



The Learning Toolkit: A Guide for Teachers

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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/cslp/ltk>



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.

Please consult *Guidelines for the Use of CSLP Educational Software* at <http://doe.concordia.ca/cslp/ltk> for further information.

For more information, please read:

Abrami, P. C., Savage, R. S., Deleveau, G., Wade, A., Meyer, E., & Lebel, C. (2010). The Learning Toolkit: The design, development, testing and dissemination of evidence-based educational software. In P. Zemliansky & D. M. Wilcox (Eds.), *Design and implementation of educational games: Theoretical and practical perspectives*. (pp. 168-187). Hershey, PA: IGI Global.

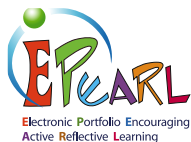
American Psychological Association. (2008). *Learner centered psychological principles*. Washington, DC. Retrieved from [<http://www.apa.org/ed/lcp2/lcp14.html>]

Partnership for 21st Century Skills (P21). (2006). *Results that matter: 21st Century skills and high school reform*. Tucson, AZ: Author. Retrieved from [<http://www.p21.org/documents/RTM2006.pdf>]

The Conference Board of Canada. (2008). *Education and skills overview*. Ottawa, ON: Author. Retrieved from [<http://sso.conferenceboard.ca/HCP/overview/Educationskills.aspx>]

LTK Announcements

Update on Existing Tools



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/eparl/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.



The Royal Conservatory 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



Vous pouvez explorer cet outil en Français (PERLE) au: <http://grover.concordia.ca/epearl/demo/cslp/lobby/pages/frontdesk.php> en cliquant sur Français.

Vous pouvez accéder aux Ressources en Français au: http://grover.concordia.ca/epearl/resources/home_fr.php

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.



Un nouvel outil bilingue basé sur la recherche, conçu pour développer les compétences en mathématiques de base et intégré dans La Trousse d'Apprentissage (LTA). Le but de l'outil est d'améliorer les compétences en numéracie (ex. : la compréhension des chiffres, opérations arithmétiques, fractions, etc...) et de réduire l'anxiété face aux mathématiques chez les étudiants. L'outil fournira aux étudiants un environnement dans lequel ils deviendront intrinsèquement motivés et plus portés à s'auto-réguler durant l'apprentissage des mathématiques, ce qui leur donnera plus de confiance et les emmènera à s'orienter vers des carrières axées sur les mathématiques. [<http://grover.concordia.ca/num/home.php>] <http://grover.concordia.ca/num/home.php>. ORME sera disponible en Anglais et en Français 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.



Figure 2: LTK Lobby



Figure 3: Management Main Menu

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).

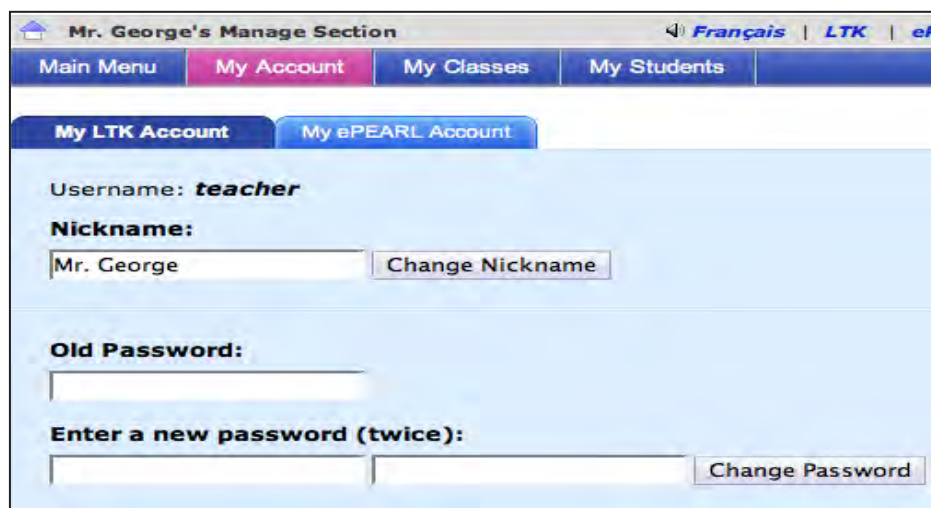


Figure 4: My Account

My Classes

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

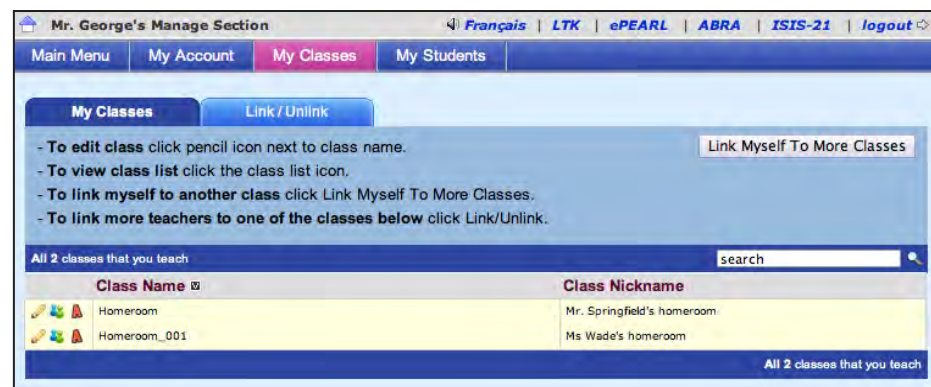





Figure 5: My Classes

-  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.

See Figure 5 for the icon placement on screen



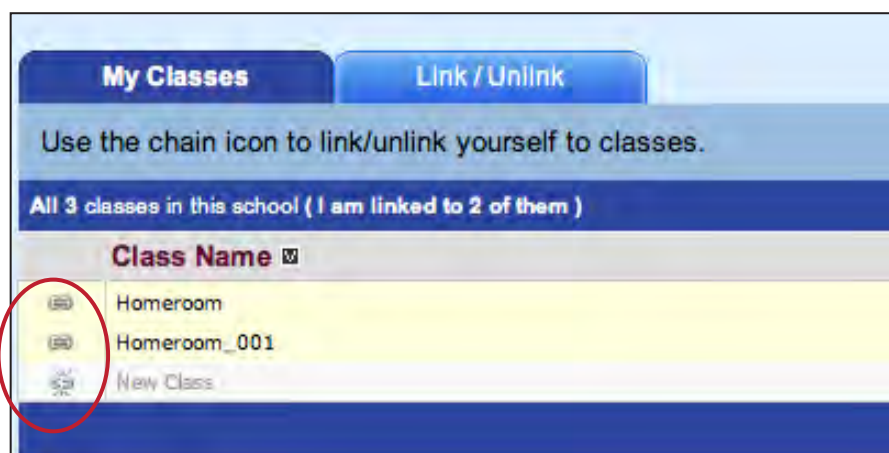
There may be instances in which a teacher wishes to link himself / herself to other classes, for example, if he or she teaches two homeroom classes or is a resource, music or technology teacher who works with many classes. This function can also be accessed in LTK Management.

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

Figure 6: Linking to classes



Figure 7: Selecting classes



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.



Figure 8: Linking other teachers

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.



My Students

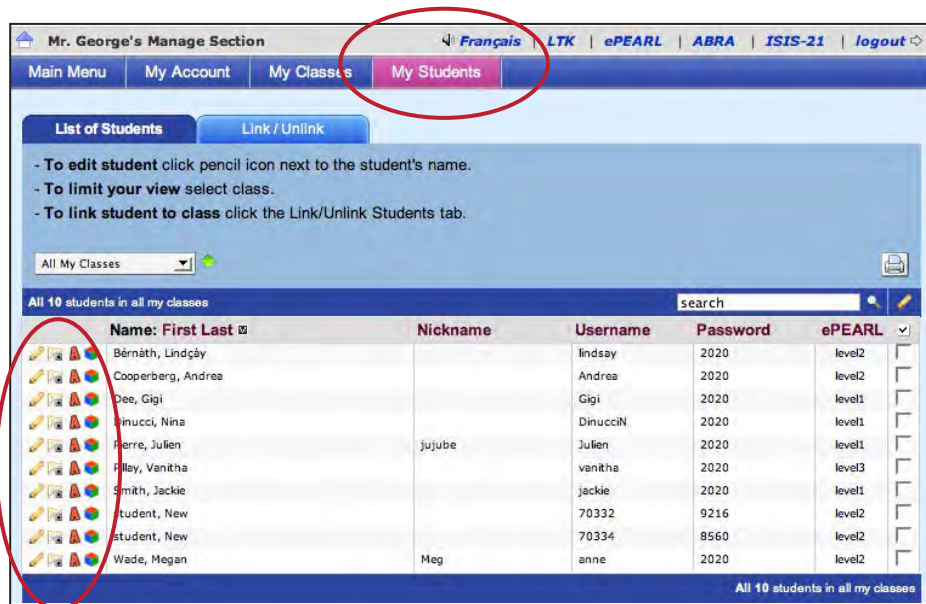
Teachers may view and edit student information within a specific class by clicking on the pencil icon beside the name of a specific student.

