



CHILDREN'S VISION INITIATIVE REPORT TO GOVERNMENT

Eye See...Eye Learn Pilot Program

**The Saskatchewan Association of Optometrists
September 2010
(Revision)**

Executive Summary

The Saskatchewan Association of Optometrists (SAO) is pleased to report on the Children's Vision Initiative (CVI) Pilot which began in March 2008 and concluded on December 31, 2009. With a mission of prevention, early detection and management of eye and vision problems, which impact the health, development, education and welfare of children a partnership with the Ministry of Health, the Ministry Learning and the SAO was coordinated. A Steering Committee from these 3 departments, along with additional consultations from supporting officials, developed the CVI Program. Within the CVI Program an *Eye See...Eye Learn (ESEL)* Pilot Program was coordinated within the Greater Saskatoon Catholic School Division and officially began on November 17, 2008 and concluded on December 31, 2009.

The Goals of the CVI Pilot and the *ESEL* Program focused on three specific areas:

- 1) To improve the opportunity for learning through the early detection and treatment of visual impairments
- 2) To ensure that parents are made aware of the importance of eye health examinations and that the Ministry of Health covers the costs for one optometric examination every 12 months for children under the age of 18, and
- 3) To increase the number of children receiving eye examinations by at age 5 (or within the first year of school)

Participation and reporting was on a volunteer basis. Children were encouraged to obtain an eye exam if one had not been received within the prior 12 months and reports of the exam results were to be completed by the optometrist with copies being returned to the child's parent/guardian, teacher and the SAO office for tabulation.

Notable Findings:

- 1) Of the 390 children who returned their eye examination reports there were 271 diagnosed with eye conditions. This represents 69.5% of the children reported being diagnosed with a visual problem.
- 2) 193 of the 390 children (48.5%) reported the *ESEL* Program eye examination was their first eye exam.
- 3) Prior to the *ESEL* Pilot Program in October 2008 only 33.93% of age 5 children were reported by Saskatchewan Health as having had an eye examination. At the end of the *ESEL* pilot, December 30, 2009 this number increased to 34.39%. This is an increase of approximately .46% of children age 5 obtaining an eye examination.
- 4) For the majority, both teacher and parents/guardians found value in the *ESEL* message and they found the program provided motivation to obtain an eye examination for children starting school.

The *ESEL* Pilot Parent Package, while perhaps cumbersome in its piloted format could be simplified and still valuable as a motivational and awareness program to promote the importance of eye examinations for children beginning school.

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1.0 Introduction

“Healthy eyes and normal vision development help children learn.”(1) Parents are often unaware of the correlation between optimum visual performance, health and child development. Young children usually do not realize if they have a visual impairment nor do they identify that they see differently than everyone else. At birth a child has basic eyesight. A child learns how to use his/her visual system and the brain must learn to correctly interpret the signals it receives from the eyes. Eye health, visual acuity, eye movement control, focusing ability and eye coordination all impact on whether the brain is receiving accurate information from the eyes. “Nearly 25% of school-age children have vision problems.” (2–4)

It has been proven that vision screenings provide a false sense of confidence. They vary in scope and are generally influenced by the environment, the capability and knowledge of the screener, the tools, and the “willingness to participate” by the participant. Normally vision screenings test distance acuity only; therefore, only the myopic (nearsighted) children are referred for an eye examination. The majority of children with learning problems are found to be those who have hyperopia (farsightedness). These children are normally missed during a vision screening and can go undiagnosed and untreated. *“According to a study funded by the National Eye Institute, even the most sophisticated vision screening tools, administered by the most highly trained screeners miss 1/3 of children with eye or vision disorders.”(8) It is therefore recommended that all children obtain an eye health examination prior to starting school to ensure that they have optimum visual acuity to learn. “Nearly two in three children do not receive any preventative vision care before starting elementary school.”(5)*

Impaired binocular vision and depth perception can cause problems with gross and fine motor development. Vision problems can discourage and inhibit children’s ability to concentrate, reading readiness and reading achievements. *“Visual impairment in children is associated with developmental delays and the need for special education, vocational and social services, often stretching into adulthood.”(7)*

The effects of uncorrected vision problems often include low self-esteem, physical awkwardness, social alienation and/or behavioural problems. This is reinforced in the U.S. National Health document Healthy People 2010 which states *“Vision impairment changes how a child understands and functions in the world. Impaired vision can affect a child’s cognitive, emotional, neurological, and physical development by possibly limiting the range of experiences and the kinds of information a child is exposed to.”(9) “Undiagnosed and untreated vision-related learning problems are significant contributors to early reading difficulties and ultimately to special education classifications.”(6)*

In July of 2003 the Canadian Association of Optometrists formalized a national emphasis on the importance of early childhood eye examinations. In October 2003 the Saskatchewan Association of Optometrists (SAO) mandated a Saskatchewan Children’s Vision Initiative dedicated to the prevention, early detection and management of eye and vision problems, which impact the health, development, education and welfare of children.

In 2005, 2006 and again in 2007 the SAO financed a provincial public awareness campaign to communicate the importance of eye examinations for children. During this time the number of children seeking eye examinations increased marginally by 3%. With only approximately 1/3 of

our children obtaining an eye examination, further initiatives to improve these results were recommended.

Through consultation with the Optometric Consultation Committee (SK Health officials and the SAO); the Alberta Association of Optometrists, “Eye See...Eye Learn (ESEL) Program”; the British Columbia Association of Optometrists, “a-b-See Program”; and support from the Canadian Association of Optometrists, a Saskatchewan Children’s Vision Initiative evolved.

Based on the success of the ESEL program in Alberta increasing awareness of the importance of early childhood eye exams and the number of children obtaining eye examinations, the SAO hoped to introduce the ESEL program or a similar Children’s Vision Initiative in Saskatchewan.

2.0 Saskatchewan’s Children’s Vision Initiative Overview

2.1 Official Name:

Children’s Vision Initiative (CVI)

2.2 Composition:

A Letter of Understanding between the Saskatchewan Association of Optometrists and Saskatchewan Health (now referred to as the Ministry of Health) was signed on September 27, 2007.

