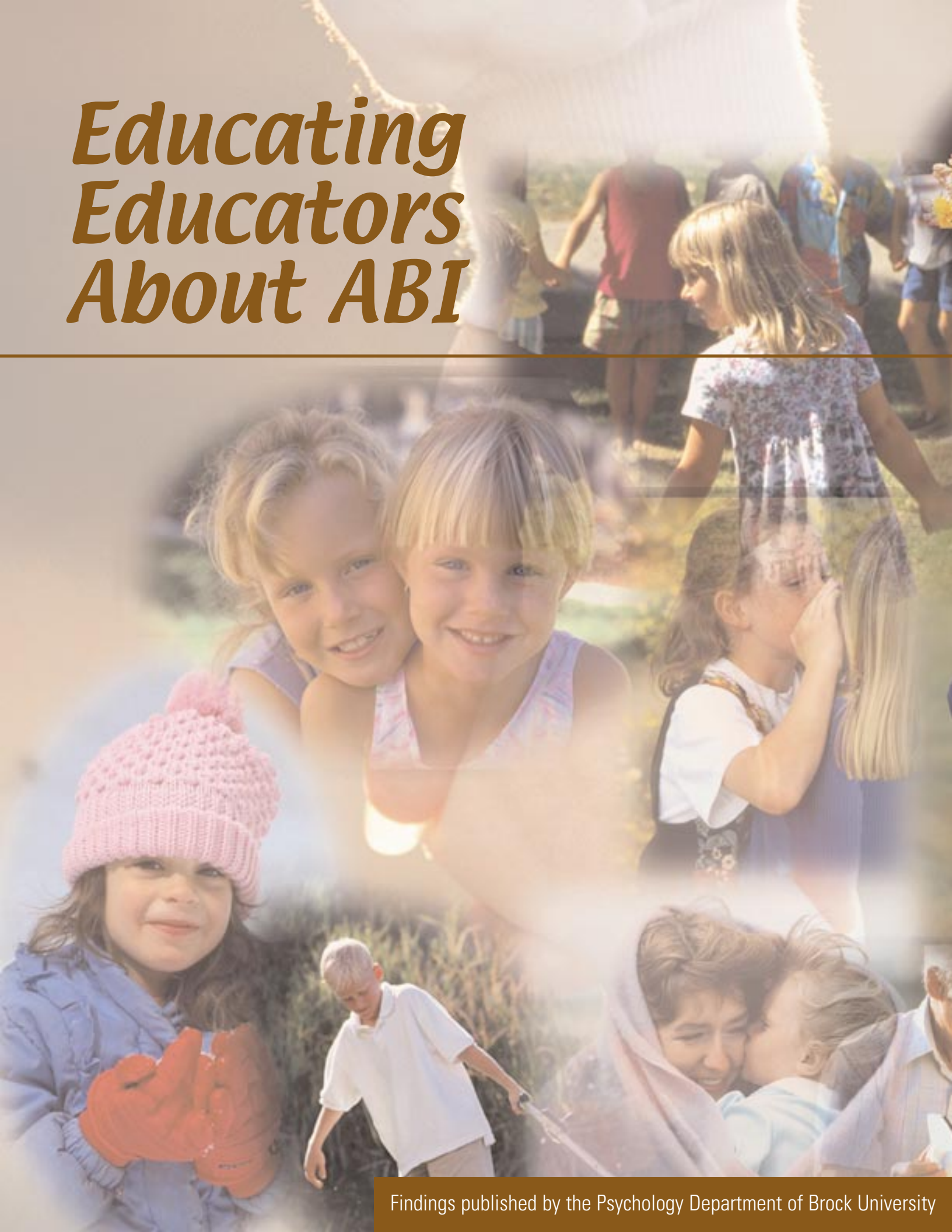
Educating Educators About ABI



Findings published by the Psychology Department of Brock University

Objectives

Primary Objectives:

To provide teachers with an awareness of the sequelae of ABI and how these affect a student's cognitive, behavioural, emotional and social learning.

