve over time (Bisanz et al., 2003). For example, some mentorship programs have objectives which reflect values such as individualism and support people to become self-sufficient (Bein, 1999). Self-sufficiency in turn promotes advancement and success in academic or business endeavours. The objectives change based on desired outcomes or goals.

Like all programs that continue to change and evolve, mentorship programs have been modified to adjust to changing norms in society. More recent definitions of mentorship include “the process whereby an older person eases a younger one’s transition…the mentor’s role has shifted from being authoritarian, such

as a parent, to increasingly egalitarian, such as an older sibling or a friend" (Freedman, 1993 as cited by Bisanz et al., 2003, p. 8). This definition reflects a trend towards respect for the mentee's goals. Another component of mentorship programs which is becoming increasingly emphasized is the community service aspect. Although traditionally the mentee is seen as reaping the rewards from mentorship programs, there is increased attention on the benefits which mentors experience such as a sense of civic responsibility and self sufficiency (Hughes & Riendeau, 2007).

Using Mentorship Programs

McCluskey & Torrance (2005) state that connectedness, continuity, dignity, and opportunity are the four main principles that underlie personal growth and contribute to the ability of disadvantaged youth to overcome challenges. A sense of connectedness is important in conferring a sense of belonging and satisfies the need to share values and ideas; continuity provides stability within relationships; dignity attributes to a healthy self-esteem and sense of personal responsibility; and opportunity arises from having access to education and/or recreation which provides the possibility of reaching one's potential. As a result, mentorship programs are useful in providing support for a wide range of groups in a variety of settings.

Not all mentorship programs are focused on youth alone. Mentoring programs are becoming more widely used in academia, businesses, and socially. Academic mentorship is seen between a professor and a graduate student. The student learns skills and develops a solid knowledge base from the professor who is an expert in his/her field of study. This mentorship relationship aims to ensure lower drop out rates, improve study skills, increase academic achievement and enhance career outcomes (Tenenbaum, Crosby, & Gliner, 2001).

In the world of business, mentorship programs are increasingly being initiated in order to educate new staff on skills that are not taught in a formal setting. Other disciplines incorporate mentoring programs

in the business of health care, including physicians, nurses, and teachers (Ho, 2006). Ho (2006) states that high employee turnover as a result of job related stress can lead to crippling costs in rehires and retraining. However, mentorship programs have proven to provide a stable work environment and assist in career development by sharing resources or offering opportunities that would otherwise go unnoticed. There have also been mentorship programs for health personnel in a range of fields to assist them with transferring their skills from a theoretical setting to a practical one (McCloughen & O'Brien, 2005). It is common to learn a skill through reading material but in practice, the skill may look completely different. Through practical training under the supervision of an experienced mentor, the health professional can gain confidence and critical on-the-job training. Additionally, health professionals learn how the organization operates from conversation with his or her mentor (Sachdeva, 1996). Knowledge of the complex policies and procedures associated with the medical field is vital to the competence and success of medical professionals (McCloughen & O'Brien, 2005). Mentors may also provide advice and facilitate the career success of health professionals.

Social mentorship is often used to ameliorate the social problems of at-risk youth or other marginalized groups (Bein, 1999). Objectives for social mentorship programs can often be very broad but incorporate support for various social problems as well as academic and career achievement. Social mentorship programs, which focus on disadvantaged or vulnerable populations, such as youth, new immigrants and Aboriginal peoples are increasing in popularity (McCluskey, Baker, & McCluskey, 2005). These programs typically have very broad objectives, such as reducing substance abuse, reducing antisocial behaviour, improving academic performance, or enhancing career development.

Youth mentorship programs include people from all socioeconomic environments but a common denominator is a troubled background (National Mentoring Partnership, 2005). One of the most well known social mentorship programs for youth is Big Brothers Big Sisters (Grossman, 1998). This program matches

youth and children who do not otherwise have an older female or male role model in their lives. Positive outcomes from the Big Brothers Big Sisters program include a reduction of substance abuse, improved behaviour, improved attitudes towards school, and the creation of positive future goals (Grossman & Tierney, 1998).

Murrell, Crosby & Ely (1999) discuss how social mentorship programs have been utilized with new immigrants to overcome challenges they may face due to differing social, educational, or economic backgrounds. For new immigrants, mentorship programs offer support in adjustment to the customs of their adopted country, learning a new language, and finding employment. Mentors from the same ethnic background are recommended to help the new immigrant adjust to new customs while strengthening ties within the larger cultural community.

