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**Dr. Philip Abrami** (Director, CSLP), **Anne Wade** (Manager & LTK Coordinator, CSLP), **Bev White** (Director, LEARN)

**Designers:** Catherine LeBel (Creative Director), Sebastien Rainville, Mimi Zhou, Jeong-Jea Hwang, Steven Kanellopoulos, Neha Sultan

**Instructional Designers:** Einat Idan, Jennifer Head

**Researchers:** Drs. Larysa Lysenko (CSLP), Eva Bures (Bishops), Vivek Venkatesh (Concordia), Robert Savage (McGill), Monique Brodeur (UQAM), Linda Siegel (U. of British Columbia), Laurie Henry (U. of Kentucky) and Eileen Wood (Wilfrid Laurier University).

**Testers:** Wai Man Kwan, Katherine Lee, Ashley Kottoor

**Trainers:** Vanitha Pillay and local RECIT (non-research schools); Susan Wastie (CASPLA)

**Consultants:** Thomas Stenzel (LEARN), Maureen Baron (EMSB), Raphaela Dixon (LBPSB), Michelle Larose (Manitoba Education), Lesley Farmer (California State University), Gilles Boudreau (EMSB) and Martin Cloutier (Propage Interactif).

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Introduction

Chapter 1
Introduction

Why was the Learning Toolkit Developed?

The ability to read and write lie at the heart of the essential competencies for life in the 21st Century and are among the keys to success in the new Knowledge Economy. Linked to reading and writing are fundamental information and inquiry skills such as identification, evaluation and synthesis necessary to support reading comprehension and writing, particularly within Internet-based environments.

The accumulated evidence on student learning has led to recommendations by American Psychological Association (2008), the Conference Board of Canada (2008) among others, that focus on increasing student activity, meaningfulness, and self-regulation, including the development of strategies for lifelong learning. The Partnership for 21st Century Skills (2006) identified the key components for the development of new literacy skills for the 21st century as being an emphasis on information and media literacy, critical thinking and problem solving, and self-direction.

While students need to develop essential curricular competencies— learning what to learn—they also need to learn how to learn— developing strategies for mastery in a world where knowledge is increasingly dynamic. Technology can play a powerful role in instructing and supporting learners as they learn these competencies and strategies.

What is the Learning Toolkit?

Developed by the Centre for the Study of Learning and Performance, the Leading English Education and Resource Network (LEARN), along with many partners, the Learning Toolkit (LTK) consists of three inter-related, evidence-based tools that work together to give teachers and learners important assistance in developing and enhancing essential educational competencies. They are powerful and flexible tools, each with a unique focus and strength, which supplement and support classroom instruction.

• ABRACADABRA (ABRA) is an acronym for “A Balanced Reading Approach for Canadians Designed to Achieve Best Results for All”. ABRA contains interactive alphabetic, fluency, comprehension and writing activities linked to digital stories to promote basic literacy skills among emerging readers.

• ePEARL is an acronym for “Electronic Portfolio Encouraging Active Reflective Learning”. ePEARL is a bilingual, multimedia container that supports the process of literacy development and self-regulation by encouraging goal setting, reflection, conferencing, and continuous improvement throughout primary and secondary school.

• ISIS-21 is an acronym for “Inquiry Strategies for the Information Society in the Twenty-first Century,” named after the Egyptian goddess of magic and giver of life. ISIS-21 is being designed to teach the competencies of information literacy, including the identification, search, evaluation, citation and use of information.

For more information on all of these tools see: http://doe.concordia.ca/cslpltk
Who Can Use the Learning Toolkit?

This evidence-based educational software designed and developed by the CSLP is available without charge to the educational and academic communities. CSLP tools are effective but only when they are wisely used. Professional development is important for everyone who plans to use these tools.


For more information, please read:


Funding from LEARN has enabled us to upgrade the software, with particular attention focused on Level 3. These changes were incorporated into the Fall 2012 release of the LTK.

**Level 1:** Student module: The home page has been redesigned to include feedback (Classmate, Parent and Teacher) on the entire portfolio, as well as to provide access to the Parent mode. The recorder has been added to the artifact Feedback boxes.

**Level 2:** Student module: Integration of the Toolbar (text editor, recorder, attachments, hyperlink) in the Goal Setting and Reflection features to allow for greater flexibility of data input.

**Level 3:** Student module: Substantial changes have been made to this module, including – Redesign of interface based on Plan, Use, Reflect model; new skins; elimination of multiple-page mode; integration of User-defined tags; searching using logical operators to enable the combination of tags; elimination of Folders; ability for deeper SRL components (Planning and Reflection); addition of Toolbox (additional support for SRL components); addition of Archives (cumulative area of Artifacts); addition of Import feature and improvements to Export.