2.3 The Mission and Vision:

The Children’s Vision Initiative is dedicated to the prevention, early detection and management of eye and vision problems, which impact the health, development, education and welfare of children.

2.4 The Goal of the Children’s Vision Initiative:

To improve the opportunity for learning through the detection and treatment of visual impairments, to ensure that parents are aware of the importance of eye health examinations, and that children under the age of 18 are eligible to receive one optometric examination every 12 months with the costs covered by the Ministry of Health.

2.5 Formation of a Children’s Vision Initiative:

This Pilot was made possible through a three-year letter of understanding signed September 27, 2007 between Saskatchewan Health and the SAO. The Pilot partnership originated with Saskatchewan Health, the Department of Learning and the SAO and was re-evaluated in the fall of 2007 with the Ministry of Health and the Ministry of Education. Due to changes of administrative and government authorities, the CVI Pilot required further consultation and was restructured from its original proposal and initiation was delayed until 2008.

Through consultation with government departments (Health and Education) and the SAO, it was identified that a child’s vision has an impact on his or her ability to actively participate and benefit from a range of developmental activities including school functions. Children under the age of 18 years are eligible to receive an optometric eye exam every 12 months, with the costs

covered by Saskatchewan Health. The consultation committee acknowledged that a significant number of eligible children are not currently accessing this health benefit.

2.6 The Terms of the Agreement:

Ministry of Health provided \$60,000 funding to the Saskatchewan Association of Optometrists in 2008 and 2009 for the purpose of coordinating a Children's Vision Initiative. The terms applied from September 27, 2007 to December 31, 2009. As referenced in Section 2.5 the Pilot required additional consultation and the actual Pilot being reported did not officially begin until the fall of 2008.

In an attempt to ensure school-age children and their families are aware of the benefits and the availability of a regular optometric examination, the parties agreed, during the term of the agreement, to undertake a Pilot Project. To that end, the parties agreed to:

- a. Collaboratively manage the Pilot Project through a joint steering committee which may include representatives of other agencies;
- b. Develop a terms of reference and project charter that will set out clear evaluation and accountability measures; and
- c. Develop a work plan that will ensure that project is completed and evaluated on or before December 31, 2009.

3.0 The Children's Vision Initiative Pilot

3.1 The Children's Vision Initiative Steering Committee and Consultations:

Through a partnership with the Ministry of Health, the Ministry of Education and the Saskatchewan Association of Optometrists, the following Children's Vision Initiative Steering Committee (CVI) was formed in March 2008 and further expanded in late 2008.

Brad Havervold	Ministry of Health, Executive Director
Natalie Good	Ministry of Health, Program Consultant
Carol Martz	Population Health, Nursing Consultant
Mary Martin-Smith	Population Health, Nursing Consultant
Rosalie Tuchscherer	Population Health, Nursing Consultant
Darren Kalaman	Ministry of Education, Program Consultant
Elaine Caswell	Ministry of Education, Children Services Consultant
Ellen Basler	Ministry of Education, Children Services
Dr Dorrie Morrow	Canadian Association of Optometrists, Children's Vision Chair
Dr Dorothy Barrie	Saskatchewan Association of Optometrists, Children's Vision Chair
Sheila Spence	Saskatchewan Association of Optometrists, Executive Director
And Consultants:	
Gwen Dueck	Saskatoon Teachers Federation
Barry Bushutski	Saskatchewan School Boards Association
Dr Chris Strelloff	Saskatchewan Association of Optometrists, Registrar
Peggy Sloan	Alberta Association of Optometrists, Executive Director
Greg Chatlain	Greater Saskatoon Catholic School Division, Superintendent
Johnny Marciniuk	Greater Saskatoon Catholic School Division, Coordinator
Joanne Weninger	Greater Saskatoon Catholic School Division, Superintendent

3.2 The Children's Vision Initiative Pilot Program Term of Reference:

The committee began development of the Pilot Term of Reference in April 2008 and document revisions continued until September 2008 when the committee agreed upon a final document. In keeping with the CVI mission of the prevention, early detection and management of eye problems which impact the health, development, education and welfare of children, a partnership was forged with the Greater Saskatoon Catholic School Division to pilot an **Eye See...Eye Learn (ESEL)** program. A copy of the CVI Term of Reference document is available from the SAO office.

3.3 The Goals of the Children's Vision Initiative Pilot:

3.3.1 To improve the opportunity for learning through the detection and treatment of visual impairments:

This was assessed by tracking the incidence of vision problems occurring in children entering the school system within the Pilot.

3.3.2 To ensure that parents are aware of the importance of eye health examinations, and that the Ministry of Health covers the costs for one optometric examination every 12 months for children under the age of 18:

Each student within the Pilot and their parents/guardians received an informational package including a joint letter from the Ministry of Health and the Ministry of Learning reaffirming the importance of children's eye examinations and confirming that an annual eye examination is covered for all children under the age of 18.

3.3.3 To increase the number of children at age 5 (or within their first year of school) to obtain an eye examination:

Saskatchewan Health statistics are to be reviewed specifically for the changes in the numbers of children age 5 obtaining an eye examination prior to and following the Pilot Program.

3.4 The Development of the **Eye See... Eye Learn (ESEL)** Pilot Program:

The **ESEL** is an awareness program designed to educate teachers, children and parents/guardians of the importance of identifying and treating visual problems early so children have a better chance to learn and develop. The **ESEL** program was developed in Alberta by a working group consisting of kindergarten teachers, public health nurses, parents, a family physician, optometrists, government officials and the Alberta Association of Optometrists. The Alberta **ESEL** program materials were reviewed and through consultation with the CVI Steering Committee the materials were reformatted and individualized to reflect a Saskatchewan preference. A joint letter from the Ministry of Health and the Ministry of Learning was included in the Pilot as a political affirmation of government's commitment to improving children's health and well-being, to ensure that parents/guardians are aware that government covers the cost of an annual eye examination for all children under the age of 18, and to encourage parents/guardians to seek an eye examination for children beginning school.