To establish an educational program for teachers that will assist them in understanding the significance of ABI in the learning processes of their students who are living with the effects of ABI.

To provide teachers with strategies relevant to a classroom setting that can be used to instruct a student with an ABI.

Secondary Objectives:

To raise public awareness of the challenges and potential of students with ABI.

To provide teachers with a set of protocols that would alert them to students who may be living and learning with the effects of an ABI that may never have been diagnosed. These protocols would include tactful ways for them to approach parents with their concerns.

To make students with an ABI, their parents, and their teachers aware that additional information and support is available on an on-going basis through the 1-800 support line of the Ontario Brain Injury Association; a special extension that has been dedicated to educational issues.

Project Scope

PROJECT SCOPE

This project a community project, aimed at the provincial level. Through the 11 Faculty of Education programs of Ontario Universities and the special needs coordinators of the Ontario school boards, we intend to access as many special needs and regular classroom teachers in Ontario as possible and assist them in accommodating students with acquired brain injury (ABI) in the classroom.

The current status of teacher training does not acknowledge an ABI designation. Without the necessary awareness and training in ABI it is, understandably, common for classroom teachers to address and/or confuse the needs of a student with ABI with those students who have other special needs issues such as developmental delays, learning disabilities, and lack of motivation or behavioural problems.

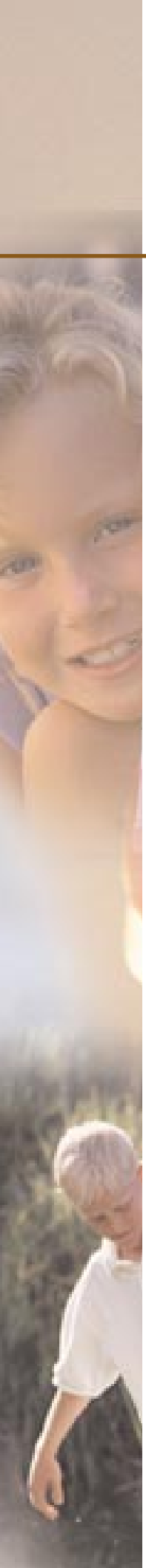
This project, through surveys, curriculum development, strategy proposals, workshops and websites, is designed to assess and "educate educators about ABI". Without specific and targeted interventions and strategies, teachers are unable to effectively assist the students who have a brain injury. Thus a teacher-oriented project designed especially for students living with the effects of ABI will benefit their ability to achieve educational success.

Abstract

The goal of this project is to educate and assist teachers in the Ontario educational system to work more effectively and productively with individuals who have sustained an acquired brain injury (ABI).

Children with ABI within the school system (ages 3 to 21 yrs.) have an excellent opportunity for compensatory recovery through their direct access to teaching professionals with expertise in cognition (e.g. learning, problem solving), physical growth (e.g. physical education, nutrition), and social development (e.g. group interactions). Further, the child with ABI within the school system will have sustained a mild to moderate injury, and therefore, will be most able to benefit from cognitive and educational interventions.

This project is designed to access the largest possible population of teachers, often the first, if only, resource people available to the child with ABI. We are currently in the process of developing professional curriculum materials designed to: (a) increase teacher awareness of ABI (symptoms, characteristics – for identification); (b) outline academic, social and behavioural concerns specific to students with ABI; (c) provide strategies for classroom use; (d) disseminate this information along with a teaching follow up and support framework to ensure maximum understanding, use and continuous support for teachers, and thus students, in the classroom.