**All levels:** Folders and Curriculum Connection features have been recoded as system defined tags. Administrators are able to edit these System-defined Tags (L2 and L3) and add their own labels. Teachers will be able to review a list of additions or changes that have been made to their students’ portfolios, organized by class. They will also receive a notification when additions/changes have been made.

**Level 4:** Currently in prototype form and therefore not part of the LTK bundle, this level is geared to adult learners and both pre-service and practicing teachers. See http://grover.concordia.ca/epearl/promo/en/level4.php for further information. Please contact the CSLP if you wish to field test this Level.

Funding from the Max Bell Foundation will enable us to completely redesign the prototype which is currently geared to developing information literacy skills in late elementary students. A Student module, with both novice and advanced user interfaces, as well as a Teacher module will be developed as part of this project. Version one of the Student module geared to late elementary students will be incorporated into the Fall 2013 release of the LTK.
New Tools

Led by Dr. Monique Brodeur (UQAM), the team is currently developing an adaptation of ABRACADABRA for early French literacy. Funding for the development and research of this tool have been received from: MELS, CSDM, CSMV, CSRDN, Webster Foundation and MDEIE. Version 1 of ABRACADABRA Français will be incorporated into the Fall 2013 release of the LTK.

A new evidence-based bilingual tool designed to develop foundational skills in mathematics and integrated into the existing LTK is being designed with funding from MDEIE. The goal of ELM is to increase numeracy proficiency (e.g. understanding of numbers, arithmetic operations, fractions etc.) and decrease math anxiety in students. The tool will provide an environment where students can become intrinsically motivated and more likely to self-regulate their learning of mathematics leading to greater feelings of competency and a higher likelihood of entering math based careers. Version 1 of ELM will be incorporated into the Fall 2013 release of the LTK.

A collaborative effort from the Royal Conservatory, Queen’s University and the CSLP, iSCORE is an adaptation of ePEARL that has been tailored to meet the needs of music teachers and their students. Generously supported by the Government of Canada through the Department of Canadian Heritage, iSCORE is being used across Canada to improve music instruction. See http://rcmusic.ca/iscore-home-page for further information.
Disponible en Français


À Venir...

Dirigé par le Dr. Monique Brodeur (UQAM), l’équipe élabore actuellement une adaptation d’ABRACADABRA pour l’alphabétisation française précoce. Sources de financement pour le développement et la recherche de cet outil ont été reçues de : MELS, CSDM, CSMV, CSRDN, Webster Foundation, MDEIE. Version 1 d’ABRACADABRA sera incorporé à LTA à l’automne 2013.

LTK Manage: Introduction

The Manage area of the LTK is where teachers manage their accounts, classes, and students for all the LTK tools. Once logged into the LTK, teachers, will see the icons only for those tools a school board has made available, and that are appropriate to the level of ePEARL a teacher is linked to. From this screen, a teacher may enter any of these tools, access the teacher resources for each of the tools, or manage teacher and student information.

We will focus on the LTK Management component to help teachers get started.

Figure 1: LTK Lobby
The LTK Management Features

The LTK Management section allows teachers to control their accounts, as well as those of their students. Teachers can change their LTK password, link themselves and other teachers to various classes, access students’ setup information, and monitor student progress in all of the LTK tools.

Clicking on the LTK Management icon allows for three main options: My Account, My Classes, and My Students.
**My Account**

In My Account, a teacher can change your nickname, password, ePEARL level and define your teacher colour codes in ePEARL (only for those teachers who have ePEARL activated in their account).

![Figure 4: My Account](image)

**My Classes**

A list of classes – classes a teacher is linked to will be displayed. Teachers are automatically linked to their homeroom class.

![Figure 5: My Classes](image)

- The pencil icon allows a teacher to change the class name and nickname.
- The class list icon opens up the list of students who are in the class. See the My Students section of this guide for more information about what can be done using this list.
- The ABRACADABRA icon is active when the class has been using ABRA. It will open up the Class Assessment data within ABRACADABRA.
There may be instances in which a teacher wishes to link himself/herself to other classes, for example, if he or she teaches two homeroom classes or is a resource, music or technology teacher who works with many classes. This function can also be accessed in LTK Management.

Click on Link Myself To More Classes to add or remove a class from the list.

**Figure 6:** Linking to classes

![Figure 6: Linking to classes](image)

**Figure 7:** Selecting classes

![Figure 7: Selecting classes](image)

The chain is connected and the background is yellow when a class is linked to the teacher. When unlinked, the chain is broken and the background is white. Once linked, a teacher will be able to see the class in the My Classes tab.
Linking Other Teachers to Your Own Class:

From “My Classes”, teachers may also link other teachers to their own class by clicking on the Link/Unlink Teachers tab.