Three primary educational mechanisms were employed within the ESEL Pilot. They included visual communication, physical activities and verbal reinforcement. The communications were supported by multiple resources.

3.4.1 Visual Communication: Attractive and fun, brightly coloured and appealing educational pieces along with an explanation of the Pilot Program were included in the Teacher and Parent/Guardian packages. The colours, theme and message of the importance of obtaining an eye examination flowed consistently through the material pieces.

3.4.2 Physical Activities: Experience stimulators to reinforce the message and understanding of the importance of eye examinations included an activity workbook containing numerous eye health related and learning exercises; a children's colouring storybook to create an inter-active experience for the teacher, child and parent/guardians; tattoos of the ESEL Mascot "Fribbit"; and ESEL coloured wrist bands were presented to the child following their eye examination.

3.4.3 Verbal Resources: Teachers were asked to verbalize the importance of eye examinations to both their students and their parents/guardians.

Multiple resources complimenting an inter-intra professional partnership of communications supporting the importance of eye examinations included a joint letter from Ministry of Health and the Ministry of Learning, a letter of support from the Superintendent of the Greater Saskatoon Catholic School Division and from the Saskatchewan Association of Optometrists.

The ESEL program information and information on the importance of eye examinations were made available on the Saskatchewan Association of Optometrist's website at www.optometrists.sk.ca.

3.5. The Partnership with the Greater Saskatoon Catholic School Division (GSCSD):

The Greater Saskatoon Catholic School Division (GSCSD) volunteered to pilot the ESEL program within their pre-kindergarten and kindergarten classes. GSCSD is Saskatchewan's largest Catholic School Division serving approximately 15,200 students in 45 schools located in Saskatoon, Humboldt, Biggar and Viscount. This division employs approximately 1,900 people who work as teachers, service and support staff. *"The GSCSD students are taught to pursue academic excellence based on their God-given talents."*(11) At the same time, their staff members maintain a concern about the successful development of the whole child. They are committed to working with students and families to see all children reach their full potential.

During the Pilot there were 130 participating pre-kindergarten and kindergarten teachers, 157 classrooms and approximately 2370 students registered. There were some student population fluctuations due to typical relocations and transfers.

3.6 Timetable and the Eye See... Eye Learn Pilot Program Details:

3.6.1 Phase I, November 17, 2008 to April 30, 2009

The ESEL program was introduced to the principals and teachers by the SAO during seven in-service “Educate the Educator” seminars. The complete ESEL packages were distributed by the GSCSD central office to the participating teachers and the information was then shared with the students and parents/guardians.

In November 2008 two ESEL Pilot Program presentations were conducted to approximately 100 provincial optometrists and approximately 150 optometric assistants to ensure that every provincial optometric office was well-versed in the administration and reporting requirements of the Pilot. Every optometric office in Saskatchewan was provided with ESEL program details, a supply of children’s wrist bands and an additional supply of eye examination reporting forms.

3.6.2 Phase II, August 15, 2009 to December 31, 2009

The ESEL program was again promoted in August 2009 as a comparison to Phase I and to better reflect the school term and back to school preparations.

3.7 Eye See...Eye Learn Pilot Program Materials:

Each of the participating teachers received a Teacher Package, a supply of Parent/Guardian Packages, and promotional materials including ESEL posters, coloring books and tattoos for their classroom students. During Phase I the Saskatchewan Association of Optometrists (SAO) printed 2000 examination forms, 1700 Parent Packages and 300 Teacher Packages for distribution. Copies of the materials went to every optometric office in Saskatchewan along with a supply of ESEL wrist bands for presentation to all participating ESEL children who obtained an eye examination.

For Phase II the SAO printed 1500 Parent/Guardian Packages and examination forms and another 300 Teacher Packages for distribution. The SAO office also stocked additional ESEL wristbands and ESEL coloring books and tattoos for distribution.

The Teacher Packages included a letter requesting their assistance and explanation of their role and responsibilities, a description of the ESEL Pilot Program, a classroom roster sheet to assist in tracking the returned eye examinations forms, ESEL and eye health pamphlets, an information Package for each Parent/Guardian, and a supply of ESEL colouring books and tattoos for all their students. A survey was included in the Phase II Packages as well. ESEL classroom activity booklets, including learning exercises, were made easily accessible on the SAO website at www.optometrists.sk.ca. Samples of the Teacher and Parent Packages are available at the SAO office.

Parent/Guardian Packages included a description of the ESEL Pilot Program, a Parent/Guardian participation consent form, an ESEL eye examination form, a letter of endorsement from Mr Greg Chatlain, Superintendent of Education, GSCSD, and acknowledgement of the partnership and the importance of eye examinations for children signed jointly by Don McMorris, Minister of Health and Ken Krawetz, Minister of Education.

To ensure confidentiality the statistical copy of the ESEL eye examination form which was returned to the SAO office did not include the child's name.

3.8 Roles and Responsibilities:

3.8.1 Role of the Saskatchewan Association of Optometrists (SAO):

The SAO volunteered to administer the Children's Vision Pilot Program through their administrative association office. They were responsible for the coordination, implementation and assessment of the Pilot.

ESEL materials including coloring books, tattoos and wristbands were originally designed and produced by the Alberta Association of Optometrists and reproduced by the Canadian Association of Optometrists. The balance of the printed materials were produced in consultation with the CVI Steering Committee and coordinated for printing and distributed by the SAO staff. The SAO office also fielded phone calls from teachers and parents/guardians regarding the program details and optometric office locations.

3.8.2 Role of the Greater Saskatoon Catholic School Division (GSCSD):

The administration office for the GSCSD provided the names and contact information of the participating teachers and student class enrolment numbers. The GSCSD distributed the materials to each participating teacher. The GSCSD communicated periodic updates on the ESEL Pilot Program and was instrumental in encouraging teachers to participate and promote the value of identifying and correcting visual difficulties early in a child's educational development.