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

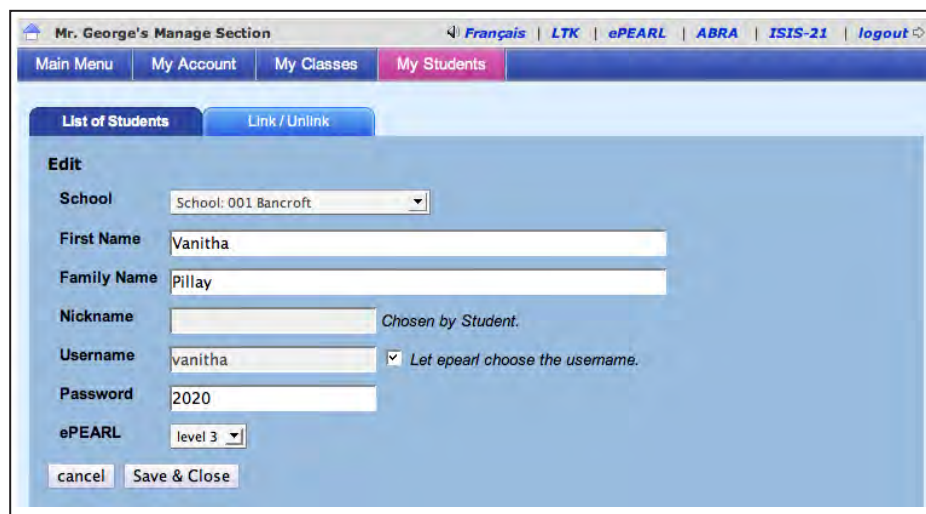
Figure 9: My Students

TIP:

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.

See Figure 9 for the icon placement on screen



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:

o 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)

Download at: <http://www.microsoft.com/windows/windowsmedia/players.aspx>

Adobe Acrobat Reader (for PDF files)

Download at: <http://www.adobe.com/products/acrobat/readstep2.html>

Adobe Flash Player (latest version)

Download at: http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=shockwaveflash

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."

TIP:

Parents should be informed that the Java plug-in is required in order to use the recorder at home.

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.)





ABRACADABRA

Chapter 2

Introduction to ABRACADABRA

What is ABRACADABRA?

ABRACADABRA (A Balanced Reading Approach for CANadians Designed to Achieve Best Results for All) is a free, interactive literacy program designed for early elementary school-aged students, their educators, teachers and parents and is available on the web or as part of the LTK. Taking a balanced reading approach, ABRACADABRA aids beginning readers by offering a variety of resources such as professional development training for teachers, literacy activities, digital stories, assessment capabilities, and a communication tool. Currently ABRA contains 32 alphabetic, fluency, comprehension and writing activities linked to 21 interactive stories and 15 stories written by schoolchildren.

Why ABRA?

For decades, researchers and practitioners worldwide have been searching for the key to unlock the mysteries of how children learn to read and write. To date, considerable evidence has been collected that suggests children must not only be exposed to a variety of instructional methods, but that these experiences must be presented in explicit and systematic ways if literacy is to be fully attained.

Research shows that children's engagement and motivation affect their academic success. While skills and drills are important components in literacy achievement, these exercises must be done in meaningful ways for learners. This involves providing appropriate opportunities, texts, and activities wherein students can apply what they have learned in authentic contexts.

The Centre for the Study of Learning and Performance (CSLP) continues to develop ABRA in an effort to help battle the alarmingly high percentage of low ability readers in countries throughout the world. These developments are a direct result of a multidisciplinary team of educational professionals who continue to guide ABRA. This team consists of researchers, policy makers, school administrators, language arts consultants, and teachers from across Canada whose input helps steer the overall direction of this project. The CSLP continues to practice its policy of working with the educational community and partnering with ABRA stakeholders to develop the best possible resource for the field.

Evidence-based Practice

The recommendations from the National Reading Panel and other front-runners in the field of language and literacy have remained the foundation of the ABRA software. Research conducted within Quebec schools during the 2004–2005 school year yielded results that helped guide the development of new instructional activities within ABRA. This meant expanding the instructional module to include more challenging material as well as additional children's stories. Dr. Robert Savage, Literacy Theme Leader, Dr. Philip Abrami, CSLP Director, and other team members have established strong partnerships with local schools in order to investigate the efficacy of our software with classroom students. Using the evidence gathered from these trials, we have infused ABRA with a much stronger content base, refined the tool, and made it ready for further research that was conducted between January and May 2006. This second investigation yielded extremely positive results in both grade one and kindergarten classrooms.



For more details on the ABRA research study results (in a later section), please visit: <http://grover.concordia.ca/abracadabra/en/resources.php>

The 2006-2007 version of the software was redesigned based on the feedback received from the field for that year's study. This version was then used for our 2007-2008 study with over 400 participating students, from kindergarten through grade 2, from 28 classrooms in Alberta, Ontario and Quebec. These students were randomly placed in experimental (ABRA intervention) and control (regular literacy lessons) classrooms. Both groups were pre-tested and, after a 10-12 week intervention, post-tested to measure the effect ABRA had on their literacy attainment. Preliminary data analysis shows that ABRA has had a significant beneficial effect on children's letter-sound knowledge, word reading and phonological awareness.

The 2008-2009 research study followed the structure of the previous randomized controlled trial interventions but had participants from over 50 classrooms in Quebec, Alberta and Ontario from kindergarten through grade 2. The focus of this study was how teachers taught English Language Arts in general, and how they incorporated ABRA and technology into these lessons specifically. Preliminary analysis has begun and shows that ABRA continues to have positive effects on students' literacy development.

This Guide















This guide is designed to provide basic information on the ABRA software to help teachers who are interested in implementing the software in their classroom. A general overview of the features as seen by the students, structure of the software and reading acquisition process is provided, followed by a detailed description of each of the activities and stories. In the latter instance, pages are divided by:

- Structure: A brief explanation of the structure of the tool.
- Features: A screen capture of the features.
- Teacher Tips: Advice on how to support students in each module
- Story Genres and Themes: An explanation of the various genres of stories and themes
- Modules: A description of each of the modules and related activities
- Professional Development: Links to a variety of resources paper-based and multimedia
- The link to ePEARL: A description of how to use ABRA and ePEARL together.



Navigational Icons

As students go through ABRACADABRA, they will meet these navigational icons. It may be advantageous for teachers to familiarize themselves and their students with them to make their experience with the software enjoyable.

| | | | |
|---|---|--|---|
|  |  |  |  |
| a-OK | help me | yes | no |
|  |  |  |  |
| next | repeat | magnet | paw |
|  |  |  |  |
| check | how to | adventure | speedy |
|  |  |  |  |
| super speedy | not here | clock | clock |



Features

ABRACADABRA Splash Page

From the Splash Page, users have access to the **Teacher**, **Student** and the **Parent** modules.

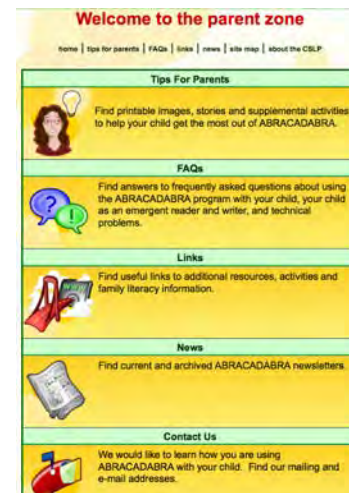


Teacher Module



Users access both the **Assessment** and **Communication** features through the **Teacher** module.

Parent Module



Users have access to print resources, video instruction on using ABRA and tips about children's literacy learning through the **Parent** Module.

Student Module



Using the tool as a student, teachers can now partner with up to three students for group work, to provide remediation or observe students' performance.

This screen also provides a link to ePearl, for access to the student's e-portfolio.



Teacher Module

The Teacher Module includes six features;

1. Stories: 36 stories are divided into five Genres or six Themes. Each of the stories is accessible from the Teacher module, where teachers can read the story to assess its appropriateness for students, view related skills, and access lesson plans, extension activities and printables.

2. Skills: Reading skills are divided into four sections; comprising a total 33 activities. For each of the activities a brief demo is available, teachers may try out the activity from the Teacher Module, view the activity's objective, group facilitation tips are also available, as well as the content and levels of each activity.

(Stories and Skills are further explained in the Student Module.)

3. Printable and Technical Resources: A large number of PDF documents are available to be printed, including the stories, flash cards, worksheets, and a colouring book.

4. ELA Best Practices: A teacher will find resources and useful suggestions for educators when teaching English Language Arts in general, and Reading, in particular. Best Practices: "Just in time" (JIT) videos provide examples of how ABRA can be used in different settings

5. Assessment: Teachers review exactly what activities their students have completed and get suggestions on how they can help them improve.

6. Communication: An area where teachers communicate with each other via a wiki.

We will discuss the Assessment and Communication features in more detail.



Assessment

With the use of trace data, information stored by computer application programs, ABRA can help teachers oversee what their students are doing and how they are progressing. This data can help teachers devise appropriate instruction to meet individual, group, or whole class needs. This feature includes:

- Student and/or whole class report
- Date selector (allows teachers to view student activity for teacher specified dates)
- Activity specific statistics
- Activity specific error reports
- Activity insights (elaborates on skills an activity addresses and gives suggestions for reinforcing subordinate skills)





- Rubrics and templates
- Observation evidence template

How do I use the Student Reports?

Step 1: In the class drop-down menu, choose the appropriate class. Notice that the students' drop-down menu, the start date and end date calendars will now be visible.