While a limited amount of published literature is available on Aboriginal approaches to mentorship, a comprehensive report was prepared for the Edmonton chapter of Big Brothers Big Sisters that reviews Aboriginal perspectives on mentorship programs (Bisanz et al., 2003). This report compares concepts and procedures of mainstream mentorship programs with Aboriginal perspectives, describes issues and insights affecting mentorship programs, and provides recommendations for the development of effective programs involving Aboriginal peoples. As an overview, Bisanz et al. (2003) describes the mentor type of lifestyle Aboriginal families and communities have traditionally employed in their daily lives. The need for youth to have knowledge and values imparted through role modeling is an integral part of Aboriginal culture. Extended family or friends can also enhance or replicate the roles played by immediate family. Examples of this extension of role playing are reflected in traditional languages; the Cree word for aunt “nikawiys” translates to “little mother” (Klinck et al., 2005). Furthermore, Aboriginal teaching styles, like mainstream mentorship programs, involve learning through positive examples, oral tradition, stories, games and role modeling (Klinck et al., 2005).

Another report released in 2007, titled *Aboriginal Mentoring in Saskatoon: A cultural perspective*, is a useful tool that reviews the importance of culture in developing a mentorship program Sinclair & Pooyak, 2007). The similarities in program delivery result in successful mentor/mentee relationships by promoting positive living in the lives of people in need.

The Role of Culture in the Mentor/Mentee Relationship

Mentoring is a tool that is useful in reaching out to various ethnic groups. When referring to ethnic minorities and mentorship programs, Torrance, Goff & Sattersfield (1998, p. 9, as cited in McCluskey & Torrance, 2005) argue that mentors can be positive role models when their mentees are faced with racial or cultural stereotypes that result in feelings of alienation, exclusion or disenfranchisement. These experiences can cause serious challenges in self identification and outlets are often expressed through drugs, alcohol, or crime (Torrance, Goff & Sattersfield, 1998, as cited in McCluskey & Torrance, 2005).

There are strong debates on matching mentorship participants with members of the same ethnic background (Murrell et al., 1999; Ensher & Murphy, 1997). One side of the argument for same culture pairings suggests that mentors from a different culture cannot adequately help mentees deal with challenges minorities may face. Also, mentees have reported feeling inferior to the mentor and perceive that they are being negatively judged (Ensher & Murphy, 1997). Likewise, although a mentor may have the mentee's best interests at heart, Ensher & Murphy (1997) suggest that a mentor from a different cultural community may subconsciously impose his or her beliefs on the mentee, confusing the mentee's sense of cultural identity. Finally, these authors suggest that ethnic communities would benefit from presenting a united front and building community strength from within its own population.

Authors in support of cross cultural mentorship partnerships contend that although same-culture mentoring facilitates the development of trust, personal attributes of the mentor are more important than

cultural background (Murrell et al., 1999). Personal skills, experience, common interests, the capacity to provide support, and an open minded approach to new cultures also facilitate relationship building. These authors also suggest that cross cultural mentorship can be beneficial for several reasons. Cultural obstacles may be overcome for both the mentor and mentee when the mentor learns about the mentee's culture and develops cultural sensitivity. Additionally, cross cultural mentorship can foster positive relationships between people of different cultures and may contribute to social harmony between different ethnic groups (McCluskey & Torrance, 2005).

Aboriginal versus Mainstream Mentorship Programs

Sinclair and Pooyak (2007) have identified that there is a huge gap in the literature with respect to Aboriginal mentorship programs. While there are similarities in Aboriginal approaches to mentorship programs, there are also significant differences (Bisanz et al., 2003). Mainstream mentorship programs tend to focus on the one-to-one relationship building between mentor and mentee, but Aboriginal approaches may involve many people including direct family, extended family and community members (Klinck et al., 2005). Aboriginal mentoring may also involve a variety of configurations including group mentorship (Sinclair & Pooyak, 2007). The learning process tends to be more informal, with less obvious distinction between the teacher and student roles (Banister & Begoray, 2006). While mainstream perspectives view the ultimate goals of mentorship as a way to achieve self sufficiency, Aboriginal perspectives view mentorship programs as benefiting the entire community (Klinck et al., 2005).