3.8.3 Role of the Optometrist:

The Optometrists administered eye examinations and promoted eye health for all children as well as informing parents that the Ministry of Health covers the costs of eye examinations for all children under the age of 18. They also completed the ESEL eye exam reporting forms for every participating student and returned a confidential copy to the SAO office for statistical reporting.

3.8.4 Role of the Teachers:

The Teachers were versed on the ESEL Pilot Program including the importance of eye examinations to ensure that every student has the best visual ability to learn. Also, they were asked to encourage their students and their student's parents/guardians to participate in the ESEL Pilot Program and inform them that eye examinations for children under the age of 18 are covered by the Ministry of Health, while encouraging the parents to obtain an eye examination for their child.

3.8.5 Role of the Parents/Guardians:

The parents/guardians were asked to return their consent form allowing their child to participate in the ESEL Pilot Program, to obtain an eye examination for their child if their child had not had their eyes examined within the past twelve months and to return a copy of the completed ESEL Examination form to the child's teacher for the purpose of understanding the child's learning needs.

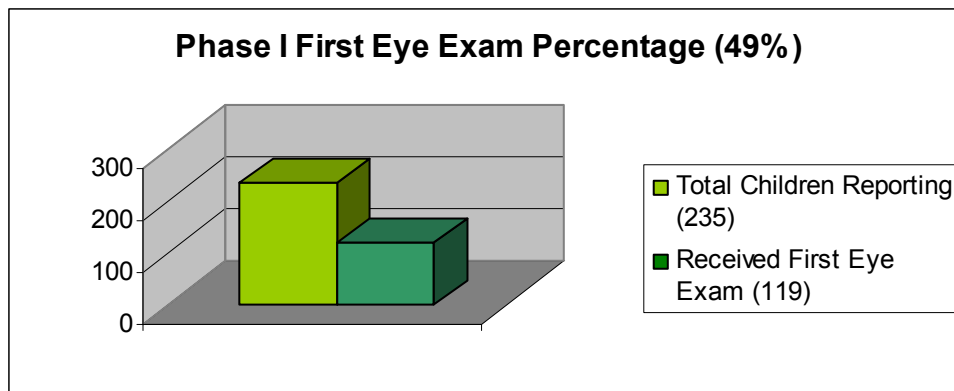
4.0 The Eye See...Eye Learn Pilot Program Review and Assessment

4.1 Review:

This report reviewed and accessed three main elements within the goals identified under section (3.3) *Goals of the Children's Vision Initiative Pilot*. Measurement of the Pilot Program results included a comparison of Saskatchewan Health statistics from 2002 to 2009, an assessment of ESEL eye examination reports and responses from the ESEL Package questionnaires.

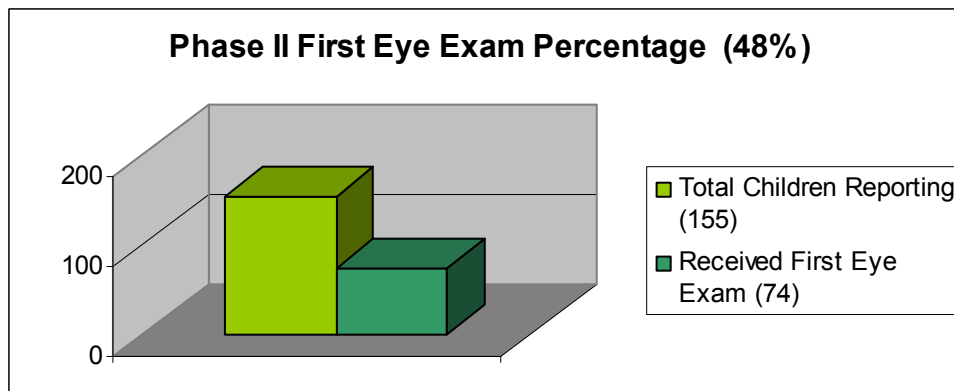
Phase I Results:

Phase I had 235 Eye See...Eye Learn examination forms returned confirming that for 119 of the children this was their first eye examination.



Phase II Results:

Phase II had 155 Eye See...Eye Learn examination forms returned with 74 reporting that this was their first eye examination.



RECAP: Total children reporting were 390 with 193 or 48.5% of these children receiving their first eye examination.

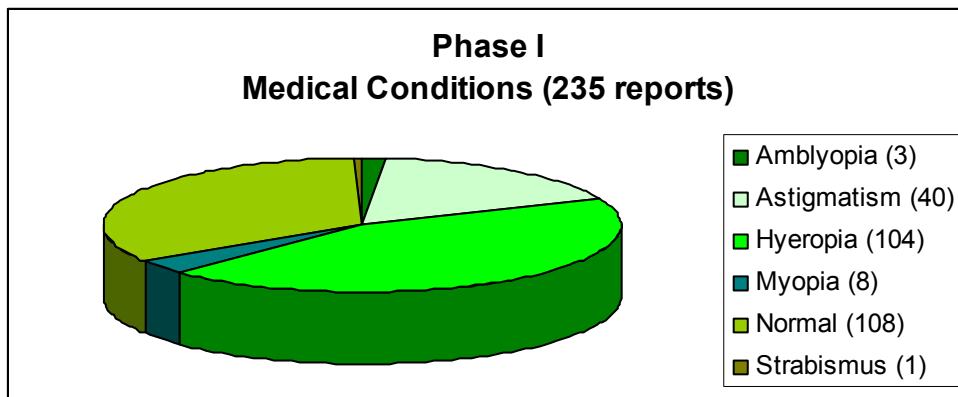
During both Phases the Saskatchewan Association of Optometrists included Children’s Vision information including ESEL Pilot Program documents on their website at www.optometrists.sk.ca. From November 17, 2008 to December 31, 2009 the Children’s Vision page received 706 hits. It was also noted that the ESEL activity kit included in this new section received 459 hits and each individual page of the ESEL Pilot Program was hit between 20-129 times.