**TIP:**

If the teacher does not appear in the list, he or she must be added to the database by the LTK sub-administrator for the school. This may be the principal, the computer teacher, or a technology consultant at the board/district/ division level. Find out who the sub-administrator is at your school.
Teachers may view and edit student information within a specific class by clicking on the pencil icon beside the name of a specific student.

Note: One must be linked to the class the student is in, in order to view the details.

![My Students](image)

Figure 9: My Students

If there are students who are not linked to a class but should be, a teacher may link them by clicking on the Link/Unlink tab to display a list of students who attend their school. Please see the sub-administrator at your school if the student does not appear on that list, as he or she must be added to the database.

From here, the student password can be changed for individual students, as well as the ePEARL level for those students who are using that tool. Note that usernames may not be changed as these are set by the software when the student list is entered into the LTK database. Nicknames are defined by the student and also may not be changed by the teacher.
From the main student list, teachers can also access any tool that an individual student is using.

If the student is using ePEARL, the teacher can access it by clicking on the Portfolio icon.

If the student is using ISIS-21, clicking on the ISIS icon will allow teachers to see the student’s main projects in ISIS.

Clicking the ABRACADABRA icon near a student’s name will allow teachers to view that student’s assessment data in ABRACADABRA.

**Sub-administrators**

There may be instances in which a teacher would like to add a new teacher (e.g. a student teacher or substitute teacher) or student to their school if they were not included in the database at the start of the school year. Sub-administrator accounts have been set up to allow for the management of classes, teachers, and students. There is usually one person in each school with Sub-administrator privileges. It may be the principal, the computer teacher, or a consultant at the board/district/division level. In Quebec, the local RECIT will know who has been assigned this role within a given board.
End User Requirements

There are various plug-ins that must be installed in order to use this software. This information should be communicated to parents as well, to encourage use of the ITK at home.

**Windows PC Requirements**

- **Processor:** Intel® Pentium® II 450MHz or faster
- **RAM:** 1 GB recommended, 512 MB minimum.
- **Graphic card memory:** 128 MB minimum
- **Available disk space:** 30 GB or more
- **OS:** Windows Vista and newer are recommended, minimum Windows XP Sp2
- **Browser:** Firefox 4 or newer, or Internet Explorer 8 or newer, or Chrome

**Warning:** IE 9 may have issues with Flash Player 11.1m making ABRA problematic. De-installing and re-installing the Flash player may help.

**Note:** to use the ePEARL recorder, make sure the latest Java version is installed and enabled.

- **Peripherals:** Keyboard and mouse. Speakers or headphones, microphone

**Note:** when using the ePEARL recorder, there can be issues with the microphone driver. Microphone compatibility to be verified by the end-users.

**Macintosh PC Requirements**

- **Processor:** Intel Core™ Duo 1.83GHz or faster
- **RAM:** 1 GB recommended, or more
- **Graphic card memory:** 128 MB minimum
- **Available disk space:** 20 GB or more
- **OS:** Mac OS X 10.6 or newer
- **Browser:** Firefox 4 or newer, or Safari 5 or newer, or Chrome

**Warning:** the ePEARL recorder may have issues in Safari and Chrome for Mac OS 10.6.

**Note:** to use the ePEARL recorder, make sure the latest Java version is installed and enabled.
**Peripherals: Keyboard and mouse.** Speakers or headphones, microphone

*Note:* when using the ePEARL recorder, there can be issues with the microphone driver. Microphone compatibility to be verified by the end-users.

**Web Browsers: Student Proficiencies**

Prior to using ISIS-21 it is recommended that students learn some basic web browser commands. In order to use ISIS-21, they will need to understand how to type a URL into a browser search window, how to copy and paste a URL into a document; and how to toggle between several open windows.

**ePEARL recorder and Java specifications**

ePEARL has an audio recorder/player feature that allows students to record audio directly to the server. The recorder has been developed in Java and requires J2SE JRE (Java Runtime Environment) version 1.5.0_19 installed on the end user’s machine.

To download, go to http://java.com/en/download/ and click on “Free Java Download.”

If your operating system does not support the latest version of Java, you can get another version in the archives at http://www.oracle.com/technetwork/java/archive-139210.html

**Warnings:**

- Java does not work in Safari 5.1 + on Mac OS 10.6 +. To use the recording function on Mac OS 10.6, use Safari 5.0.5. The recording function does work on Mac OS 10.7 with Safari 5.1 +.

  * Note: all accounts on a computer (ex: admin, teacher, student) that will be used to access the LTK must have Java enabled.