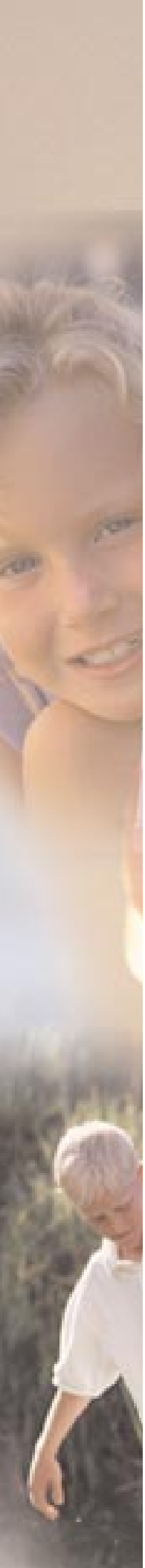


Introduction

The consequences of ABI can affect many areas of function, most of which can severely interfere with successful academic achievement. Based on research estimates (Segalowitz & Brown, 1991) and incidence hospital reports (1996 Census data, Statistics Canada), the prevalence of school age individuals in Ontario who have sustained a brain injury and survived is approximately 27,000. Since recovery takes months (in the case of concussion) or years, schools are an important extension of the rehabilitation that begins in the hospital (Clark, 1996).

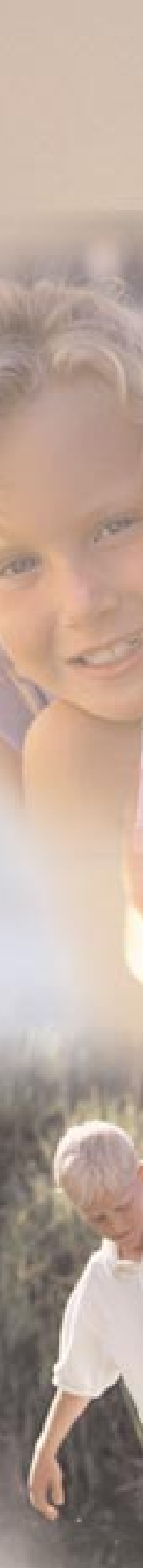
Children with ABI who are able to access the school system will typically have sustained mild to moderate severity in injury, and therefore, are the ones who can most benefit from cognitive and educational interventions. Further, since physiological central nervous system neurodevelopment is particularly extensive from conception until age 15, and continues at a more limited, but important, pace up until ~ age 25 (Kolb, 1995), and since this neurodevelopment is particularly enhanced by experience and interactions (Gazzaniga, 1995; Kandel, Schwartz, & Jessell, 1995) despite the kind of neurotrauma, the educational system is an excellent resource to promote recovery and redevelopment of function.

However, educators often lack the knowledge and specific training as to how ABI can affect one's social and academic function (Savage &



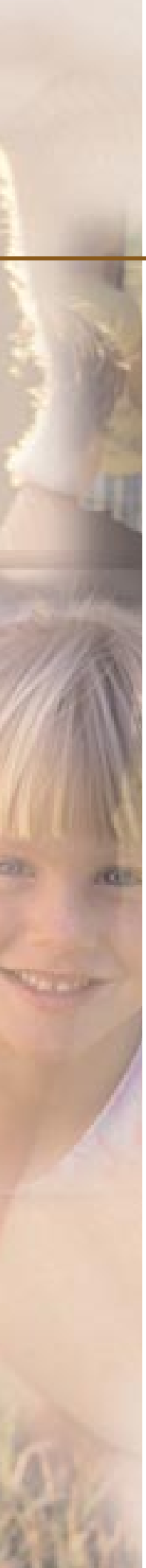
Wolcott, 1994; Glang, Singer & Todis, 1997). Since children, and adults alike, can frequently make a good physical recovery, outwardly they will appear normal in all respects. Common cognitive problems, for example, include difficulties with attention, memory, language comprehension, concept formation, integrating/organizing/generalizing information, problem solving, and judgement (Bigler, 1987; D'Amato & Rothlisberg, 1996). Persistent behavioural and emotional problems are also observed such as aggression, poor anger/frustration control, and hyperactivity. Furthermore, notable problems may not be apparent for a year or more after injury (Chadwick, Rutter, Brown, Shaffer, & Traub, 1981; Tyler & Mira, 1999) and often educators are not notified of the child's injuries (Savage, 1991; Singer, Glang & Williams, 1996) and therefore the injury is often overlooked as the relevant correlate or cause of difficulty. As such, the behavioural problems will be misinterpreted and considered a learned conduct or social issue independent of any underlying organic basis (Johnson, 1992; Farmer et al, 1996).