4.1.1 To improve the opportunity for learning through the detection and treatment of visual impairments:

This was assessed by tracking the incidence of vision problems in children reported in the ESEL Pilot Program. Statistics from other sources confirm that four out of every ten children entering school will have an uncorrected or undiagnosed eye health or vision problem. This ESEL Pilot program exceeded the normal average.

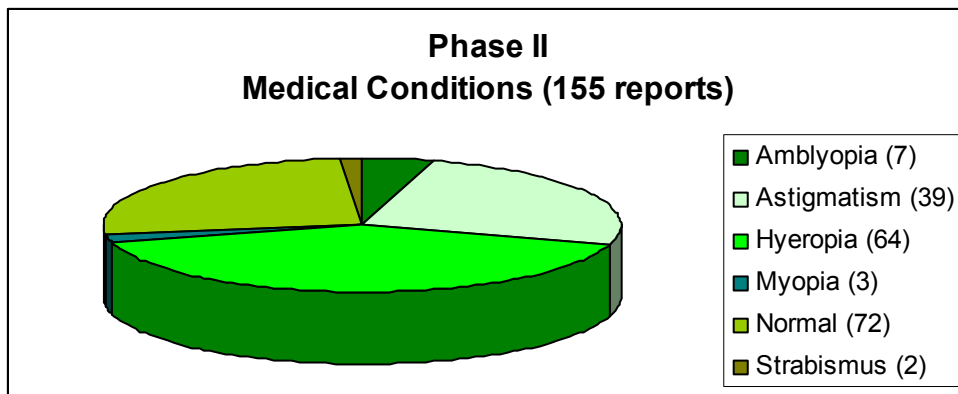
Phase I Results:

Out of 235 reports there were 156 (66%) children diagnosed with vision problems. There were 26 children requiring corrective lenses and preferential classroom seating was recommended for 3 children.



Phase II Results:

Out of 155 reports there were 115 (74%) children diagnosed with vision problems. There were 20 children requiring corrective lenses and 3 of those children required preferential seating in their classroom to aid in their learning.



RECAP: Total children reporting were 390 with 271 or 69.5% of those children presenting with eye conditions.

- 4.1.2 To ensure that children and parents/guardians are aware of the importance of eye health examinations and that the Ministry of Health covers the costs for one optometric examination every 12 months for children under the age of 18.

Phase I & II Results:

The parent questionnaire was not developed or included in Phase I; however, 92% of the 145 parents/guardians responding to the Phase II ESEL parent questionnaire indicated that the ESEL program was beneficial. 88% of the teachers responding to the Teachers questionnaire from Phase I and 94% from Phase II found the program to be both informational and beneficial and confirmed their commitment to continue recommending eye exams in their curriculum.

99% of the parents/guardians responding said they would be including eye examinations in their child's annual health routine.

Some respondents found the Parent/Guardian information package overwhelming in Phase I. In response, the SAO made an effort to scale down the package in Phase II.

Educational "in-service" sessions were coordinated to "Educate the Educators" of the importance of eye examinations, to confirm that eye examinations were covered by SK Health for all children under the age of 18, and to provide a review of the Pilot goals and the roles and responsibilities of the participants. Questions and comments during the sessions (while not documented) confirmed that the majority of teachers felt that early childhood eye examinations were important and many teachers were unaware that the cost for an eye examination was paid for by SK Health.

- 4.1.3 To increase the number of age 5 children receiving eye examinations by the age of 5 (or within the first year of school):

As shown in (4.1) Review charts, 49% of the children involved in the Pilot Program received their first eye exam during Phase I and 48% during Phase II.

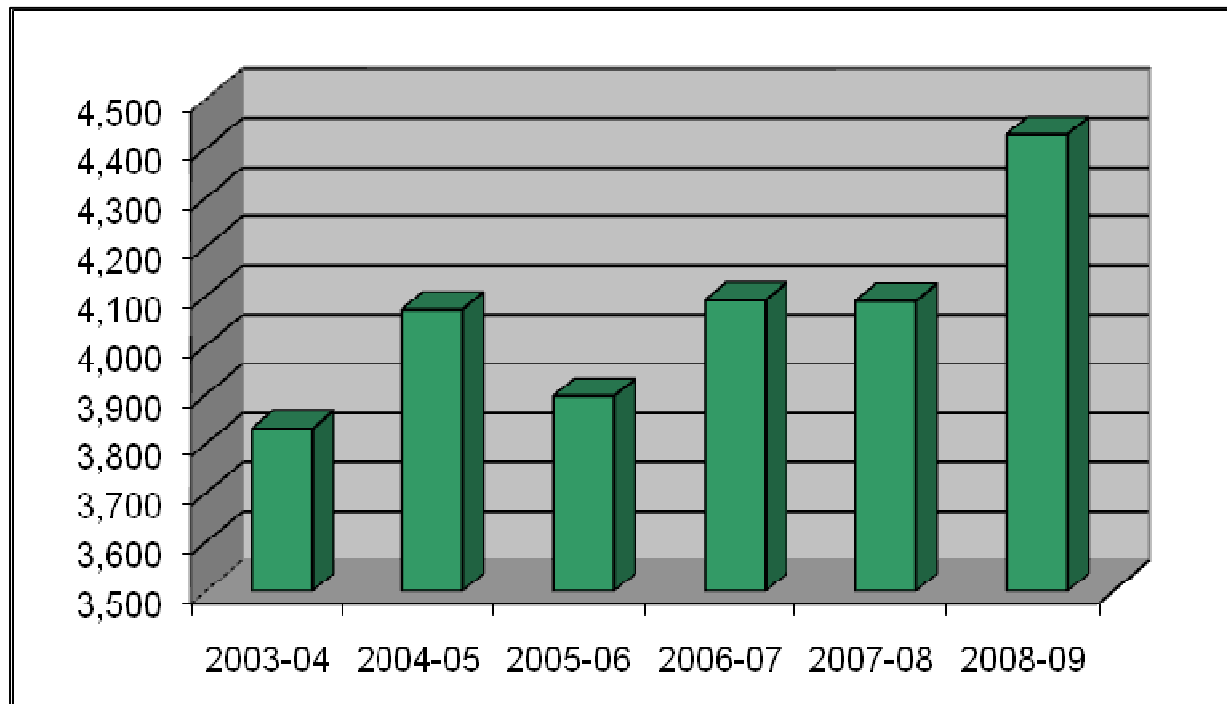
SK Health statistics on the number of age 5 children obtaining an eye examination have been recorded since 2002. They provide measurable and substantiating evidence to support the need to improve the number of children seeking an eye examination. In 2002 only 28% of Saskatchewan children age 5 received an eye examination.

