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# Special Education Technology - British Columbia Working Collaboratively with School Teams to Provide and Implement Assistive Technology

## *Technologie de l'éducation de l'enfance en difficulté - La Colombie-Britannique collabore avec des équipes en milieu scolaire pour fournir et mettre en oeuvre des aides techniques*

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### Abstract

Special Education Technology - British Columbia (SET-BC) is a Ministry of Education program designed to enable learners with special needs to develop their individual potential through the use of technology. The mandate of the program is to assist school districts to educate students whose access to the curriculum is restricted primarily due to a physical handicap or visual impairment.

The SET-BC model has moved through a number of evolutionary stages during the past six years. SET-BC began operating under the expert model, providing prescriptive solutions to students who were referred by school districts. Today, SET-BC works in partnership with the school districts through a collaborative model that places the decision making responsibilities back in the hands of the school district. SET-BC staff work collaboratively with school teams to decide how technology can help students achieve their educational goals. Specific services provided to school districts include planning, loaning of equipment, training and information.

The following article will describe the evolution of the SET-BC program and explain its components.

### Abrégé

*Special Education Technology - British Columbia (SET-BC) est un programme du ministère de l'Éducation conçu afin de permettre aux étudiants qui ont des besoins spéciaux de développer leurs propres aptitudes grâce à l'utilisation de la technologie. Le programme a pour mandat d'aider les districts scolaires à former les élèves qui ont un accès restreint au programme d'études, surtout en raison d'un handicap physique ou d'une déficience visuelle.*

*Le modèle de SET-BC a franchi un certain nombre de stades évolutifs depuis six ans. SET-BC a commencé par fonctionner selon un modèle expert, en fournissant des solutions normatives aux élèves, qui lui étaient adressés par des districts scolaires. Aujourd'hui, SET-BC travaille en partenariat avec les districts scolaires, d'après un modèle axé sur la collaboration, qui renvoie les responsabilités décisionnelles aux districts scolaires. Le personnel de SET-BC oeuvre en collaboration avec des équipes en milieu scolaire, afin de décider comment la technologie peut aider les élèves à atteindre leurs objectifs sur le plan de l'éducation. Les services particuliers fournis aux districts scolaires comprennent la planification, le prêt de matériel, la formation et l'information.*

*Dans l'article suivant, la description de l'évolution du programme SET-BC sera accompagnée de l'explication de ses composantes.*

Special Education Technology - British Columbia (SET-BC) is a Ministry of Education program designed to enable learners with special needs to develop their individual potential through the use of technology. The mandate of the program is to assist school districts to educate students whose access to the curriculum is restricted primarily due to a physical handicap or visual impairment.

SET-BC was formed as a result of recommendations from the Provincial Advisory Committee on Computers in 1988. This committee investigated the use of technology in the school system and determined that technology for students with special needs was to be a high priority. The

SET-BC model has moved through a number of evolutionary stages during the past six years. SET-BC began operating under the expert model, providing prescriptive solutions to students who were referred by school districts. Today, SET-BC works in partnership with the school districts through a collaborative model that places the decision making responsibilities back in the hands of the school district.

The majority of special needs students in British Columbia are educated with their non-handicapped peers in their neighbourhood schools. They are supported in these inclusive settings by school based teams who design Individual Education Plans to help them achieve appropriate educational objectives. School districts receive additional funding for these students, based on their category of disability.

The Ministry of Education places a high priority on the provision of educational technology for all BC students, including students with disabilities. SET-BC provides a province-wide technology service for students who fall in the low incidence categories of disabilities.

In order to serve all 75 districts, SET-BC operates a provincial centre located in Vancouver and eight regional centres throughout the province. SET-BC staff work collaboratively with school teams to decide how technology can help students achieve their educational goals. The services provided include the following:

*Planning:* SET-BC provides school based teams with a framework (Student Profile) for reviewing each student's needs and abilities. The teams use this information to develop a Collaborative Action Plan (CAP) for the student's use of technology. The CAP outlines educational goals, technologies that will help the student to attain those goals, and strategies for classroom implementation.

*Provincial Loan Bank:* Once the team completes a Collaborative Action Plan, SET-BC can provide a long term loan of certain types of technology to the student. The SET-BC Loan Bank includes access enhancing tools (such as word prediction software, switches and adapted keyboards), speech output devices, and adapted computer systems. A technical support team maintains and repairs loan bank equipment.

*Training:* SET-BC staff provide inservice to school based teams, focusing on a wide range of ideas and strategies that will help students use the technology in the classroom. SET-BC staff also teach university and college course for educators interested in learning about assistive technologies.

*Information:* SET-BC Centres have demonstration sites where interested persons can explore and ask questions about assistive technology. The re:SET newsletter highlights special projects, inservice activities, and innovative uses of assistive technology. SETnet is a bulletin board service (BBS) that is used by SET-BC staff and our key school district contacts to share information and resource materials.

An example of a student who participates in the program is "Jane", a teenager who has cerebral palsy and cannot walk or talk. In November of 1993, Jane was using an Introtalker but relied most heavily on body language and vocalizations to communicate. At a team meeting dynamic screen display communication devices were discussed and the skills required for effective use (for example, knowing that a message is on an overlay that is not in her visual field and being able to access it ) were outlined. A plan was devised to teach Jane the skills required. This was accomplished during the next year via paper communication boards. In November, 1994, a team meeting took place where various dynamic screen display systems were presented and compared. A system was chosen, requested from the Provincial Loan Bank and delivered in the Spring of 1995. Three training and support sessions have been conducted and follow up will continue in the Fall of 1995.

### District Partners

SET-BC has established a network of District Partners who provide a vital link between SET-BC and school district staff and students. SET-BC staff work closely with these professionals in assessing student needs and planning for the implementation of technology. District Partners enhance the delivery of service to students, families, and schools while providing greater autonomy to local professionals. Major roles for district partners include: (a) acting as a liaison between the school district and SET-BC, (b) providing a clear understanding of the SET-BC mandate for school staff, (c) facilitating the identification of students and collaborative planning, (d) identifying areas of inservice needed for schools and students, (e) identifying sources of assistance for educational and technical support and (f) maintaining an educational focus and clarifying school needs.

### Implementation Projects

Implementation projects were designed to support school based teams implementing technology in inclusive settings. The intent was to support teams in their exploration of the uses of technology in the classroom beyond available and conventional applications and to document "best practices".

Each team generated practical, valuable and sharable information regarding implementing technology in classroom settings.

An example of one project was "Hyperstudio Buddies". Initially, a school team identified a need for more inclusive use of a desktop computer for "Erin", a single-switch user. A proposal was submitted, requesting consultation and training time to address this difficulty. The decision was made to use Hyperstudio, a software program that allows students to create their own projects. The school team devised a plan for training peers in the use of Hyperstudio. Students used the software to develop projects based on the current curriculum. They were also instructed to plan their projects so that they could be adapted to be used by Erin, with her single switch and Ke:nx interface. At the conclusion of the "Hyperstudio Buddies" project, the students had developed several classroom-based multi-media presentations that

could be used by Erin as well as all the other students in the classroom. Implementation Projects have provided many school teams with the skills and ideas to continue to use assistive technology in effective, innovative ways!

SET-BC is a dynamic program, constantly searching for new ways to support technology in the educational setting. We are interested in learning about other programs that offer similar services in order to continue to develop our support for students with disabilities. To share information about assistive technology programs, or to obtain further information about SET-BC, please contact:

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