Students who have sustained ABI are often very different from their peers with learning disabilities or other special needs. For example, it is not uncommon to find that prior to the injury, these individuals typically experienced success in school (Blosser & DePompei, 1989; Glang, Singer & Todis, 1997) and often the student and teacher have set unrealistic goals and apply no longer appropriate strategies for theclassroom. The resultant failure upon return to the classroom is frustrating and difficult to comprehend for the student and the teacher. Plans, goals and programming must be modified appropriately and realistically to assist the student's success.



The project we have undertaken will directly address this gap in the educational system. A promising aspect of this endeavour is that the educational system already has in place a strong program directed at working with students with special needs, and on securing a substantial resource library providing teachers with information and access to materials and interventions on how to better address students with special needs. The problem is that the designation of ABI as a special needs category for recognition and academic programming has not been acknowledged or established. Further, currently only 4 of the 11 Faculties of Education in the province offer a Special Education component in their basic teacher training program, and even in these, ABI receives little attention.

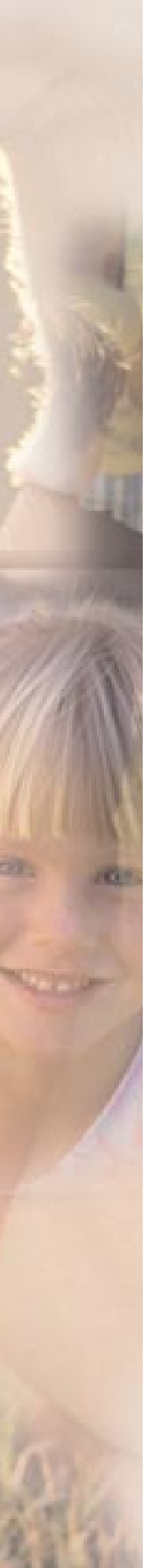
If teachers working with a child with an ABI attempt to find information on teaching children with ABI, they will find articles in the research literature, but almost all of them are written by specialists in rehabilitation and lean toward application in a clinical setting. There is a tremendous need for ABI relevant teacher training in the reintegration of students with ABI into the classroom. It is our goal to provide this awareness and education and to develop the necessary materials for teachers in the Ontario school system.



Method

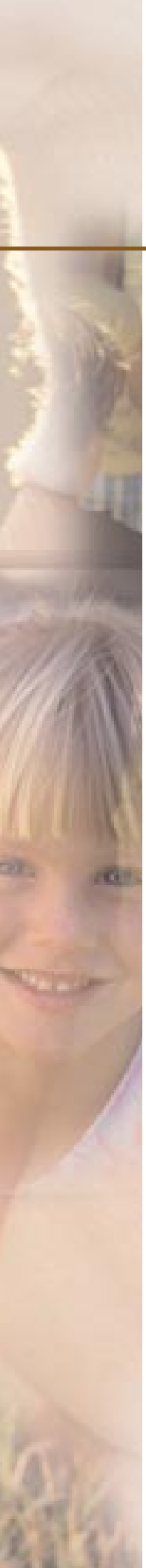
Using representative sampling, 70 school boards from across Ontario were randomly chosen and contacted for participation in the study. Within these boards, 513 schools had been pre-determined to match the overall demographic characteristics of the 4669 existing schools across Ontario in terms of geographic distribution, language of instruction, level of instruction, public/separate affiliation, and total enrollment. Each school board of interest was contacted either by phone, fax or e-mail and provided with a sample package of materials to review. Once the school board had given permission, the schools were contacted according to the procedure in place for each board. The principal of each school was asked to invite 4-6 teacher volunteers to participate in the study. Interested teachers were provided with an introductory letter explaining the procedure of filling out and returning their survey. In the letter the teachers were reminded that their participation is completely voluntary – none of their superiors or peers would know if they agreed or declined to fill-out the survey, and that they have the option of completing the survey on paper or on-line in an electronic format. Anonymity was ensured through a coding procedure that would allow matching on a pre- and post-test basis.

