

## CSLP Learning Toolkit Newsletter Issue: Fall-Winter 2008

The CSLP was very excited about the launch of their **Learning Toolkit** at the beginning of this school year. Installed locally on school board servers, this web-based software provides access to ePEARL, ABRACADABRA, and the latest entry, ISIS-21 (for selected schools). Offered at no charge to the educational community, this software has been installed throughout Quebec, Manitoba, and Alberta and in selected school districts in British Columbia, Ontario, the United States, Portugal and Australia.

In the January release of the Learning Toolkit (known as the LTK), ABRACADABRA's database will also be included in the upgrade, along with the following new modules – **Parent, Communication** and most importantly, **Assessment**. In the latter instance, teachers will be able to track those areas in which their students have difficulties reading.

On the following pages you will be provided with exciting news related to the unique research and development projects associated with these three tools.



- Past Findings from 2007–2008 study
- ABRACADABRA Present
- New for January 2009
- ABRA Australia Pilot
- Promising Findings

## Past — Findings from 2007–2008 study

Last year the researchers studying ABRACADABRA (ABRA) undertook a huge task in having designed a project that not only utilized a randomized control trial (RCT) format, but was also a Pan-canadian study. Over four hundred students from twenty-six grade one, grade two, and kindergarten classrooms from the Foothills School Board in Alberta, the Waterloo Region District School Board in Ontario, and the English Montreal School Board and Sir Wilfrid Laurier School Board in Quebec participated. Students and their teachers were randomly placed in experimental (used ABRA) and controlled (did not use ABRA) conditions. (The control classes were able to use ABRA after the 10–12 week intervention period.) Each child, for whom we had received parental consent,

was pre- and post-tested using a battery of standardized instruments. As this is part of a three-year project, these second-year results continue to be encouraging. Our interim analyses show that the children who were exposed to ABRA made significant gains in letter-sound knowledge, phonological awareness and word reading when compared to the children who did not use ABRA. Our treatment integrity instruments support these findings. However, our analyses showed that teachers did not use ABRA fully, as they tended to use it mainly for phonics-type activities, often using the alphabetics section but seldom the Fluency, Comprehension and Writing sections of the tool. Training for the 2008-2009 study will focus on helping teachers become more comfortable with these sections of ABRA.

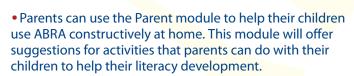
#### ABRACADABRA Present

Our ambitious goal to have sixty ABRA research classrooms, scattered throughout Alberta, Ontario, and Quebec was attained. Consistency in teacher training improved as the CSLP Literacy and Research Coordinators conducted face-to-face training with all of the participating teachers, as well as with the facilitators in all three provinces. Implementation of ABRA began following the initial training. Based on the teachers' request for followup training, we provided an interim session in November to discuss the progress and needs of all participants. The fall months were also used to further develop the Professional Development module, to create more ABRA lesson plans focusing on higher order literacy skills, to develop additional printable resources accessible from within the tool, and to complete the work on three brand new modules.

## **New for January 2009**

Our first release of the new year will include a pilot of the ABRA Assessment, Parent and Communication modules. Some highlights include:

- Teachers may use the Assessment module to learn where their students are having difficulty when reading within ABRA. This information can help direct subsequent instruction in order to meet the needs of students.
- Administrators can use the Assessment module to obtain a global picture of how students in kindergarten and Cycle 1 are performing. They may also use this to help plan professional development workshops for their teachers.
- Practitioners are encouraged to use the Communication module to become members of a community of practice. Teachers will be able to pose and answer questions posted by other teachers or ABRA researchers, as well as share their own successful practices tips.



Note that we are asking our research schools not to use this latest version of ABRA until the Fall 2009. As we are comparing data over two years, it is important that the same version of ABRA is used by the students. We apologize for this delay!



Assessment module



Communication module



**Parent module** 

## **ABRA Australia Pilot**

According to an article published in Australian Higher Education, only 20% of the aboriginal children living in Australia's Northern Territory (NT) achieved their year three reading benchmarks, a full 63% behind their counterparts in other parts of the country (Storry, August 31, 2006). Researchers from Charles Darwin University (CDU) advise that one of the contributing factors to the poor literacy showing of these students has to do with trained teachers: There are not sufficient qualified teachers who stay in the region for an extended and continuous period of time to change this. Because schools in the Northern Territories are equipped with good computer resources and are connected to the internet, the researchers from CDU, with collaboration from the ABRA Canada team, designed the 2008 pilot study to see if ABRA could assist their students' literacy development. The Australian researchers chose to use ABRA due to its web-based design and evidence-based instructional practices.

Teachers from three schools (2 classrooms per school) in the NT were trained to use ABRA and were expected to use it for 30 minutes a day over a ten week period. Their students' literacy skills were assessed prior to and after this intervention period. The literacy assessment instruments used were the internationally validated measure Group Reading Assessment and Diagnostic Evaluation or GRADE (Waterman, 2003; Fugate, 2003) and the Longitudinal Literacy and Numeracy Study or LLANS, developed by the Australian Council for Education Research (Meiers, Khoo, Stephanou, Anderson & Nolan, 2006). During the intervention, teachers kept lesson plans and a log book of how their lessons went. Site visits were made by a CDU researcher/coach to support the teachers and provide constructive feedback.

## **Promising Findings**

Based on the findings of this quasi-experimental study, in spite of one classroom having three teachers leave within the intervention period, with the consistent use of ABRA, these students were not negatively impacted in their ability to use ABRA; they learned foundational literacy skills when compared to the students in classrooms that did not experience such a high teacher turnover rate. Then, all students who took part in the ABRA study showed gains in their literacy skills development from the time they were pre-tested to when they were post-tested. Gains of 4 to 7 months were achieved in the areas of phonemic and phonological awareness, print concepts, as well as listening comprehension. We look forward to next year's study where they hope to double their sample size and use a randomized control trial research design.