With the increased use of mentorship programs, Bisanz et al. (2003) have suggested that there is an evolving convergence between Aboriginal and mainstream perspectives on mentoring. However, Sinclair and Pooyak (2007) state that Aboriginal mentoring relationships are typically informal or spontaneous, and it is this type of relationship that is most common and most effective for Aboriginal people. Neverthe-

less, there are instances of Aboriginal communities incorporating a more formalized social program and mainstream mentorship organization that incorporate Aboriginal values and strategies in their program delivery (Bisanz et al., 2003). Likewise, mentorship programs are being delivered in a variety of formats and settings such as schools and on the internet. Following the successful development of Aboriginal mentorship programs such as the Northern Aboriginal Peers Support Network Program at the University of Northern British Columbia, the structure of formal mentorship programs has moved from the traditional one-to-one mentoring to group mentorship programs while developing closer ties within the community. Unlike the western view of mentorship which is often characterized as individualistic (Sinclair & Pooyak, 2007), the Aboriginal view is holistic in nature. It is inclusive of the broader community and organizations, and seeks to promote relationships between individuals that increase cohesiveness and collaboration (Klinck et al., 2005).

Developing a Successful Aboriginal Mentorship Program

Understanding Aboriginal culture, the diversity of cultures and worldviews, yet still recognizing the similarities between Aboriginal cultures, are essential in developing a successful Aboriginal Mentorship program (Sinclair & Pooyak, 2007). Other considerations for successful mentorship relationships, as described by Sinclair & Pooyak are as follows:

- fidelity or trustworthiness (keeping promises and respecting cultural traditions and protocols),
- autonomy (encouraging maximum choice) and understanding the importance of family and community within the Aboriginal community,
- justice (distributing benefits fairly amongst mentees, which incorporates the distribution by both heredity and community law),
- beneficence (the principle of doing good in which both people benefit), and
- non-malfeasance (doing no harm)

Bisanz et al. (2003) also outline several cultural issues which they consider to be important when developing a mentorship program in Aboriginal communities. Aboriginal cultures value the roles of Elders in their communities and this is something that should be taken into consideration when developing mentorship programs. Mentors with different backgrounds and experiences should take this into consideration when facilitating communication with Aboriginal children and youth. Culturally appropriate methodologies and tools should be used in Aboriginal mentorship programs. The medicine wheel, sharing circles and other cultural tools can aid in building trust and respect between the mentor and mentee. For example, in a sharing circle, all people are equals and mutual respect is achieved. Knowledge of the negative impacts of colonization and experiences of individuals, families, and communities is also essential.

The role of Aboriginal communities in the development and implementation of an Aboriginal mentorship program is also debated. While Bisanz et al. (2003) do not feel that the development and implementation of such programs must come from within the community itself, Sinclair and Pooyak (2007) argue that "the Aboriginal community [should have] input, influence, and decision making power" (p: v). Likewise, Klinck et al. (2005) stress the importance of collaborating with community members from the outset of program development and building on the existing strengths and programs already established within the community. Organizers from outside the community must take into account that if they are to be involved, their role should be supportive and not one of control (Sinclair & Pooyak, 2007). In addition, Aboriginal peoples often exhibit mistrust to 'outsiders' who offer programs without their input. Historically, this approach has not been supported by Aboriginal communities, and outside program development is typically unsuccessful unless there is a component of community engagement prior to implementation.

In addition to the need for Aboriginal mentoring programs to include the mentee's family and traditional values and culture, adequate resources for sustainability also need to be considered for programs to be suc-

cessful (Klinck et al., 2005). Too often, programs are established in Aboriginal communities with limited funding, and little consideration is given to sustaining the program beyond immediate funding opportunities.

Bisanz et al. (2003) provide a summary of requirements that will lead to a more successful Aboriginal mentorship program. Aboriginal mentors should be used whenever possible to ensure inclusiveness and culturally appropriate program delivery. Collaboration with Chief and Council and community members at all stages of planning, implementation and evaluation should occur in order to further promote successful program delivery. New programs should build on existing strengths and community programs to prevent program overlap and increase a sense of community ownership. Furthermore, Bisanz et al. (2003) suggest that a sense of community ownership prevents the repetition of the paternalistic approach which is disempowering and reminiscent of colonization. The mentor should aim to develop respect and understanding of traditional values and culture (Klinck et al. 2005). Providing training for coordinators and mentors and ensuring that adequate resources are available are also key requirements for a successful Aboriginal mentoring program. Finally, the formation of a community advisory group that provides guidance and support for the program was highly recommended (Bisanz et al. 2003).