Step 2: From the students' drop-down menu, choose the student to be reviewed, or select your whole class. Then choose the time period using the start date and end date calendars and click the View button.

Step 3: The activity drop-down menu should now be visible. Select the activity to view from the drop-down menu. The student activity statistics and error reports will be visible in the data print sheet.

| Word | Correct Answer (# of syllables) | Student Answer (# of syllables) |
|-------------|---------------------------------|---------------------------------|
| swallowtail | 3 | 2 |

Figure 3: Student report in Assessment

Communication

ABRA provides a wiki online space where teachers using ABRA and other tools within the LTK can provide support for one another. By joining this forum, teachers can: download and upload lesson plans; get “hot-of-the-press” activity ideas, printable materials and rubrics; join and start stimulating discussion forums; collaborate quickly and easily on teaching practices; and more.

Joining the LTK wiki

To join the LTK wiki in general and the ABRACADABRA extended community in particular, contact us at ltk@education.concordia.ca with your request. Include “wiki invite” in your subject line and we will be happy to send you an invitation to join.





Parent Module

The parent module is a separate web site parents can access when their child logs in. It provides step-by-step instruction on using ABRA at home, information about emergent readers, tips on raising a reader and printable resources.

ABRA provides information about different literacy skills needed to help children actively participate in school and the wider society. Resources and information to help parents engage their children in phonemic awareness, reading and spelling activities are also. JIT videos show parents how ABRA can be used outside of the classroom setting, while frequently asked questions (FAQs), and helpful tips offer additional support to extend literacy activities.





Student Module

Julie and Leo are the main characters in the magical world of ABRA. They take students through a journey of word sound discovery, word matching games, stories and spelling activities.

Students' Stories

A total of 15 Students' stories are available. These stories were written by students as part of student story contest. Furthermore, These stories are recorded in Canadian and Australian accent for the entertainment and education of students worldwide. Their levels of difficulty vary.

Characters

Each character is associated with a reading skill. In the Characters' section a biography is presented for each of the characters, associating them with their preferred reading skill.

Activities and Stories

There are a total of 32 activities and 21 stories in this section. Activities are leveled and some are practised with the context of a story. Each activity is preceded by a brief demo.

The student module is the heart of the ABRA software. All instructional activities are developmentally appropriate and revolve around a progressive model of instruction providing foundations in four literacy domains: Alphabetics, Fluency, Comprehension, and Writing. Built-in scaffolding and multiple levels of difficulty allow for flexibility.

Profile

Here, a student can choose an avatar, which is the graphical representation of the user or the user's character.

Adding a classmate

Students can add up to four classmates and do activities and read stories with them. Trace date will be recorded for all students for the same activity.

Figure 4: Add a classmate



Phonological Foundation

A solid phonological foundation is necessary to create a good literacy program and is a good predictor of future reading success. This foundation includes phonemic awareness, which is the ability to identify and manipulate sound units in words, and phonics, which involves connecting letters or groups of letters to their specific sound(s).

Mastery

In ABRA, students are said to have mastered a particular activity when the rate of correct response is 90%-100% for three consecutive entries. When this is achieved, they are encouraged to move on to the next level. Teachers are encouraged to use the data and printable materials found in the Assessment section to help monitor their students' literacy development.

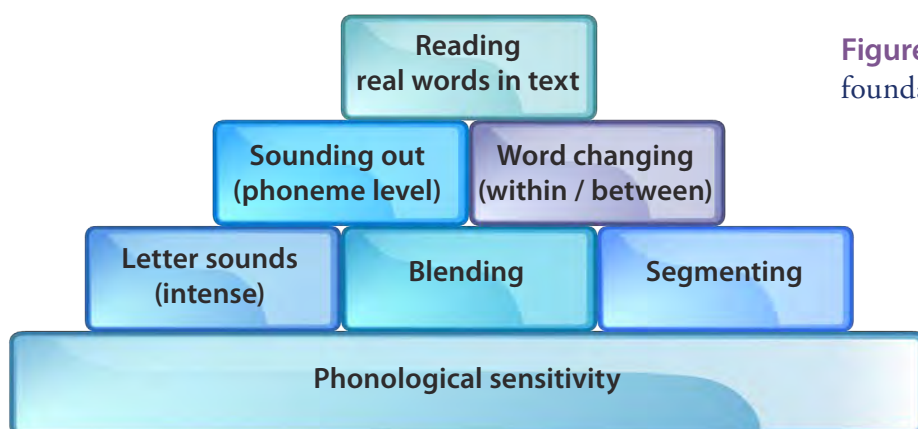


Figure 1: Phonological foundation

Extension activities

ABRA has been designed to be used by teachers in their classrooms as an instructional tool. Teachers will connect the skills being learned online to those being learned in other aspects of their language arts curriculum. It is, therefore, important to help create a link between what the students are learning in ABRA and how they might use these skills in their daily literacy. There are many different ways that the system can be used. There are online components the teacher can use with a projector, as well as various printable resources and flashcards.





Story Genres and Themes

Genres (text types)

ABRA helps expose children to different literary genres. A genre can be defined as a category of literature that is distinguished from others by characteristics such as style, form and content. Research shows that the more experience children have with different genres the more successful they will be when reading and writing in these various genres.

ABRA features five genres:



Folk and fairy tales

Stories and their variants passed down from one group to another throughout history



Fiction

Make-believe stories and stories that could happen in real-life



Non-fiction

Informational text that provides facts about a particular topic or character



Poetry

Line and verse that evoke emotion or thought in the reader



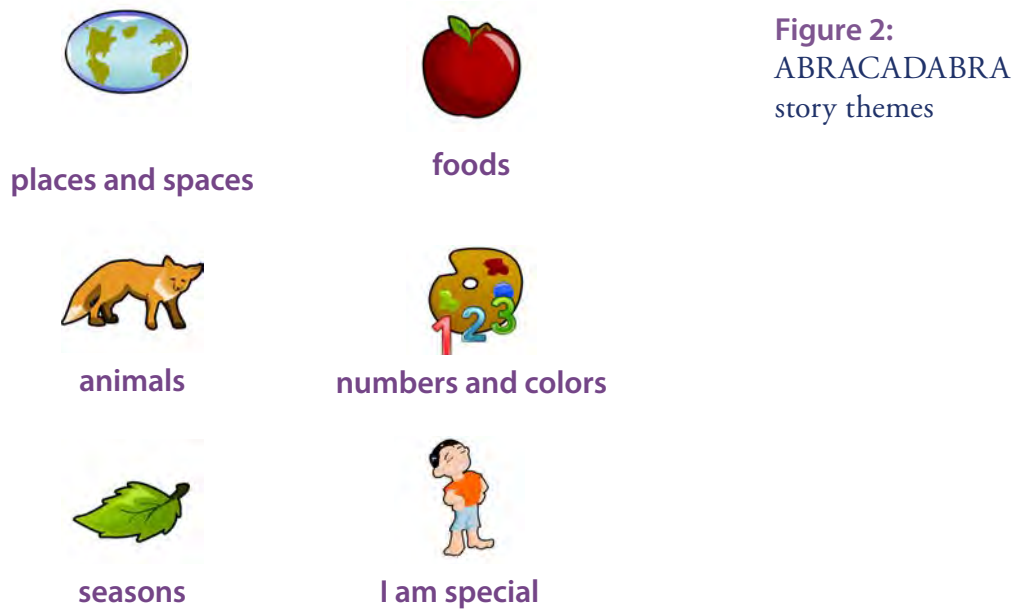
Multicultural

Stories and myths from or about a variety of cultures



Themes

ABRA stories also expose students to different themes. These themes support students' use of their personal, social and cultural backgrounds to interpret the text.



Choosing an Appropriate Reading Level

When assigning stories to students one should always consider the frustration, instruction, and independent reading levels of each individual student.

Generally, it is accepted that reading is at the frustration or entry level when a text is read at 90% or less accuracy (1 or more out of 10 words incorrect); reading is at the instruction level when text is read with 90-95% accuracy (about 1 in 10 words correct); and finally, reading is at the independent level when an easy text is read with 95% or more accuracy (about 1 in 20 words is incorrect) (McCarthy, 1996)

Source

McCarthy, T. (1996). *Teaching Genre: exploring 9 types of literature to develop lifelong readers and writers*. Missouri: Scholastic Professional Books.

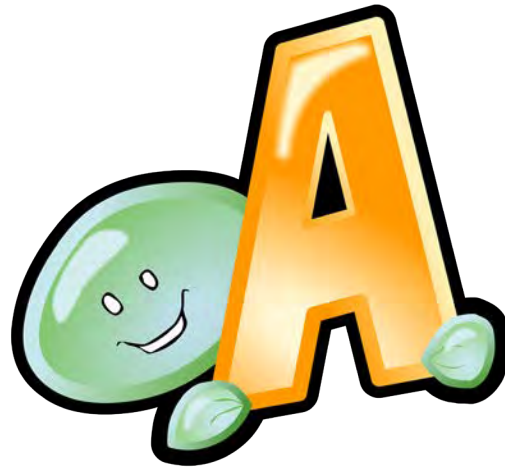




Alphabetic

What is Alphabetic?

Alphabetic (Sounds, Letters and Words) is the ability to associate sounds with letters and use these sounds to create words. The sounds associated with letters are referred to as phonemes (smallest units of spoken language) while the written letters associated with these sounds are called graphemes. There are 26 graphemes in English but there are over 40 phonemes.