As of September 30, 2008, prior to the ESEL Pilot beginning in November 2008, there were 34% of age 5 Saskatchewan children obtaining an eye examination.

At the end of the Pilot, as of December 31, 2009, this number increased to 36.29%, an increase of almost 2% of age 5 children obtaining an eye examination.

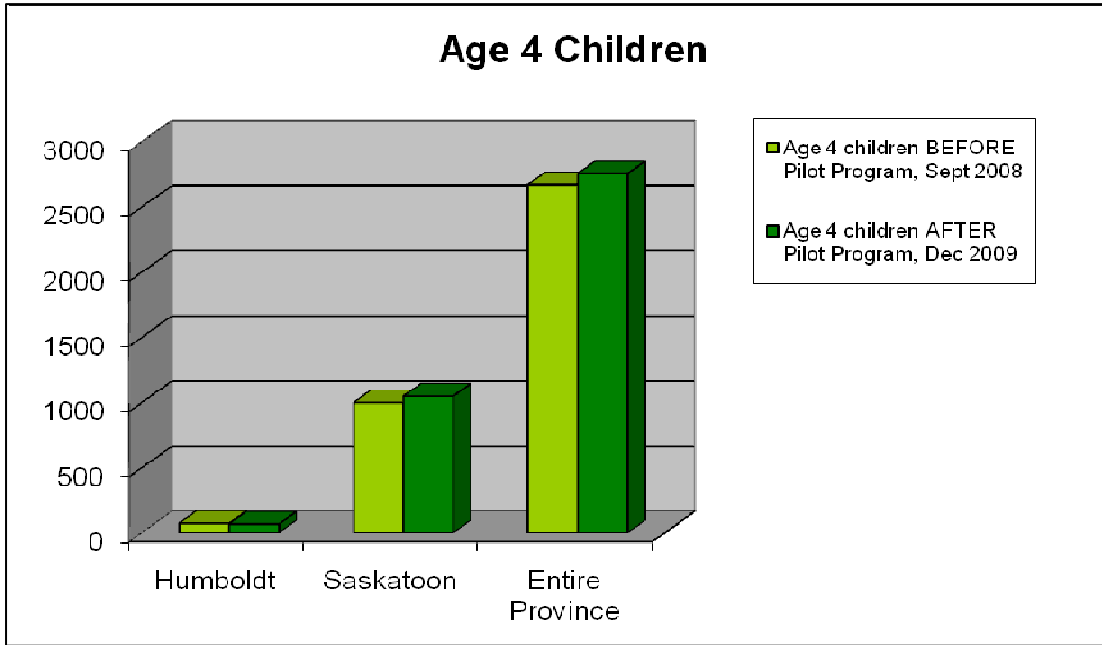
We believe the ESEL Program was a significant contributor to this increase.

Year	# of 5 Year Olds Receiving Service	% of 5 Year Olds	Cov Pop for Single Age
2001-03	3,763	28%	13511
2002-03	3,819	29%	13342
2003-04	3,830	31%	12548
2004-05	4,072	32%	12641
2005-06	3,896	31%	12577
2006-07	4,091	34%	12058
2007-08	4,089	33.93%	12053
2008-09	4,428	36.29%	12201

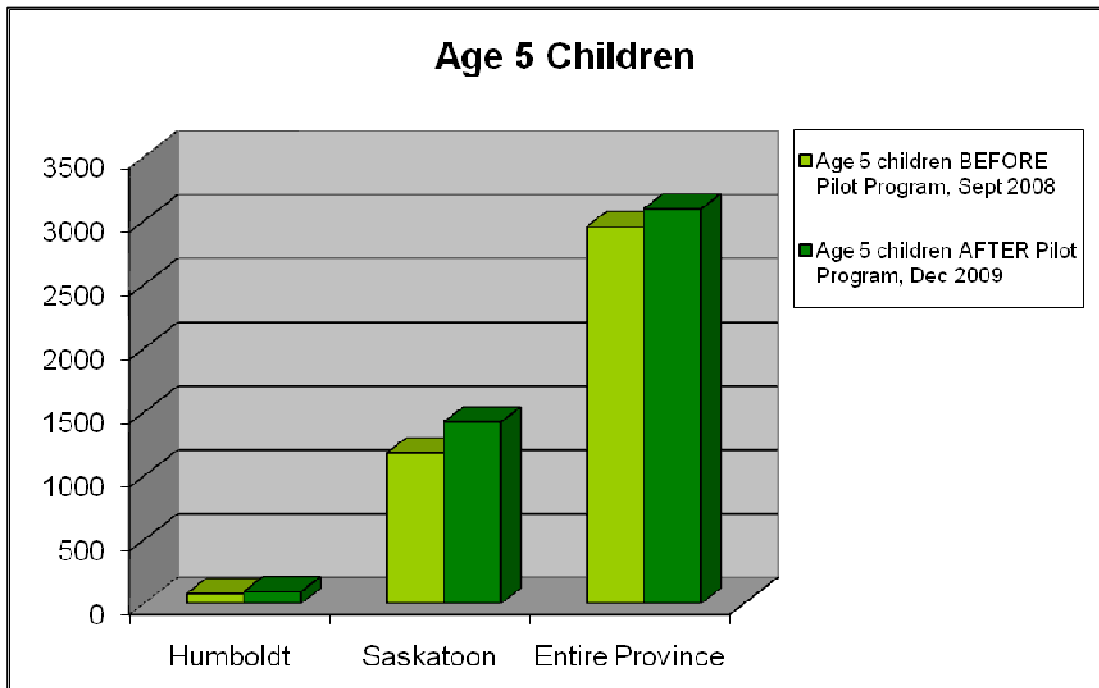


*Statistics provided by the Ministry of Health

The statistics provided below tabulates children age 4 and age 5 within the Pilot area. The students of the Greater Saskatoon Catholic School Division have not been solely identified within these numbers. Age 4 children have been included as pre-kindergarten children were included within the Pilot.