Examples of Aboriginal Mentorship Programs

There are a number of Aboriginal mentorship programs in practice that have varying levels of successes and challenges. McCluskey & Torrance (2005) reviewed three programs in Canada that aim to reflect current best practices. These three programs, Second Chance, Northern Lights, and Mentoring At-Risk Students, focused on strengths, were respectful of cultural values, and built upon existing personal, familial, and community resources.

Second Chance was a mentorship program developed in 1992 that targeted about-to-be-released Aboriginal inmates. Thirty one participants were offered pre-release support consisting of in-class training in prob-

lem solving as well as on the job mentorship where they put problem solving skills into practice. Employers were mentors to inmates and had significant influence on the inmate's behaviour. Inmates responded positively when given encouragement, guidance, support, trust, and true talents emerged when least expected. In return, the inmates exhibited reliability, initiative, and creativity on the job. The result of this mentorship program was that in a group where 90% are likely to re-offend within a year, only 38.7% ended up back in prison. Furthermore, employer mentors in several workplaces offered part or full time positions to participants. Unfortunately, there was no sustainability component in the funding mandate and the project has been completed.

The Northern Lights project was another three year mentorship initiative targeted at vulnerable Aboriginal youth that was developed among three rural Manitoba schools (McCluskey & Torrance, 2005). Aboriginal students who had left or had been removed from school due to poor attendance, academic struggles, or behavioural challenges were recruited for the program. With each youth, individual talents and strengths were identified, and students were encouraged to develop these areas. Problem solving skills were taught in a classroom setting, and mentoring with community partners, such as social workers and educational assistants, were implemented. Initially, the program was not successful because the importance of cultural appropriateness and examination of both individual and group issues were not incorporated in program development. After discussions with Elders and Native counselors, cultural information was provided in-class. Modifications to the program, such as hiring Aboriginal people to establish links with the youth and their families, incorporating a culturally appropriate curriculum to the in-class mentoring, and lengthening the program, significantly improved the program outcome and the majority of students responded by either returning to school, graduating, finding employment, or entering a post-secondary education program.

Mentoring At-Risk Students (MARS) was a two year project that addressed the needs of urban Aboriginal youth at risk for academic failure, alienation and gang involvement (McCluskey, Baker & McCluskey, 2005). Student teachers were recruited from a fourth year 'At-Risk Children and Youth' class at the University of Winnipeg. The course included instruction on cultural diversity, resiliency, mentorship and talent recognition. The Winnipeg Native Alliance, a community organization with a pre-existing program aimed at reducing youth gang involvement, an urban sports camp and institutional outreach for incarcerated youth, became a partner in the program. Student teachers were matched with at-risk youth and assisted with counseling, tutoring, coaching, role modeling, classroom supervision, and providing companionship and transportation during outings. This program was very successful and benefited youth through the provision of needed support and relationships. Reciprocally, teachers benefited from the project through gained experience working with at-risk youth.

Other examples of mentorship programs are at the academic level. The University of Northern British Columbia (UNBC) has developed the Northern Aboriginal Peer Support Network Program that focuses on bicultural peer counseling and service delivery. The program allows lay counselors and clients to be immersed within the Aboriginal culture and to practice counseling from a medicine wheel perspective (MacDonald, Denby, & Madak., n.d.). It is considered to be a best practices model for mentorship. A goal of this program is to educate both the mentor and the mentee in different cultural perspectives while developing skills required in the post secondary setting.

The University of Saskatchewan has a similar mentorship program targeted at first year university students' transition from high school. The Aboriginal Student Experience program provides a culturally appropriate learning environment that combines academic and personal support through the availability of Elders for consultation purposes and Aboriginal ceremonies such as sweatlodges, powwows, and traditional prayers, to promote learning in a way that is acceptable to the student (http://www.usask.ca/

campaign/index.php). In addition to this initial transition phase, there is also a student mentorship program that matches new students with successful senior students. This mentorship phase focuses on working with Aboriginal students one-on-one to provide encouragement, personal support, study skills advice, and tutorial support.

Most recently, the Indigenous Peoples' Health Research Centre (IPHRC), in collaboration with Big Brothers Big Sisters of Saskatoon and the Community University Institute for Social Research, published a report titled 'Aboriginal mentoring in Saskatoon: A cultural perspective.' This report discusses mentoring projects that are currently taking place in the Saskatoon area and emphasizes Aboriginal perspectives on mentoring strategies and programs. In addition, it provides recommendations for improving Aboriginal mentoring techniques and incorporates the wisdom of Elders, youth and the community in general. The findings of this report emphasize the importance of collaboration with the community in program development and implementation, and serves as a best practices model of Aboriginal mentorship.