Stages of Alphabetic

Children begin their path to reading by developing their phonemic awareness by learning to distinguish between different sounds, or phonemes. Through practice and modeling students begin to associate these sounds with print and recognize the correspondence between letters and sounds.

The ability to manipulate these phonemes, either individually (letter by letter) or in chunks such as in rhyming families, is a more sophisticated skill in the area of phonics. Here, the learner begins to segment words by breaking them apart into units that make them easier to read and then blending these units together. Decoding (the ability to interpret symbols, such as letters) then begins to take place as the learner is able to access strategies to read words.

Why is Alphabetic Important?

Research suggests that children who do not have a solid foundation in these alphabetic principles are less skilled readers as they progress through school. By third grade students literacy level is highly predictive of their eventual literacy success. Therefore, providing children with multiple opportunities to practice alphabetic is crucial for growth in the next steps in literacy, fluency and comprehension skills.





How does ABRACADABRA Support Alphabetics?

ABRA has 17 different activities (Table 1) specifically aimed at reinforcing the alphabetic principles. Each activity has multiple levels so that classrooms with a wide range of student needs can match student skill and activity difficulty level. There is scaffolding built within each activity to encourage autonomous use of the tool.

Many of the alphabetic activities are associated with the stories embedded in the software. This helps to build the context necessary for practicing specific vocabulary and all reading related skills. Many activities are appropriate for students who are struggling or at the beginning stages of alphabetic skills development. These activities focus predominantly on listening skills, auditory discrimination and letter naming. For those students who are ready for more advanced practice the activities support word family manipulation, decoding games, and blending tasks with text support. Of course, there are fun games that are appropriate for all levels and provide practice such as Letter bingo and Letter-sound search. Please refer to the complete table for more details about each activity.

| | |
|---------------------|---------------------|
| Matching Sounds | Word Matching |
| Alphabet Song | Letter Sound Search |
| Same Phoneme | Same Word |
| Syllable Counting | Animated Alphabet |
| Rhyme Matching | Word Counting |
| Letter ID Bingo | Word Families |
| Auditory Segmenting | Blending Train |
| Word Changing | Basic Decoding |
| Auditory Blending | |

Table 1: Alphabetics activities



Matching Sounds

Activity objective

The student will identify sounds that are the same.

Group facilitation tips

Students can take turns matching sets of sounds in this activity. (Since there are only two sounds to match per set, the turns won't take long.)

Content/Levels

- Story-independent activity



| Level | Description |
|-------|------------------------|
| 1 | Distinguishable sounds |
| 2 | Similar sounds |

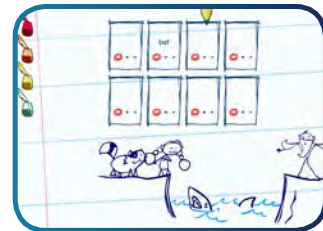
Word Matching

Activity objective

The student will match words that have the same beginning or ending consonants.

Group facilitation tips

- Students can take turns or work as a group to count the words in a sentence.
- Clapping can be encouraged to support the counting.



Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |



Content/Levels

- Pairs of Consonant-Vowel-Consonant (CVC) words randomly presented:
 - 8 cards (4 pairs)
 - 12 cards (6 pairs)
 - 16 cards (8 pairs)



Alphabet Song



Activity objective

The software sings the Alphabet Song and the students will sing along with or without the voice of the computer.

Group facilitation tips

- The facilitator should help focus students' attention so that they begin the song with the computer
- If necessary, sing along with the students as a form of support.

Content/Levels

- Story-independent activity

| Level | Description |
|-------------|------------------------------|
| Sub-level A | Lower Case |
| Sub-level B | Upper Case |
| Sub-level C | Mixed Case |
| 1 | Music and words (sing along) |
| 2 | Words fade in and out |
| 3 | Only music (karaoke) |



Letter Sound Search



Activity objective

Given the pronunciation of a letter sound, the student must identify and find its associated letter.

Group facilitation tips

- Finding a single letter should comprise a student's turn.
- The facilitator can support a student who needs help by narrowing the area of location of the letter; i.e. "look in this corner around the tree."

Content/Levels

- Story-independent activity

| Level | Description |
|-------------|-----------------------------|
| 1 | s p m t k d l a h r |
| 2 | g c o n u b f i z d h p r e |
| 3 | w v y q x i b l a t e h |
| Sub-level A | Lower case |
| Sub-level B | Upper case |
| Sub-level C | Mixed case |



Same Phoneme

Activity objective

The student will distinguish between letter sounds that are the same or different.

Group facilitation tips

- Students can take turns (one or two pairs of sounds per turn).

Content/Levels

- Story-independent activity
- All letter sounds



Same Word

Activity objective

The student will distinguish between words that are the same or different.

Group facilitation tips

Students can take turns (one or two pairs of words per turn).

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |



Content/Levels

- CVC words randomly presented.

| Level | Description |
|-------|--|
| 1 | Words where only the first letter differs (i.e. cat, fat) |
| 2 | Words where only the last letter differs (i.e. cat and can) |
| 3 | Words where only the middle vowel differs (i.e. cat and cot) |



Syllable Counting



Activity objective

The student will identify the number of syllables in a word.

Group facilitation tips

- If necessary, explain the concept of syllables and provide some examples using the activity.
- Students can take turns or work as a group to count the syllables in a word.
- Clapping can be encouraged to support the counting.

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

Content/Levels

- 1 to 4-syllable words randomly presented

Animated Alphabet



Activity objective

For each letter students are shown an animation that includes the letter sound, the letter-writing cue and an alliterative phrase to associate with the letter sound.

Group facilitation tips

- Have each student say the sentence.
- Tell the students you will give them one minute to come up with as many words as they can for that particular letter.

Content/Levels

| Level | Description |
|-------|------------------------|
| 1 | Distinguishable sounds |
| 2 | Similar sounds |



Rhyme Matching

Activity objective

The student will identify words that rhyme.

Group facilitation tips

- Students can work as a group to match rhyming words (one student in control of the mouse).
- Students can also take turns controlling the computer and matching one or two pairs of words per turn.
- Students love the game format and the challenge in this activity. Make sure the students listen to the words and keep in mind the instructional goal of the activity.



Content/Levels

- All stories are available in this activity.
- Pairs of CVC words randomly presented:
 - 8 cards (4 pairs)
 - 12 cards (6 pairs)
 - 16 cards (8 pairs)

Word Counting

Activity objective

The student will identify the number of words in a sentence.

Group facilitation tips

- Students can take turns or work as a group to count the words in a sentence.
- Clapping can be encouraged to support the counting.



Available stories

| Genre | Story |
|----------------------|-----------------------------|
| Folk and fairy tales | The Dove and the Ant |
| | The Little Red Hen |
| | The Frogs and the Well |
| | Henny Penny |
| | The Three Billy Goats Gruff |
| Poetry | Darryl! Don't Dawdle |
| Non-fiction | How a Bean Sprouts |



Content/Levels

| Level | Description |
|-------|--|
| 1 | 2, 3 and 4-word sentences (40%, 40% and 20%). |
| 2 | 2, 3, 4 and 5-word sentences (20%, 30%, 30% and 20%) |



Letter Bingo



Activity objective

Given the pronunciation of a letter name, the student must determine if she has that letter on her bingo card.

Group facilitation tips

- Students should play as a team – each taking a turn for one letter.
- If student has difficulty finding the letter the facilitator may narrow down the area of location.

Content/Levels



| Level | Description |
|-------|---|
| 1 | Distinguishable sounds |
| 2 | Similar sounds |
| 3 | Lower Case Challenge: e d p q g l m n u v |

Word Families



Activity objective

The student will create different words from the same word family.

Group facilitation tips

The facilitator can choose a specific word family to work on or have the computer randomly pick the word families.

Available stories

- All stories are available in this activity.



Content/Levels

| Level | Description |
|----------|---|
| 1 | Beginning consonants consist of single letters and phonemes. |
| 2 | Beginning consonants consist of single letters and phonemes and clusters. |
| Advanced | Choose the word family on which you want to focus. |

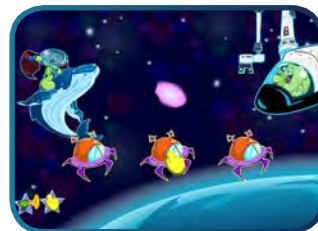
Auditory Segmenting

Activity objective

Given the pronunciation of a word, the student will identify its breakdown (i.e.: 'cat' = /c/ /a/ /t/).

Group facilitation tips

- If necessary, explain the concept of segmenting words, using an example from the activity.
- Students can take turns (one word per turn).



Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

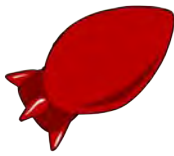
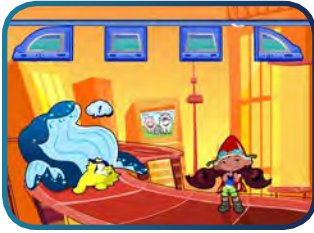


Content/Levels

| Level | Description |
|-------|---|
| 1 | 2-phoneme words with short and long vowel sounds. |
| 2 | 2-phoneme words with clusters, short, long, and r-controlled vowel sounds |
| 3 | 3-phoneme words with short vowel sounds. |
| 4 | 3-phoneme words with clusters, short, long, and r-controlled vowel sound. |
| 5 | 4-phoneme words with blends mainly at the beginning, short, long, and r-controlled vowel sounds. |
| 6 | 4-phoneme words with blends mainly at the end, short, long, and r-controlled vowel sounds. |
| 7 | 5-phoneme words with blends at the beginning and end, short, long, and r-controlled vowel sounds. |



Blending Train



Activity objective

Given a phonemic breakdown, the student will identify a word (i.e. /c/ /a/ /t/ = 'cat').

Group facilitation tips

- Students can take turns (one word per turn).
- This activity requires participation from the facilitator to monitor student response.
- When appropriate, peer monitoring can be encouraged (one student reads the word while the others check for accuracy and give feedback).

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|---|
| 1 | 2-phoneme words with short and long vowel sounds. |
| 2 | 2-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 3 | 3-phoneme words with short vowel sounds. |
| 4 | 3-phoneme words with clusters, short, long, and r-controlled vowel sound. |
| 5 | 4-phoneme words with blends mainly at the beginning, short, long, and r-controlled vowel sounds. |
| 6 | 4-phoneme words with blends mainly at the end, short, long, and r-controlled vowel sounds. |
| 7 | 5-phoneme words with blends at the beginning and end, short, long, and r-controlled vowel sounds. |
| 8 | 5-phoneme challenge words. |



Word Changing

Activity objective

The student must change individual letters or phonemes in a word to form a new word (i.e. change “bad” to “sad”).

Group facilitation tips

- The facilitator should be aware of incorrect responses and aid where necessary.
- Encourage the group to pay attention to make sure each student gives a correct response.



Available stories

| Genre | Story |
|----------------------|-----------------------------|
| Folk and fairy tales | The Dove and the Ant |
| | The Little Red Hen |
| | The Frogs and the Well |
| | Henny Penny |
| | The Three Billy Goats Gruff |
| Poetry | When I open my eyes |
| | Feelings |
| | Darryl! Don't Dawdle |
| | I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |



Content/Levels

| Level | Description |
|-------|---|
| 1 | CVC words. Only first letter is manipulated (rime units) |
| 2 | CVC words. All letters are manipulated |
| 3 | CVC words with long vowels. Only first letter is manipulated (rime units) |
| 4 | CVC words with long vowels. All letters are manipulate. |



Basic Decoding



Activity objective

Given the visual representation of a word, the student must say the sounds of its letters, and then blend them together to read the word and identify its corresponding picture.

Group facilitation tips

- This activity combines letter sounding with actual blending of words.
- The facilitator should be aware of the students' responses and scaffold where necessary.
- The facilitator can encourage other members of the group to aid a student who may be struggling.

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|---|
| 1 | 2-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 2 | 3-phoneme words with short vowel sounds. |
| 3 | 3-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 4 | 4-phoneme words with blends mainly at the beginning, short, long, and r-controlled vowel sounds. |
| 5 | 4-phoneme words with blends mainly at the end, short, long, and r-controlled vowel sounds. |
| 6 | 5-phoneme words with blends at the beginning and end, short, long, and r-controlled vowel sounds. |
| 7 | 5-phoneme challenge words. |



Auditory Blending

Activity objective

Given a phonemic breakdown the student will identify a word and its corresponding picture (i.e. /c/ /a/ /t/ = 'cat').

Group facilitation tips

- Students can take turns (one word per turn).
- If necessary, explain the concept of word blending, using an example from the activity.



Available stories

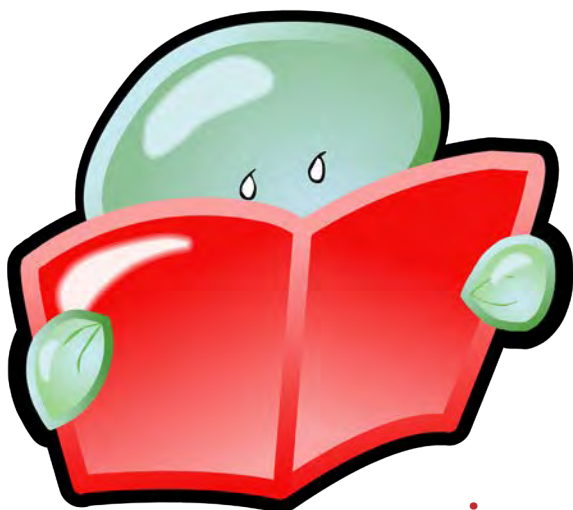
| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|---|
| 1 | 2-phoneme words with short and long vowel sounds. |
| 2 | 3-phoneme words with short vowel sounds. |
| 3 | 3-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 4 | 4-phoneme words with blends mainly at the beginning, short, long, and r-controlled vowel sounds. |
| 5 | 4-phoneme words with blends mainly at the end, short, long, and r-controlled vowel sounds. |
| 6 | 5-phoneme words with blends at the beginning and end, short, long, and r-controlled vowel sounds. |
| 7 | 5-phoneme challenge words. |



Fluency



What is Fluency?

Fluency describes the level of automaticity that children have when reading a text. Fluent readers decode words with little or no effort. Speed, accuracy, correct pacing and expression are fluency sub-skills that allow readers to focus on the content, thereby increasing comprehension. Overall fluency, and its sub-skills, lead to a better understanding of the text.

Why is Fluency important?

Research suggests that students who are unable to acquire the skill of automatically reading words will struggle with being able to attend to the meaning of a text. In addition, children who have trouble reading accurately at an appropriate pace tend to experience motivational problems. The reading load increases as students' progress through the grade levels, making lack of fluency a major obstacle to school success.

How Does ABRACADABRA Support Fluency?

Activities in ABRA allow for extensive practice in reading fluency. The activities cover all of the sub-skill areas, including expression and speed. Through games, students can test their pace against ABRA's cartoon characters. Good reading models are built into the story-related activities so students can hear appropriate examples and evaluate if, how or where they can improve. In addition, the program models how to decode words within the context of a story thus giving students access to consistent and readily available help. The more learners are able to practice a specific skill, the better the chance they have of developing fluency.

Table 2: Fluency activities

| | |
|----------------------|----------|
| High Frequency Words | Tracking |
| Expression | Accuracy |
| Speed | |



High Frequency Words

Activity objective

Given a list of high frequency words the student will identify the words.

Group facilitation tips

- Remind students that speed in their word recognition is an important element in this activity (time for word recognition is controlled by the computer).
- Have students line up and take turns reading a word.



Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen |
| Poetry | I Can Move Like A... |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|---|
| 1 | A set of four words randomly presented four times with gradually less time to read them. |
| 2 | A set of seven words randomly presented four times with gradually less time to read them. |

Tracking

Activity objective

While reading a story, the student will be able to read with one-to-one correspondence and without skipping words.

Group facilitation tips

- Students can take turns reading the story and controlling the computer (arrow keys for tracking).
- Remind students that they can click on the words that they don't know (and have the computer read them).



Available stories

All stories are available in this activity.

Content/Levels

All stories available in this activity include the tracking functionality.



Expression



Activity objective

The software reads a paragraph using good or bad expression and the student must decide if it was read with good expression. The student will then read the same paragraph practicing correct use of expression.

Group facilitation tips

Before beginning this activity, a teacher/facilitator can provide examples of how good and bad expressive reading sounds. For example, a teacher/facilitator can talk about how a story should be read differently if a character is sad or happy.

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Frogs and the Well Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... |
| Multicultural | Waterfall |

Content/Levels

The computer plays the voice of someone reading different sentences using different expressions. The listener must decide if the person is reading with the correct expression.



Accuracy

Activity objective

After listening to the computer read a passage, the student must read the same page accurately.

Group facilitation tips

This activity should be done individually. As the computer reads, the student follows. When s/he reads, s/he can click on a word if help is needed. At the end of each passage, the words clicked will be reviewed in a game-like feature to help the student become more familiar with them.



Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... Where am I? |
| Multicultural | Waterfalls |
| Non-fiction | How a Bean Sprouts |

Content/Levels

This activity can be done at all levels.



Speed



Activity objective

Using an algorithm of good reading speed, the software will monitor a student's reading rate. The student will read a given text at an appropriate pace.

Group facilitation tips

- This game is best played after students are familiar with a story or are comfortable with reading or sounding out words.
- The game can be played with one to four students. Each student chooses a character and names it. The software selects who will read and monitors the person's reading rate. If a student needs help, s/he can click on the word but this slows down her/his reading speed.

Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen Henny Penny The Three Billy Goats Gruff |
| Poetry | When I open my eyes Feelings Darryl! Don't Dawdle I Can Move Like A... Where am I? |
| Multicultural | Waterfall |
| Non-fiction | How a Bean Sprouts |

Content/Levels

Using an algorithm of good reading speed, the software will monitor a student's reading rate. The student will read a given text at an appropriate pace.