	<u>Humboldt</u>	<u>Saskatoon</u>	<u>Other</u>
Age 4 children BEFORE Pilot Program, Sept 2008	72	998	2670
Age 4 children AFTER Pilot Program, Dec 2009	66	1048	2756



	<u>Humboldt</u>	<u>Saskatoon</u>	<u>Other</u>
Age 5 children BEFORE Pilot Program, Sept 2008	77	1180	2954
Age 5 children AFTER Pilot Program, Dec 2009	92	1423	3093

4.2 Assessment:

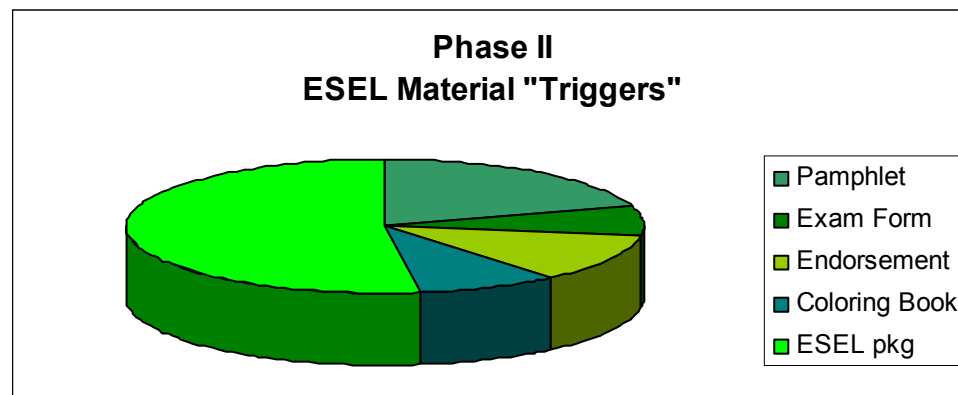
Phase I:

There were 85 participating teachers returning a total of 62 Teacher Questionnaires. Parent/Guardian Questionnaires were not developed or included in Phase I.

Phase II:

There were 66 participating teachers and 43 Teacher Questionnaires were returned. A total of 145 Parent/Guardian Questionnaires were returned.

What ESEL portion of the Pilot Program was considered the “trigger” or motivator to initiate an eye exam? This question was not asked until Phase II where the results suggest that the entire ESEL package was informative and served as a motivator and in some cases a reminder for parents to take their children for an annual eye examination.



Teachers commented that the ESEL materials were age-appropriate and the tattoos and coloring books were popular with the children. The Packages were informative, although some felt that the Packages contained too much information. Teachers found that reaffirming the importance of an eye examination and encouraging parents to obtain an eye examination was beneficial. Overall assessment was that the ESEL Pilot Package was beneficial as both an awareness tool and a motivator to arrange an eye examination.

Teachers commented that the information was easier to communicate to the parents/guardians when it was made available at the beginning of the school term. Phase I received a larger number of returned reports; however, this could be because of the internal promotions from the GSCSD superintendents and enthusiasm as well as the pre-kindergarten children and their parents/guardians would have been introduced to the ESEL Pilot materials by the time they entered kindergarten in Phase II.

For the majority both teachers and parents/guardians found value in the ESEL message and materials and felt that the program provided motivation to obtain an eye examination for children starting school.

5.0 Other Children's Vision Initiatives in Canada

5.1 National Overview:

The Canadian Association of Optometrists continues to prioritize children's vision as a public awareness priority.

British Columbia - The **a-b-See™** Children's Vision Program (a similar interactive children's eye health program) continues in its 6th year with corporate sponsorship from Essilor Canada. The **a-b-See** kits are distributed to daycares and pre-schools province-wide.

Alberta - The **Eye See...Eye Learn (ESEL)** program is introduced to all kindergarten students. The Alberta government continues to support the **ESEL** program providing annual funding of \$50,000. Through a partnership with Optiq Frames, Metro Optical and Essilor Canada their **ESEL** program dispenses on average 1000 pairs of glasses per year.

Manitoba – In Sept 2008 they launched a Pilot **Eye See...Eye Learn** program in Winnipeg's Pembina Trails School Division. The program involves all kindergarten students in the Division (approximately 800 per year). Volunteer-based vision screenings are no longer offered in this School Division. No Pilot results are available at the time of this report.

Ontario - An **Eye See...Eye Learn** Pilot Program was introduced in the fall of 2009 in the Public and Catholic School Boards in the Hamilton-Wentworth District. The program will involve 140 elementary schools (450 teachers and available to approximately 5000 students) in this district in a city of approximately 500,000 people. Partners in the project include local Best Start agencies, CNIB and healthcare providers as well as support from industry partners. The Pilot is set to expand into the Windsor/Essex, Peel, Halton and Thunder Bay regions in 2010.

Nova Scotia - Children's Vision committee participated in events and advertising to educate parents about importance of eye examinations. Presentations were arranged for elementary teachers' professional development days.

5.2 Saskatchewan Overview:

5.2.1 Public Awareness:

The Saskatchewan Association of Optometrists continues to fund a Provincial Public Awareness Fall Campaign on the importance of eye examinations during Eye Health month (October) and during the balance of the year as opportunities present. **ESEL** materials and eye health information is also available on their website at www.optometrists.sk.ca.

5.2.2 Saskatoon Building Equity Committee:

Discussions with the Saskatoon Building Equity Committee (a subsidiary of the Saskatoon Health Region and Saskatoon core area school principals, social workers and public health nurses) identified the need to improve access to optometric services for children living in the core area of Saskatoon.