This is a single-blind study. The only aspect of the research that was not disclosed to participants before completion of the study was that we were particularly interested in acquired brain injury. Once all the



teachers had submitted their surveys, they received a second letter of feedback (debriefing) explaining our project. This was done in order to evaluate general knowledge of ABI in the broader context of special needs.

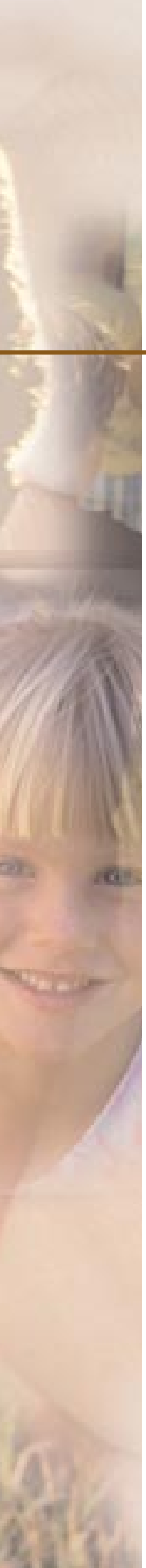
Teachers also receive a brochure about acquired brain injury and our project, access to a web site, possibility for consultation on individual cases, and the on-line version of the resource binder as well as being invited to provide feedback and comments on the material. Together with our assessment of current understanding about ABI in the classroom along with input from experts and professionals in the field, we hope to target and address the needs of teachers of students with ABI.



Participants

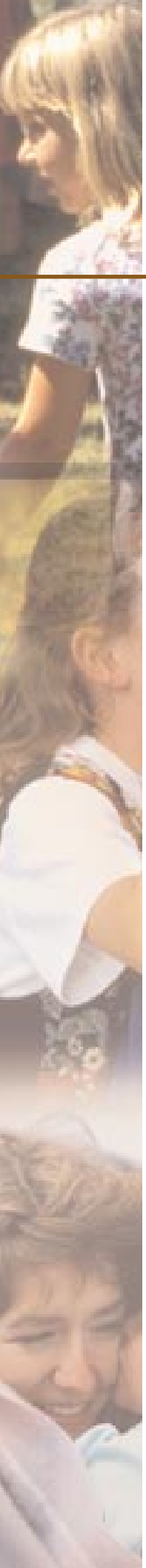
The target population is the 250,000 teachers of the Ontario School system who are the frontline workers in gaining direct contact to, and have the educational responsibility for, the 27,000 school aged individuals who have sustained a brain injury. The materials we are preparing for the teachers are intended to be practical, direct and readily useable. In addition, teachers and, through them, students and families who are involved with ABI, are being offered expertise, academic support and resources.

Along with the teachers who are directly participating in the survey, an Advisory Committee has also been formed to provide input, recommendations, and feedback regarding the practical use and applicability of the educational materials designed during the project. This committee consists of Ontario Special Needs Educators, family members of students who are living with the effects of ABI, physicians, lawyers, and a member of the general public. These committee members are located across Ontario from Thunder Bay to London to Welland so that concerns and opinions from as many regions in Ontario as possible are represented and reflected in the educational material being developed.