These programs have been successful in meeting their goals and objectives while identifying gaps, modifying program delivery based on need, and incorporating a culturally appropriate service delivery mechanism to each program.

Considerations for Mentorship Programs

Grossman (1998) identifies a number of challenges associated with mentorship programs that involve vulnerable populations. She states that there is typically a hierarchical balance of power which may put the mentor/mentee relationship at risk. Paternalistic, overly authoritarian attitudes from the mentor may be disempowering for the mentee and result in low self esteem.

Grossman (1998) also suggests that persistence and durability of the mentorship relationship is vital to the success of the program. Longer matches with frequent interaction have been shown to have more positive effects on desired outcomes. Matches involving youth programs which last less than three months have been shown to actually have harmful effects on youth (Scandura, 1998). Because youth may already face challenges trusting figures of authority, a relationship which ends prematurely may increase rejection of social norms and structures. When relationships last longer, the youth becomes open to a wider array of support from the mentor due to increased trust. In the event that a relationship ends prematurely, guidance should be provided to control any damage that may result to the mentee.

With youth, possible negative outcomes can stem from mentoring relationships which end prematurely (Grossman & Tierney, 1998), including extensive damage to self-esteem and personal development to the mentee (Queensland Continence Clinicians, 2006). For example, mentoring relationships which end early due to conflict may result in increased rates of substance abuse and antisocial behaviour. The challenges of severing ties in a relationship prematurely are often referred to as a 'roadblock' and there are several types that are common in mentorship programs (National Mentoring Partnership, 2005). While common, there are rarely guidelines and supports in place that work with these challenges. In order to prevent harm to participants, mentorship programs must be carefully designed with supports in place to facilitate conflict resolution, appropriate matching and sustainable mentorship relationships (Grossman & Tierney, 1998).

Other challenges identified with mentorship programs are that they can be time-consuming and emotionally draining, and there can be a lack of appropriate support, (Queensland Continenence Clinicians, 2006). Jones (1997) highlights the scarcity of organizational resources and the limited availability of adults to serve as mentors as contributing to the challenge of implementing effective mentoring programs. When designing a screening program to recruit mentors, resources can be saved by looking to similar youth pro-

grams for volunteers. While resources are an apparent struggle with both mainstream and Aboriginal mentorship programs, the limited availability of adults is seen more often in mainstream programs. In Aboriginal settings, Elders are typically involved in the education and mentoring of the community's youth. Grossman (1998) argues that programs that do not adequately address one or more of these areas have less successful outcomes than those that do.

Finally, sustainability has been identified as one of the main challenges with mentorship programs (Seguin, 2006; Klinck et al., 2005; McCluskey & Torrance, 2005; Sundli, 2007; Rhodes, Grossman, & Resch, 2000; Sinclair & Pooyak, 2007). Many mentorship programs are incorporated as pilot projects or have limited government funding. While consideration is given to 'fine-tuning' existing projects, little thought is given to developing a component that ensures sustainability. This gap should be considered in the early stages of program development so as to avoid jeopardizing an otherwise valuable project. This should be done with the input of community members and leaders to help prevent significant developmental consequences to the mentee.

Several components must be present in order for a mentoring relationship to be successfully implemented (Jones, 1997). These components, often considered best practices, are also outlined by Grossman (1998). The first component to successful mentoring is thorough volunteer screening. This process weeds out adults that may pose a risk to children or those who may not honour the time commitment (Jones, 1997; Sipe, 1999). In addition, it is argued that mentors must understand the need to earn the trust of the mentee and offer "sincere enthusiasm and caring, flexibility, sense of humour, believing in the mentee's potential and the ability to communicate information, attitudes, and values clearly" (McCluskey & Torrance, 2005, p.1). A steady, involved presence in the mentee's life is essential to developing trust, while the ability to respect the mentee's personal views and goals is also important (Sipe, 1999).

Intensive mentor training, including communication, limit-setting skills, tips on relationship building, and recommendations on the best ways to interact with youth is another component to successful mentoring. In addition, successful mentoring requires active involvement by a professional case manager. The case manager determines the best match for the mentor and mentee and should provide intensive supervision through frequent contact with the mentor, mentee, and his/her family.