5.2.3 Coordinating an Eye See...Eye Learn Optometric Office in the Core area of Saskatoon:

In 2009, Dr Dorothy Barrie, an optometrist with 20 years of private practise experience in Saskatoon, Past President of the SAO and Chair of the SAO Children's Vision Initiative wrote a thesis on the "Provisions of Optometric Services in the Inner City of Saskatoon" for the MBA program at the Edwards School of Business and Wilson Centre for Entrepreneurial Excellence through the University of Saskatchewan. The business plan included the installing and operating of an optometric clinic one day a week during school hours in the core area of Saskatoon in St Mary's school. The plan estimated that the optometric clinic would require approximately \$70,000 funding from either government or from industry donations for equipment. Optometrists from Saskatoon would arrange to service the location outside their current practice locations.

The three main goals of the ESEL Optometric Clinic were identified as:

1. To ensure that children entering school have a complete eye examination.
2. To provide eyewear as required and desired, with regular maintenance, adjustments and warranty service as needed.
3. To provide education and information for parents/guardians regarding their children's vision and eye health.

Remuneration for the optometrists would come from eye examinations and standard billing. It is assumed that the revenue from this source would be less than a typical practice; however, for the well-being of the children living within the core area of Saskatoon the optometrists are prepared to support this initiative.

It is unlikely the revenue potential from the ESEL clinic could support the additional expense of an optometric assistant; however, the assistant would be mandatory in view of the time restrictions within a "school day", logistics of the space available and for efficiency and coordination of students. Filling this position remains unresolved.

6.0 Economic Analysis and Financial Implications

"Ocular conditions, if undetected, can have substantial long-term implications for the quality of life of the child and the family and can place a burden on public health resources."(10)

As reported in the National Coalition for Vision Health document, *"The cost of vision loss to Canada and to Canadians is significant, by both financial and non-financial measures, and whether expressed in direct or indirect costs. The report estimates the real financial cost of vision loss in Canada at \$15.8 billion in 2007, representing 1.19% of the country's gross domestic product. Of that amount:*

- \$8.6 billion was a direct health system expenditure

- *\$7.2 billion was indirect costs association with vision loss, made up as follows:*
 - *\$4.4 billion was lost productivity (loss of employment, absenteeism, premature deaths);*
 - *\$1.8 billion is so-called “deadweight losses”, including welfare payments and forgone taxation;*
 - *\$0.7 billion was the value of the care for people with vision loss; and*
 - *\$305 million was for other indirect costs, including home modifications and aids.*

Within the next 25 years, the number of Canadians with vision loss is expected to double. The expenditures associate with visual impairment or blindness are expected to cost Canadians \$40.3 billion per year (expressed in 2007 dollars) by 2032.

Comprehensive eye examinations are cost-effective investments in children, when viewed over time, especially when the possible long-term medical and social consequences are taken into consideration. A 2006 study in New Jersey concluded that early interventions for those children with undiagnosed or untreated vision problems could eventually save the state \$200 million/year in special education costs and the rescued lives of thousands of children each year.”(1)

The ESEL Program is a cost effective public awareness program offering flexibility within a designated budget. The ESEL tools including coloring books, tattoos and informational pamphlets compliment the Pilot Program by providing a series of subtle reminders to encourage action. The ESEL Program materials are developed, available and without limitations. The Saskatchewan Association of Optometrists is prepared to provide administrative assistance “in-kind” to continue to expand the ESEL program across the province.

7.0 Observations and Recommendations

The opportunity to improve learning through the early detection and treatment of visual impairments exists. There remains 63.71% of Saskatchewan children age 5 who have not had an eye examination and remain at risk for undiagnosed visual impairments that could affect their ability to learn at their full potential.

The ESEL Pilot was information heavy and the tracking was onerous. The tracking of returned reports provided basis for the Pilot evaluation but provided little value to the children involved. The tracking of increases to the number seeking eye examinations should be continued by the Ministry of Health. It is assumed that children diagnosed and prescribed treatment will have an improved opportunity for learning.

The collaboration of stakeholders including government, educators and health professionals complimented and affirmed the importance of the eye examinations. Teachers provide the optimal “funnel” to encourage children to have an eye examination prior to starting school. The ESEL materials provide a flexible assortment of awareness tools and motivational tools.

The majority of teachers and parents/guardians found value in the ESEL message and materials and felt that the program provided motivation to obtain an eye examination for children starting school. The ESEL program should be included in all kindergarten and pre-kindergarten registration packages and arranging an eye examination should be considered as a school preparedness recommendation.

8.0 Summary

Our children depend on us to give them the necessary tools to succeed in school and in life. Comprehensive eye exams to ensure that students can see clearly and comfortably is an important step in helping them fulfill their potential.

Barriers to eye examinations should not exist for children. The Ministry of Health funds the eye examinations and health benefit programs exist for those people requiring additional health and treatment coverage.

Lack of awareness of the importance of an eye examination and prioritization create barriers. A broken arm or a toothache normally creates an immediate reaction and priority, whereas the need for a vision correction may go unnoticed or unattended for years. Without pain or a prior comparison, children seldom recognize that they have a visual problem. Raising public awareness through programs like ESEL is the key to removing this barrier.

Building partnerships, health, education, improving public awareness and motivating action required planning and commitment. The Saskatchewan Association of Optometrists is grateful for the Pilot funding and the opportunity to work with government to improve the number of Saskatchewan children seeking eye examinations.

The Saskatchewan Association of Optometrists and its members support the Eye See...Eye Learn program and encourage the Ministry of Health and the Ministry of Education to include the materials in each pre-kindergarten and kindergarten children's school registration package. The Eye See...Eye Learn pilot while perhaps cumbersome in its piloted format could be easily simplified and still motivational as an awareness program of the importance of eye examinations for children beginning school.

We hope that this report will provide momentum to advance the Eye See...Eye Learn program across the province.



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See Friabbit Play



See Friabbit Run



See Friabbit Learn