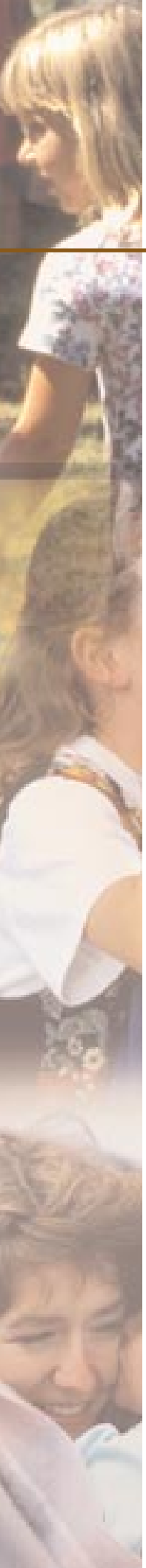
Dissemination of Results

This project is producing an essential bank of knowledge about the characteristics of children with ABI and compensatory strategies that can be implemented in the classroom. This information for teachers will be packaged in several formats to provide the widest possible dissemination – a curriculum module for teacher training, workshops for professional development, and web-site access resource for individuals to obtain the relevant information (www.abieducation.com). In addition, the dissemination of results is taking place through direct contact with Faculties of Education, Ontario School Boards, a 1-800 support line (1-800-263-5404), the OBIA organization, as well as through professional means in the form of conference presentations and annual reports to ONF.



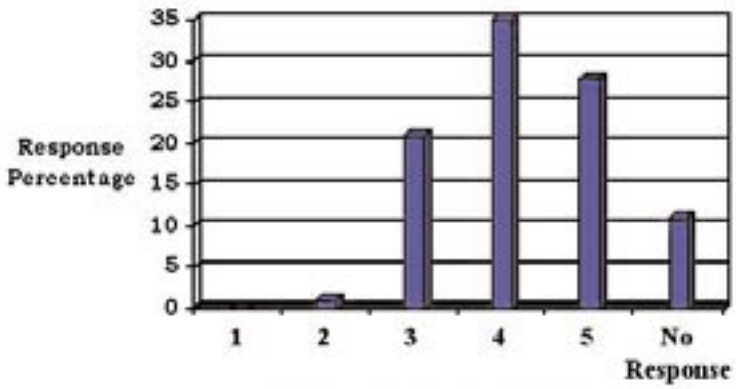
Results

To date, 17 of the 70 school boards in Ontario have agreed to participate in our survey for a response rate of 24%. Within the school boards, 43 individual schools from our sample of 513 have agreed to participate for a response rate of 8%. Finally, within each individual school 223 teachers from our sample of 2000 have returned completed surveys for a response rate of 11%. These data are providing us with invaluable information regarding teacher's knowledge of ABI and are forming the basis for the kind of information we are providing to teachers in our Educating Educators about ABI resource binder, brochure, poster, web site, and 1-800 information phone line.



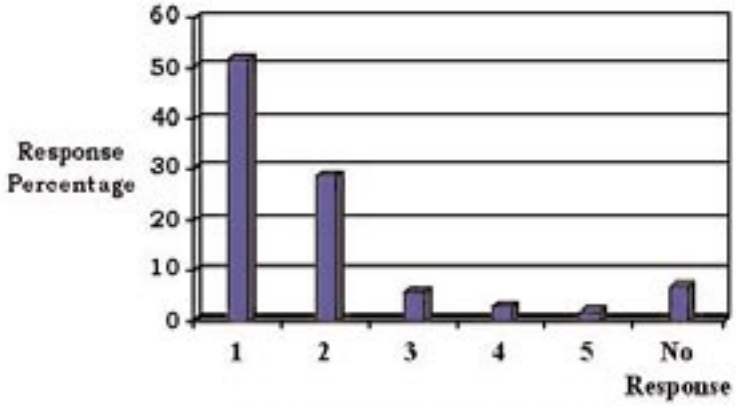
Results-Graphs

Normal IQ scores after a head injury indicate that a child will have no trouble in the classroom.