In order to use the ePEARL recorder, Java must be enabled in end user’s computers. Because of a vulnerability in Java 1.7 and later, Java may be disabled in user’s computers, without the user knowing about it. A fix may come in the fall of 2013. Downgrading to an earlier Java version is not recommended.
**Required Plug-ins**

In order to use media files on the web (Flash, QuickTime, Windows Media, MP3, etc.), the appropriate players for those files must be installed on the user's computer:

**QuickTime Player** (latest version)
Download at: http://www.apple.com/quicktime/download

**Windows Media Player** (latest version)

**Adobe Acrobat Reader** (for PDF files)
Download at: http://www.adobe.com/products/acrobat/readstep2.html

**Adobe Flash Player** (latest version)

**Recording Audio**
ePEARL has an audio recorder/player feature that allows students to record audio directly to the server. The recorder has been developed in Java (Java applet) and requires J2SE JRE (Java Runtime Environment) to be installed on the end user’s machine. To download, go to http://java.com/en/download/ and click on “Free Java Download.”

**File Compatibility**
The following are examples of file formats that can be attached to an artifact in the portfolio. Other formats can be used if the user’s computer supports them.

**Video:** MOV (QuickTime)

**Image:** JPG, GIF, PNG, BMP

**Text:** MS Word, RTF, Excel (or any other file that can be supported by a user’s software)

**Audio:** MP3, WAV

**Internet Connection Speed**
A high-speed Internet connection is recommended.
Frequently Asked Questions

Question 1: Can I link/unlink students to my class list?

Yes. To do this, go to the LTK Management section in the LTK Lobby page and click on My Students and then Link/Unlink Students and follow the instructions on the page.

Note: If you wish to link a student to your class but they are not in the database, ask your sub-administrator to add this student.

Question 2: How can I view a student’s work from LTK Management?

Click on the My Students, from the LTK Management section. Icons to the left of the student names will indicate which tools they are using. Clicking on these icons will take you to the student’s work in that tool.

For example, click on the Portfolio icon to the left of a student’s name to view his/her portfolio and leave comments. To return to your own portfolio, simply click on “close window” in the top right corner of the screen (or LTK on the top left, if you are in ABRACADABRA).

Question 3: What if I am not connected to my classes?

If, after the beginning of a new school year, you find that you are not connected to your classes, try to link them yourself; Go to My Classes and then on the button Link Myself To More Classes. You will see all the classes that are available for linking in your school. If there are no classes listed, contact your LTK administrator or subadministrator.
Implementation of the LTK within a School District

Steps for Implementing the LTK

1. A small working group with representatives from all relevant departments (e.g. IT, pedagogical-educational services, Complementary services (special needs) etc) should be established.

2. The purpose of this committee is to define roles and responsibilities related to management and implementation of the LTK and to ensure effective and timely communication across the board/district and the schools.

3. A plan should be established including: the roles and responsibilities of the IT technician and the sub-administrators for each area or cluster of schools, a list of schools who are interested in using the LTK, communication channels (how will the Administrator communicate with the Sub-admin or how will Sub-admin communicate with the schools), and a timeline for installation, data importing, backups etc.

4. Once the plan is in place then some professional development times should be set up to train participating teachers. This could be through a Train-the-Trainer institute or through other offerings.

5. Succession planning should be part of the implementation plan so that if the LTK Administrator leaves there is a paper trail (e.g. file/binder) kept documenting the implementation and upgrade process.

Note: A school board/district may decide to provide access to the LTK to a handful of schools. For example, if only a couple of schools are using the LTK it may be decided that data for these schools (school, class, teacher and student) be imported only. Depending on the number of schools to be imported, a decision should be taken regarding the best time to install the software (e.g. down times such as summer holidays).

Suggested Roles

LTK Administrator (IT technician)

- Responsible for the technical installation and management of the LTK back-ups including initial installation, annual upgrades, population of the database, trouble shooting etc.

- Needs to be hands-on with the software and technically adept.

- Must be conversant with the Administrator and Sub-administrator Guide.

- Should establish a regular LTK back-up routine.

- Acts as liaison between district and the CSLP developers (communications technical help needs to ltkhelp@education.concordia.ca).
• Responds to requests from the sub-administrators related to changing default settings (e.g. file size attachments, size of student portfolios etc.)

• Communicates with the IT and Ped. Directors whenever new releases come out and informs them of the changes that need to be communicated to end users.

**Sub-administrators (Pedagogical consultants or lead teachers)**

• Acts as liaison between the schools and the district departments (IT, Pedagogical Services, Complementary Services).

• Acts as liaison between district and the CSLP LTK Coordinator (communicates pedagogical help needs to LTKhelp@education.concordia.ca)

• Responsible for turning on/off specific tools for specific schools and adding teachers who wouldn’t normally be included in the import (substitutes, resource teachers, librarians etc.), as requested by the schools.

• Provides teachers with their access information.

• Provides support to teachers (e.g. links multiple classes, or who wish to have their students “Share” their portfolios with classes outside of the local school).

Note: There needs to be good communication between the LTK Administrator and the Sub-administrators, and both need to respond quickly to requests or problems (e.g. to increase the file size attachment, or the student portfolio size or if recorder isn’t working etc.)