- News on ePEARL
- Findings 2007-2008
- Project Updates

## **News on ePEARL**

The ePEARL project is off to a strong start this year building on some exciting findings from the 2007-2008 research. We continue to get inquiries for demo accounts and trainings from schools all over the world including: the United States, Australia, France, Switzerland, and Morocco to name only a few. This is in addition to our strong partnerships with school boards in Quebec, Alberta and Manitoba and new ones being developed in Ontario and British Columbia. The launch of version 3.0 of the software in the *Learning ToolKit* this September was successful and we continue to receive rave reviews on the software from teachers, parents, and students.

## **Findings 2007-2008**

The participants in our study last year included teachers and students from 32 classrooms (Grade 4-6) in three provinces (Quebec, Manitoba, & Alberta). Of the 16 experimental classrooms, we dropped nine from the final analysis due to low or inconsistent use of ePEARL and its self regulated learning features. We interviewed all participating teachers to help us understand the reasons for low-use and some of these included: delayed access to ePEARL (not installed in a timely manner by school board), not enough access to computers, or lack of comfort and familiarity with teaching with ePEARL. Our final group of classrooms for analysis was reduced to 14 and included seven experimental classrooms (at least one from each province) that were considered medium-high implementers of ePEARL.

The student questionnaires showed that students who used ePEARL reported higher levels of: setting process goals, listing strategies, using comments from their teacher to improve on work, and understanding how they are being evaluated. Students also made significant gains in writing skills specifically in the area of content management, which refers to the word choice, sentence structure and conventions of print. The teacher questionnaires similarly reported improvements in their students' use of the following self-regulation strategies:



setting their own process goals, articulating task demands, documenting strategies, providing constructive feedback to peers, using both teacher feedback and peer feedback to revise their own work, and evaluating their own work. We are very encouraged by these positive results and look forward to expanding our knowledge of how ePEARL positively impacts teaching and learning in the upcoming research cycle.

## **Project Updates**

We are excited to announce the addition of more teaching support materials such as an online Virtual Tutorial and a series of six "Jump Start" lesson plans to help teachers build on their knowledge of ePEARL and integrate it into their teaching after they've left their first workshop.

This year ePEARL research is being conducted in 24 classrooms in three school boards (English Montreal School Board, Central Quebec School Board, and Foothills School District) in two provinces (Quebec and Alberta). Pre-testing and training for participants was completed on October 3. Classroom visits for ongoing support of the research teachers and to support more consistent implementation of ePEARL have been scheduled. Our thanks to all of our partners and participating research schools.



- Inquiry Strategies for the Information Society in the Twenty-first Century
- ISIS-21 Modules
- Next Steps

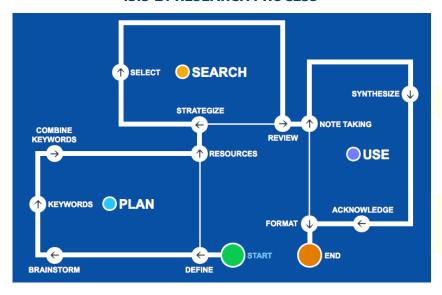
# Inquiry Strategies for the Information Society in the Twenty-first Century

Funded by a \$100,000 grant from Inukshuk Wireless, the CSLP-LEARN-EMSB team has spent the last year developing a beta version of the first two ISIS-21 modules — **Planning** and **Searching for Information** which are being offered within the Learning Toolkit. These are currently being field tested in a number of classrooms in Quebec, Manitoba and Alberta.

#### ISIS-21 Modules

The modules have been designed to introduce late elementary/early secondary students (and their teachers) to the fundamental components of information literacy by guiding students through the enquiry process. Our road map includes the following steps....note that Module 3: Using Information has not been included in the prototype.

## **ISIS-21 RESEARCH PROCESS**



Topics covered in the prototype include; the definition of a research topic and corresponding sub-topics, the selection of appropriate retrieval tool(s), introduction to search strategies for web retrieval tools, and the use of criteria for evaluating the quality of the information found. The development of additional sub-skills such as critical thinking, problem solving and self regulated learning, have also been addressed through a link to ePEARL.

Modules have been designed according to current research evidence on effective pedagogical strategies for online learning and current standards for e-learning, and are faithful to student centred, constructivist curricula.

## **Next Steps**

This December the prototype was evaluated by pilot librarians, teachers and students (in the cross section of grades 5 – 9) and a final report will be prepared in February. Following this, the team will be preparing a proposal for additional funding so that we may continue in our development of the modules. It is hoped that ISIS-21 will be opened up for wide-scale use within the Learning Toolkit by the fall of next year.

This pilot project will be an important building block for our broader ISIS-21 project that will consist of the design and research of bilingual web-based modules for Cycle 3 (grades 5 and 6) parents and Cycle One-Secondary (grades 7 and grade 8) and Cycle Two-Secondary (grades 9 to graduation) school library personnel, students and teachers. The larger project will also include a research project that will study the impact of these online activities on student learning in such core areas as critical thinking, problem solving, decision making, and development of ICT skills.

We would like to acknowledge the contributions of our partners--the Quebec Library Association. School Libraries Division; the Canadian Association of Principals; Manitoba Education, Citizenship and Youth; the English Montreal School Board; St. Georges High School; and the Foothills and Medicine Hat school districts in Alberta.

For more information please contact, Anne Wade (Project Coordinator) at wada@education.concordia.ca

To learn more about these projects or to view our latest research reports, please visit: http://doe.concordia.ca/cslp/ and follow the links under the ICT projects.