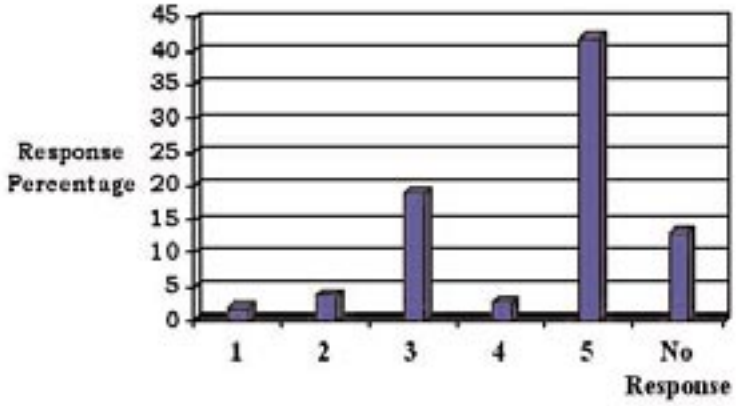
Rating Scale 1 = Strongly Agree, 5 = Strongly Disagree

A mild brain injury can affect a child's ability to concentrate, learn and function in the classroom.



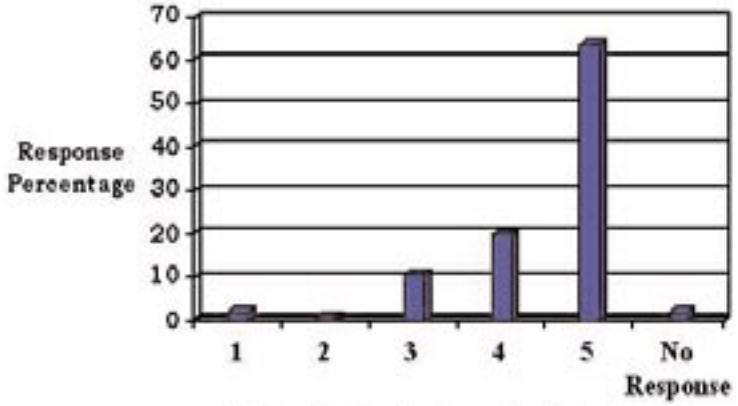
Rating Scale 1 = Strongly Agree, 5 = Strongly Disagree

A brain injury heals with time and physical recovery is a sign that the brain has healed.



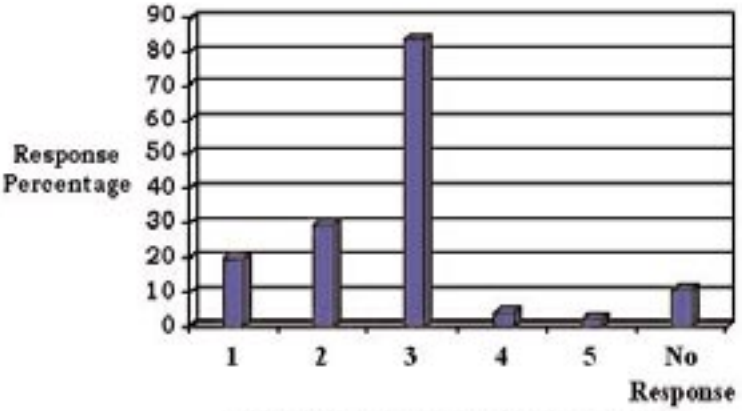
Rating Scale 1 = Strongly Agree, 5 = Strongly Disagree

All learning disabilities can be addressed by similar strategies.