Finally, since a lack of appropriate evaluation protocols can result in an inability to acknowledge successful aspects of the program or assist in developing areas of concern, an evaluation process is critical in ensuring reliability and validity of the project itself (Parson, 2006). Evaluation of mentorship programs can involve measuring participant outcomes and the quality of the mentorship relationship. However, evaluation of participant outcomes can be complicated due to the difficulty of defining baseline measurements. For example, in the case of youth mentorship programs, it may be difficult to determine what a "normal" course of social behaviour would be over a period of time as compared to the effect the mentorship program is having on social behaviour (The National Mentoring Partnership, 2005). As a result, baseline and typical measurements of participant outcomes must be established. Measuring the quality of a mentorship relationship is more straightforward. The length of the relationship and the frequency of contact are relatively easy to calculate. Finally, the mentor and mentee may determine specific measurements of relationship quality that can be incorporated into the baseline data.

Conclusion

It has been established in the literature that mentorship programs are effective when used in grade schools, post-secondary institutions, government agencies and businesses across North America. Some of the successes and challenges of these mentoring programs have been highlighted in this paper. Early discussions with the Provincial Government have indicated they are interested in developing culturally appropriate vi-

sion screening programs that can be implemented for the general and Aboriginal population alike. Agencies such as the Health Authorities in British Columbia can learn from these examples and incorporate some of the successful elements of mentoring programs into the implementation of a training program for vision screening of Aboriginal preschool children. As a review, benefits of mentoring include skill development, facilitating personal growth, and building respect for socially acceptable values. One of the strongest benefits of mentorship programs is lasting relationships between the mentor and mentee. These points also promote culturally sensitive service delivery and sustainability; two issues that are consistently overlooked in program development when working with Aboriginal communities.

In addition to these considerations for the provincial government, the construction of successful mainstream and Aboriginal mentorship programs must focus on the screening of mentors and mentees, appropriate orientation and training, and ongoing support and supervision. When these three areas are satisfactorily addressed, solid mentorship relationships are more likely to be formed. Also, detailed planning is essential in positive outcomes that result in long lasting relationships and sustainable skill development. As discussed previously, rigorous training and orientation programs are needed to ensure the mentor/mentee relationship does not exhibit a power imbalance. Furthermore, mentorship programs that focus on the Aboriginal population must consider social and cultural understanding in the development and implementation of projects and engage community members from the planning stages of program development.

Research that discusses the strengths and challenges of ethnic or gender similarity when matching mentors to mentees have found that although there are some benefits to cultural similarity in relationships, the most important aspect is that the mentor is able to appreciate the mentee's point of view and mutual respect is established. Overall, the literature states that mentorship programs are beneficial to the mentor, mentee, and the program that is incorporating this type of learning. In addition, it is crucial that mentorship

programs include culturally appropriate components to ensure that knowledge transfer and exchange take place between mentor and mentee, and to ensure sustainable relationship building.

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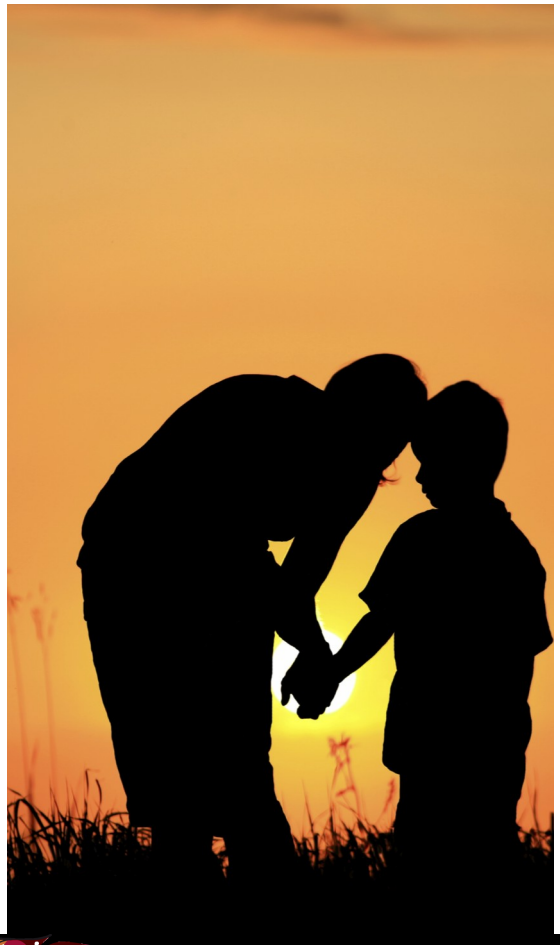

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