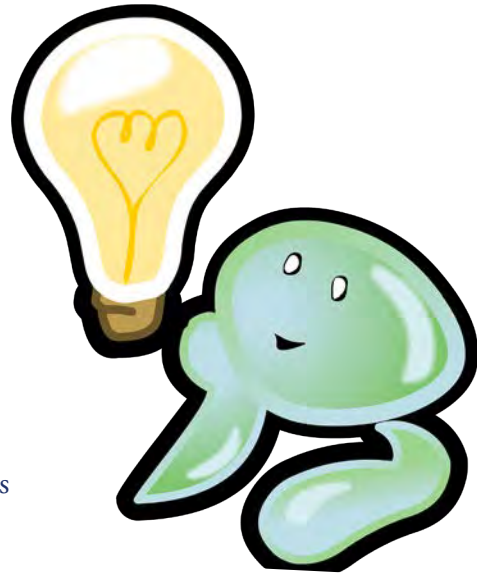




Comprehension

What is Comprehension?

Comprehension (understanding the story) is the cognitive process in which the reader interacts with a text in an attempt to ascertain its meaning. Reading comprehension is the culmination of all the students' reading skills; it involves good oral comprehension, vocabulary, and decoding skills. Depending on the grade level of the students, the importance of each of these prerequisite skills varies. Comprehension is also affected by prior knowledge, which can help children relate to various texts.



Why is Comprehension Important?

Reading for meaning is the ultimate goal of learning how to read. This is the element that takes children from being good decoders to being good readers and literate beings. It is therefore understandable that the acquisition of reading comprehension is a complex, and vital, process.

How does ABRACADABRA Support Comprehension?

ABRA has focused on developing several specific skills that contribute to overall comprehension. These activities have various levels and range from simpler tasks, such as placing the elements of a well-known story in order, to summarizing an entire text. Other activities allow students to respond to a question prompt, to think critically about a text and to respond appropriately given the context of the story. Additional vocabulary activities help students to build a bank of words that they can read (decode) but may not be able to understand.





How Does ABRA Support Comprehension?

Research suggests that there are several strategies that have a positive influence on children’s ability to understand what they read. The National Reading Panel suggests practicing skills such as asking and generating critical questions, using story maps, and monitoring comprehension through cooperative learning opportunities.

There is also evidence that modeling appropriate strategies, such as using context clues, and allowing children to develop skills through providing multiple opportunities to interact with texts aids in the development of comprehension. Also, students should have time to read individually, with peers and with adults.

Table 3: Comprehension activities

| | |
|----------------|--------------------------|
| Prediction | Comprehension Monitoring |
| Sequencing | Summarizing |
| Vocabulary | Vocabulary (ESL) |
| Story Response | Story Elements |



Prediction

Activity objective

Based on information from the story, the student will predict future events.

Group facilitation tips

- Students can read the story as a group (using the tracking functionality) or have the page read by the computer (audio icon).
- If necessary re-word or explain the prediction question and encourage discussion among the group.
- Make sure students elaborate and justify their responses to the questions.
- Teachers can add other questions that may not be embedded in the activity.



Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen Henny Penny The Three Billy Goats Gruff The Frog and the Well |
| Multicultural | Waterfalls |



Content/Levels

Prediction questions at the end of certain pages in the story.

Comprehension Monitoring

Activity objective

After reading a story, the student will identify words that do not make sense (one on each page of the story).

Group facilitation tips

Students can work as a group (reading the story and looking for the non-sense words) and take turns controlling the computer.



Available stories

| Genre | Story |
|----------------------|--|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Three Billy Goats Gruff The Frog and the Well |
| Poetry | Darryl! Don't Dawdle |
| Non-fiction | How a Bean Sprouts |



Content/Levels

One non-sense word per page in every story



Sequencing



Activity objective

After reading a story, the student will place story events in their correct order.

Group facilitation tips

- Students can work as a group (reading the story events and discussing the appropriate order) and take turns controlling the computer.
- Encourage participation of other students as peer monitors.



Available stories

| Genre | Story |
|----------------------|-----------------------------|
| Folk and fairy tales | The Dove and the Ant |
| | The Little Red Hen |
| | Henny Penny |
| | The Three Billy Goats Gruff |
| | The Frog and the Well |
| Multicultural | Waterfall |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|---|
| 1 | Three story events (summary of story pages), displayed in random order. |
| 2 | Five story events (summary of story pages), displayed in random order. |



Summarizing

Activity objective

The student will answer story-related questions to help him/her summarize the story at the end.

Group facilitation tips

- Students can read the story as a group (using the tracking functionality) or have the page read by the computer (audio icon).
- If necessary re-word the question and encourage discussion among the group.



Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen Henny Penny The Three Billy Goats Gruff The Frog and the Well |
| Multicultural | Waterfalls |

Content/Levels

Story-related questions at the end of certain pages in the story, which help the student to identify key elements to include in a summary of the story.



Vocabulary



Activity objective

Given different attributes of a word, the student must determine which sentences use the word appropriately.

Group facilitation tips

This activity can be used to preview words from a particular story or to work with words after the story has been read.

Available stories



| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Three Billy Goats Gruff The Frog and the Well Henny Penny |
| Poetry | When I open my eyes Darryl! Don't Dawdle I Can Move Like A... Feelings |
| Non-fiction | How a Bean Sprouts |
| Multicultural | Waterfall |

Content/Levels

A number of vocabulary words from each story.

Vocabulary (ESL)



Activity objective

The student will be able to match given words with their corresponding pictures then use the words appropriately in given sentences.

Group facilitation tips

- This activity is better done individually or in pairs. If done in pairs, students can take turns controlling the mouse as they each do a set. The other student is there to support and provide assistance if necessary.



Available stories

- The same stories as listed for Vocabulary above, with the exception of "How a Bean Sprouts."

Content/Levels

- A number of vocabulary words from each story.



Story Response

Activity objective

Students are given open-ended questions about the story that they will discuss with one another.

Group facilitation tips

Teachers may need to remind the student of the story.



Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Three Billy Goats Gruff The Frog and the Well Henny Penny |
| Poetry | When I open my eyes Darryl! Don't Dawdle I Can Move Like A... Feelings |
| Non-fiction | How a Bean Sprouts |
| Multicultural | Waterfalls |



Content/Levels

Six questions are presented in a set, three of which are general and three of which are specific to a story.



Story Elements



Activity objective

The students must answer questions about events that took place in a story.

Group facilitation tips

This activity can be done individually or in small groups. After reading a story, students must answer questions. They can take turns selecting answers and hitting the piñata.



Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Little Red Hen The Three Billy Goats Gruff The Frog and the Well Henny Penny |
| Poetry | Darryl! Don't Dawdle |
| Non-fiction | How a Bean Sprouts |
| Multicultural | Waterfall |

Content/Levels

Students must select the answer to six questions about the story. Because there are audio prompts to assist, this activity can be done by all students once they are familiar with the story.



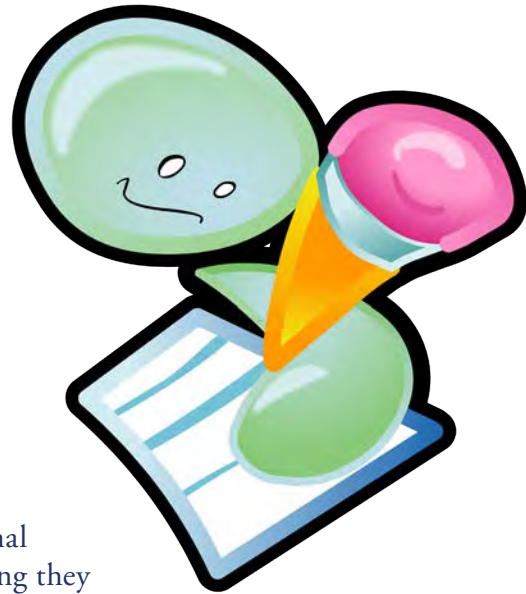
Writing

What is Writing?

Writing is defined as a system in which graphemes (letters or symbols) that represent a language are placed on a surface (encoded) to be read (decoded) by someone familiar with the code. It is a powerful, multifaceted tool for both personal and interpersonal communication.

Stages of Writing

Writing progresses through at least seven different stages; from children giving meaning to their scribbles, pictures and drawings to conventional spelling. When children begin their formal schooling they may fall anywhere on this continuum in terms of writing ability.



Why is Writing Important?

Writing is a means by which we communicate with others. When children see different types of writing that is modeled and used around them, they soon want to engage in its production. Children usually begin writing (albeit through scribbling) before they start to read. Research shows that writing supports reading development and vice versa. When students encode their thoughts using conventional or invented spelling on paper or via a word processing program, they use skills that support reading and writing development. With the disparity that exists between the number of phonemes and graphemes in the English language (twenty-six and over forty, respectively), students need explicit and systematic phonics instruction to learn how this code works and how to reproduce it. ABRA is a tool that supports this development.

How Does ABRACADABRA Support Writing?

ABRA's writing component is designed for children to apply phonetic principles and their literacy experiences to the writing of words and sentences. Through game-like activities, children are asked to write words and sentences they have encountered in the different texts in the program.

Scaffolding mechanisms are built-in so that students can complete the writing activities on their own. When words are spelled incorrectly, ABRA will provide prompts to support and encourage students until the words are spelled properly.

Table 4: Writing activities

| Spelling Words | Spelling Sentences |
|----------------|--------------------|
|----------------|--------------------|



Spelling Words

Activity objective

The student will spell regular and irregular words using the keyboard.

Group facilitation tips

- Before doing this activity, acquaint students with basic keyboarding skills, especially letters, backspace and enter keys.
- This activity is better done by individual students or in pairs where they alternate having control of the keyboard. If students make a mistake spelling a word, the software highlights where the error occurred but the students will have to retype the whole word to correct it.



Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Three Billy Goats Gruff The Frog and the Well Henny Penny |
| Poetry | When I open my eyes Darryl! Don't Dawdle I Can Move Like A... Feelings |

Content/Levels

| Level | Description |
|-------|---|
| 1 | 2-phoneme words with short and long vowel sounds. |
| 2 | 2-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 3 | 3-phoneme words with short vowel sounds. |
| 4 | 3-phoneme words with clusters, short, long, and r-controlled vowel sounds. |
| 5 | 4-phoneme words with blends mainly at the beginning, short, long, and r-controlled vowel sounds. |
| 6 | 4-phoneme words with blends mainly at the end, short, long, and r-controlled vowel sounds. |
| 7 | 5-phoneme words with blends at the beginning and end, short, long, and r-controlled vowel sounds. |
| 8 | 5-phoneme challenge words. |



Spelling Sentences



Activity objective

The students will use keyboarding skills to spell words to make a sentence.

Group facilitation tips

- Before doing this activity, acquaint students with basic keyboarding skills and ensure that they are familiar with the letter, backspace, and enter keys, as well as the spacebar.
- This activity should be done after a story has been read because the words tested are story specific. It is better done by individual students or students in pairs who take turns controlling the keyboard. If the student makes a mistake spelling a word, the computer highlights where the error occurred, but the student will have to retype the whole word to correct it.

Available stories

| Genre | Story |
|----------------------|---|
| Folk and fairy tales | The Dove and the Ant The Little Red Hen The Three Billy Goats Gruff The Frog and the Well Henny Penny |
| Poetry | When I open my eyes Darryl! Don't Dawdle I Can Move Like A... Feelings |
| Multicultural | Waterfall |
| Non-fiction | How a Bean Sprouts |

Content/Levels

| Level | Description |
|-------|-------------------|
| 1 | 2-word sentences. |
| 2 | 3-word sentences |
| 3 | 4-word sentences. |
| 4 | 5-word sentences. |



Suggested ABRA Usage Structure

ABRA is a flexible program that is able to adapt to the specific needs of the children in a teacher's classroom. ABRACADABRA's word content and structure are connected to both the stories in the tool and familiar vocabulary words. Below is a suggested structure for using ABRA during a one-hour Language Arts lesson. The CSLP is interested in getting feedback on this structure and how teachers feel it can be modified or improved. It is not necessary for teachers to follow this outline exactly, but it is suggested that teachers make each of these work elements part of every ABRA-based lesson.

I. Word-level work (10 minutes)

(Based on the needs and abilities of the class)

- All **Alphabetics** activities

II. Text-level work (15 minutes)

(Putting skills into action)

- All **Fluency** and **Comprehension** activities

III. Collaborative work (20 minutes)

(Students working in small groups or pairs on a particular element)

- Pair reading (**Fluency** and **Comprehension**)
- Decoding words (**Alphabetics**)
- Spelling (**Writing**)

IV. Extension work (15 minutes)

(Students working on other activities related to language arts)

- Responding to the story they've read
- Writing an alternate ending, etc.



Table 1: Resources available on the ABRACADABRA Teacher Resource Page

| Type of Resource | Resource Name |
|---------------------------------|---|
| Job Aid | Prereading Skim |
| Job Aid | Reading Fluency |
| Job Aid | Setting Task Goals |
| Job Aid | Setting General Goals for Level 1 |
| Job Aid | What is Self-Regulated Learning? |
| Job Aid | Teaching Vocabulary |
| Job Aid | LTK Management (student passwords, etc...) |
| Lesson Plans - ABRA-ePEARL link | Basic Decoding |
| Lesson Plans - ABRA-ePEARL link | Setting Reading Goals |
| Lesson Plans - ABRA-ePEARL link | Sequencing |
| Lesson Plans - ABRA-ePEARL link | Prediction |
| Lesson Plans - ABRA-ePEARL link | Teaching Vocabulary |
| Lesson Plans - ABRA-ePEARL link | Comprehension Monitoring |
| Worksheets | Basic Decoding - Level 2 |
| Worksheets | Comprehension Monitoring - Short Vowels |
| Worksheets | Comprehension Monitoring - Long vowels |
| Worksheets | Comprehension Monitoring - Preposition |
| Worksheets | High Frequency Practice |
| Worksheets | Letter Sound Matching - 1 |
| Worksheets | Letter Sound Matching - 2 |
| Worksheets | Letter Sound Matching - 3 |
| Worksheets | Letter Sound Search - Level 1 (lower case) |
| Worksheets | Letter Sound Search - Level 2 (lower case) |
| Worksheets | Letter Sound Search - Level 2 (upper case) |
| Worksheets | Letter Sound Search - Level 2 (mixed case) |
| Worksheets | Letter Sound Search - Level 3 |
| Worksheets | Segmenting - Two-sound Word |
| Worksheets | Segmenting - Three-sound Word |
| Worksheets | Segmenting - Four-sound word |
| Worksheets | Sequencing - Level 1 - How a Bean Sprouts |
| Worksheets | Sequencing - Level 1 - When I Open My Eyes |
| Worksheets | Sequencing - Level 1 - Darryl Don't Dawdle! |





| Type of resource | Resource Name |
|------------------------|---|
| Worksheets | Syllable Counting - Fruit Syllables |
| Worksheets | Vocabulary Matching |
| Worksheets | Word Families - Level 1 |
| Worksheets | Word Families - Level 2 |
| Worksheets | Word Matching - Level 1 |
| Worksheets | Word Matching - Level 2 |
| Worksheets | Word Spelling - Level 3 |
| Worksheets | Word Spelling - Level 6 |
| Videos | ABRA Introduction |
| Videos | Getting Strated with ABRA |
| Videos | Whole Class Instruction |
| Videos | Lab Instruction |
| Videos | Learning Centre |
| Videos | Using the Assessment Module |
| Videos | Using ABRA with ePEARL to Develop Prediction in Your Classroom |
| Videos | Using ABRA with Special Needs Children |
| Videos | Introduction to Using ABRA-ePEARL in your classroom |
| Videos | The Benefits of Using ABRACADABRA and ePEARL Together (Level 1) |
| Videos | The Benefits of Using ePEARL for Portfolio Assessment |
| Videos | Implementing ABRACADABRA in the Classroom |
| ABRA Sample Curriculum | ABRACADABRA Hong Kong Curriculum |
| ABRA Sample Curriculum | ABRACADABRA Kenya (Std 1-2) Curriculum |
| ABRA Sample Curriculum | ABRACADABRA Cycle 1 (K-2) Curriculum |
| Other | LTK Log In Template |
| Other | Colourig Book |
| Other | Comprehension Cue Card |
| Other | Four Seasons Sentence Starter |
| Other | Little Red Hen Sentence Starters |

Follow this link: <http://grover.concordia.ca/abracadabra/resources/index.php>





ABRACADABRA

Cycle One Curriculum
Chapter 3



Reading Development:

Cycle One Curriculum

1. **Goal:**

- Integrating ABRA into the development of early and crucial reading skills. These skills include phonics (alphabets), fluency, reading comprehension and writing instruction.

2. **Objective:**

- Focus on ABRA with links to ePEARL
- Map out literacy, reading comprehension and self-regulation concepts (tie them together comprehensively)

3. **Target Level:**

- Geared to Pre-K to Gr.2 (4-7 yrs old)

4. **Purpose:** The curriculum will:

- Provide guidance to teachers on how to support skills related to reading, comprehension, and writing using ABRA and ePEARL;
- Show teachers the whole path; from how to start using ABRA to how to use ePEARL and the combination of both tools.
- Each lesson plan links to existing support materials such as worksheets or job aids, etc...
- Each lesson plan has a 'do-it' yourself component, where teachers have to create an activity of their own, completing the lesson plan.
- Teachers should integrate their own resources, lesson plans and other related materials.

*Note:

- These activities are merely suggestions for teachers who need a little scaffolding.
- These activities can serve as a springboard, until teachers become more comfortable using the tools.



Teacher Preparation

Go to your **Teacher Zone**

- Familiarize yourself with the Skills, Stories, Alphabetics activities and suggested extension activities.
 - When reviewing stories, look at the vocabulary, number of words per page, metaphors, overall content and judge the appropriateness for the age group and level of your students.
 - Consider the suggested stories for each lesson. Try modifying the stories according to your students' readiness, level and interests.
 - Go to Printable and Technical Resources and print out the icons into cards to use in your classroom to help your students activities the story and/or activity they should be going to. In addition, the printed out cards can also serve for collaborative activities
 - Go to Printable and Technical Resources, under Activities, review the various extension activities
1. <http://grover.concordia.ca/epearl/demo/cslp/abra/pd/main.php?fn=selectMenu&iMenu=3> and look under Activities for the printables.
 2. <http://exchange.smarttech.com/search.html?subject=English+Language+Arts#page=2> define your search criteria and find some great activities for the SMART Board to support ELA Instruction

Use the **Assessment Feature** to regularly:

- Verify that your students are doing the appropriate activities
- Check that they are doing the correct level of activities
- Direct your teaching
- Create new classroom activities
- Support students' learning
- Modify and adjust other available resources





Suggested Implementation Structure

Please keep in mind that ABRA is an evidence-based tool and best results are achieved when it is used in a consistent manner, for at least 2hrs/ per student/ per week.