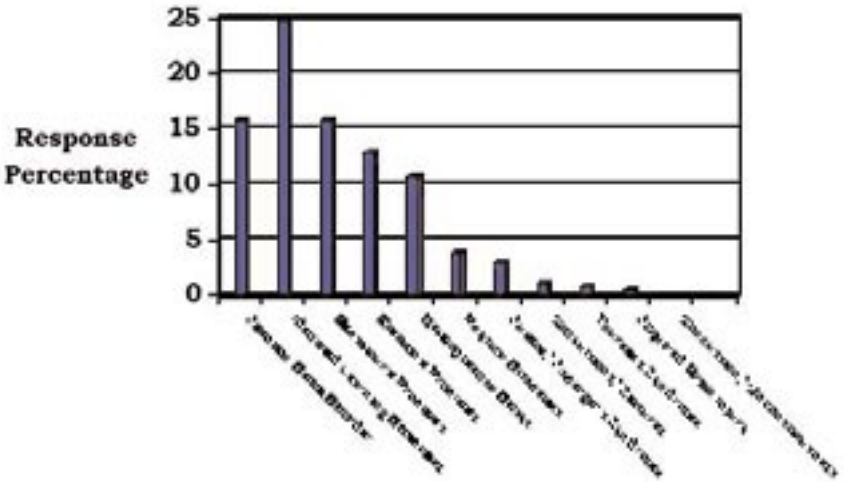
Rating Scale 1 = Strongly Agree, 5 = Strongly Disagree

Head injuries affect a student's self-awareness and ability to regulate his/her own behaviour.

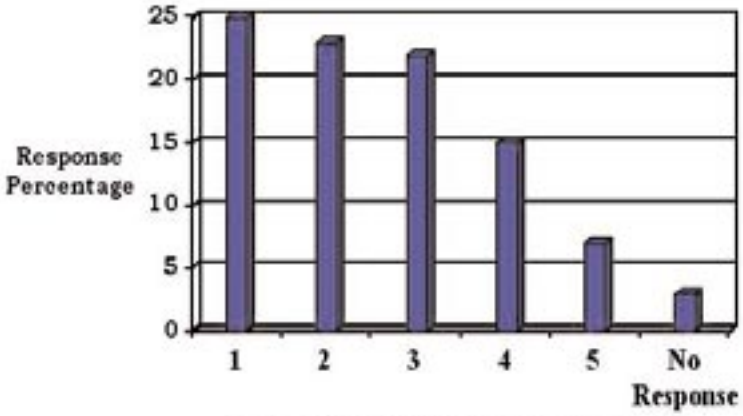


Rating Scale 1 = Strongly Agree, 5 = Strongly Disagree

Proportion of students reported to have or exhibit signs of the following conditions or symptoms.



Emotional and behavioural problems take up most of my time in the classroom.



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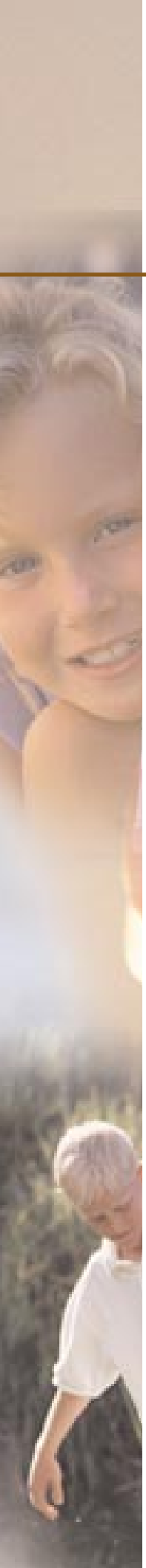

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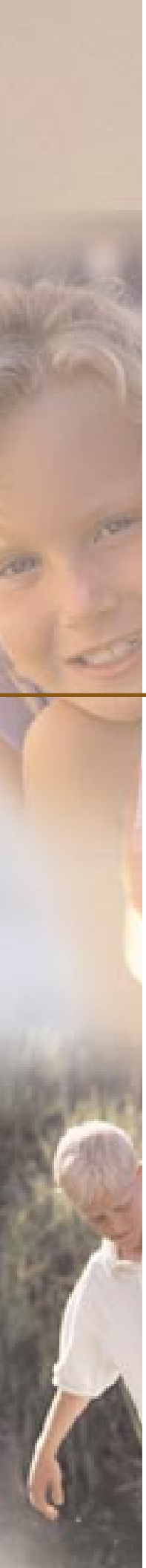

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