Use ABRA 2-3 hours a week: If you have a one-hour ELA block, your lesson should have:

- 20 minutes on word level work (pre-alphabets/phonics)
- 20 minutes on text level work (fluency/comprehension/spelling)
- 10 minutes on collaborative work (ePEARL/any activity/resource)
- 10 minutes on extension activities (ePEARL/any activity/resource)



Introduction: The World of ABRACADABRA

Preparation:


- This activity should take about an hour.
 - Have a whiteboard available and ready.
1. Sit the whole class in front of the whiteboard on the floor.
 2. Login to your account and show them the school corridor where Julie and Leo are walking.
 3. Say: “This is the magical word of ABRACADABRA, it looks a lot like our school, here we have Julie and Leo, and they are going to take us on a wonderful journey where we can learn new sounds and words and finally how to read!”

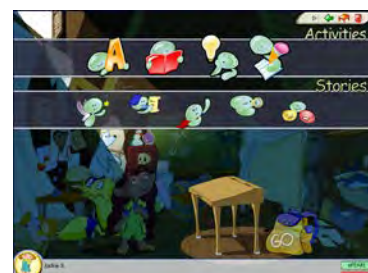


4. Click on Characters.
5. Have students choose different characters.
6. Have the software read aloud the character's biography, or if students want they can try to read various portions of it themselves.





1. Click on  and go back to the corridor.
2. Now, click on Activities and Stories.
3. Say: “This is the secret room, could this be a room in our school? From here, Julie and Leo can take us to different activities and stories where we will learn how to read and share what we have learned.
4. Allow for ample exploration time:
 - Students will have to login on their own (with your help). It may be useful to have an assistant for that period.
5. Let students familiarize themselves with the icons, the navigation menu.
6. Encourage students to watch the demos for the activities



Extension Activities

(Each of these could be a separate thematic unit)

Map of Canada (Geography)

1. Introduce the map of Canada.
2. Place the different ABRA characters in the respective Province or Territory they come from.
3. Give a short introduction to each Province or Territory.



Thank you to Tanya Beccat (Gr. 1, LDV - EMSB)

Vocabulary (ELA)

1. While reading through the characters' biographies, students will encounter many words they have never heard of before.
2. Have students make a list of words they don't know.
3. Create 3-4 small groups, give students each 2-3 words to look up.
4. Share the definitions with the whole class.
5. Project: create an ABRA dictionary.





Identity and Culture (ERC & Art)







1. Discuss how the characters are diverse and have various identities.
2. Ask:
 - What makes them different?
 - How are each of your students unique?
3. Have them talk about their own culture.
4. Students can create a presentations or Art work to share.



Segment 1: Pre-alphabetic and Phonics Activities



- Do one of the following activities (During ELA time <60 mins.)

| | |
|---|--|
| Matching Sounds  | Same Phoneme  |
| Alphabet Song  | Letter Sound Search  |
| Animated Alphabet  | Letter Bingo  |

- Do the above-mentioned activities until students can do them

- Without making any errors
- Being able to repeat the sounds
- Say/recite the alphabet
- Identify all letters of the alphabet







Extension Activity

It is important to support the online activities with a number of paper/pencil activities, here are some suggestions:

| | |
|--|---------------------------|
| Letter Sound Search - Level 1 (lower case) | Letter Sound Matching - 1 |
| Letter Sound Search - Level 2 (lower case) | Letter Sound Matching - 2 |
| Letter Sound Search - Level 2 (upper case) | Letter Sound Matching - 3 |
| Letter Sound Search - Level 2 (mixed case) | Basic Decoding - Level 2 |
| Letter Sound Search - Level 3 | |

It is also important to expose students to text.

- 20 – 30 mins. Read aloud an ABRA story with the whole class
- Choose one of the following Beginners stories:

| | |
|---|---|
| Fruit family  | My Town  |
| Counting to ten  | The Four Seasons  |
| Where am I?  | Canadian Wild Animals  |






Segment 2: Phonics Activities and Exposure to Text






Week 1

- Activities not linked to stories
- 20-30 mins. Do one of the following activities:

| | |
|---|--|
| Alphabet Song  | Letter Sound Search  |
| Letter Bingo  | |

Exposure to text

- 20 – 30 mins. Read aloud an ABRA story with the whole class
- Choose students who are comfortable to come up and read
- Choose one of the following stories:

| | |
|--|---|
| Fruit family  | Counting to ten  |
| Where am I?  | |

Collaborative work

- 10 mins.
- Have students create upper-case and lower-case Alphabet cards
- Have students sit in pairs or small groups
- Distribute cards randomly
- One student shows a card to the group
- Have other student(s) take turns to identify the card shown
- Correct, shape response, and have students repeat





Extension Activity

- 10 mins.
- After having reviewed the extension activities, select the appropriate activity for students to do (worksheet)






Week 2

- Activities not linked to stories
- 20-30 mins. Do one of the following activities:

| | |
|---|---|
| Matching Sounds  | Letter Bingo  |
| Alphabet Song  | Letter Sound Search  |

Exposure to text

- 20 – 30 mins. Read aloud an ABRA story with the whole class
- Choose one of the following stories:

| | |
|---|---|
| Canadian Wild Animals  | My Town  |
| The Four Seasons  | |

Collaborative work

- 10 mins.
- Have students create upper case and lower case Alphabet cards
- Have students sit in pairs or small groups
- Distribute cards randomly
- One student shows a card to the group
- Have other student(s) take turns to identify the card shown
- Correct, shape response, and have students repeat

Extension Activity

- 10 mins.
- After having reviewed the extension activities, select the appropriate activity for students to do (worksheet)



Weeks 3 & 4

Exposure to text

- 20 – 30 mins. Read aloud an ABRA story with the whole class
- Choose one of the following stories:

How a Bean Sprouts



I Can Move Like a...



- Read the story several time with your students

Alphabetics activities (link activity to one of the stories read above):

Word Counting



Syllable Counting



Rhyme Matching



Word Matching



Same Word



Word Families



Collaborative work

- 10 mins.
- Have students sit in pairs or small groups
- Students should do collaborative activities

Extension Activity

- 10 mins.
- After having reviewed the extension activities, select the appropriate activity for students to do (worksheet)



Segment 3: Phonics Activities related to Stories



Weeks 1 & 2

Exposure to text

- 20 – 30 mins. Read aloud an ABRA story with the whole class
- Choose one of the following Intermediate level stories:

| | |
|---|--|
| How a Bean Sprouts  | I Can Move Like a...  |
| When I Open my Eyes  | Dary Don't Dawdle...  |

- Read the story several time with your students

Alphabetics activities (link activity to one of the stories read above):

| | |
|---|--|
| Blending Train  | Auditory Segmenting  |
| Auditory Blending  | Word Changing  |
| Basic Decoding  | High Frequency Words  |

Collaborative work

- 10 mins.
- Have students sit in pairs or small groups
- Students should do collaborative activities

Extension Activity

- 10 mins.
- After having reviewed the extension activities, select the appropriate activity for students to do (worksheet)



Segment 4: Fluency









Weeks 1 & 2

Tracking



- Beginners stories: Numbers, Colours, Seasons, Animals, The fruit family
- Intermediate stories: I can move like a..., How a bean sprouts..., When I open my eyes, Darryl don't dawdle.
- Advanced stories: The Little Red Hen, The Dove and The Ant, Henny Penny, The three Billy Goats Gruff, Frogs and the Well
- Expert: Waterfalls, Feelings

Alphabetics activities (link activity to one of the stories read above):

| | |
|---|---|
| Word Counting  | Syllable Counting  |
| Rhyme Matching  | Word Matching  |
| Same Word  | Word Families  |

ePEARL - Weeks 1 & 2

Whole Class Discussion

- 20 mins.
- Refer to the *Planning Lesson Plan* on your ePEARL Teacher Resource Page: http://grover.concordia.ca/epearl/resources/home_en.php
- Go to Lesson Plans, then LTK Curriculum
- Have students sit on the floor
- Talk about goals, what is a goal? Good goals? Personal goals, etc...
- Have students give examples of reading goals, create a goal bank, write them on the board and post.
- Review several times during the week
- In week 2, have students select and set a goal
- Complete the Planning worksheet available on Teacher Resource Page



Weeks 3 & 4



Reading with Expressiont

- Choose the same story as in Weeks 1 & 2.

ePEARL

- Have students login to LTK, and select ePEARL. If this is the first time, have a volunteer help you.
- Explain to students what they can expect to see.
- Demo on white board if available
- With their worksheet, have students open a, select the right story, enter their reading: Type title, record, and enter their goal. Stop there. Remember to save.
- It may take two weeks, before you have all students login, and complete this first step.



Segment 5: Fluency and Writing

Weeks 1 & 2



Accuracy

- Beginners stories: Numbers, Colours, Seasons, Animals, The fruit family
- Intermediate stories: I can move like a..., How a bean sprouts..., When I open my eyes, Darryl don't dawdle.
- Advanced stories: The Little Red Hen, The Dove and The Ant, Henny Penny, The three Billy Goats Gruff, Frogs and the Well
- Expert: Waterfalls, Feelings
- Go to the Teacher Resource Page and select under Job Aids, Reading Fluency and Prereading Skim.
- Go through the material, and if appropriate for students, try it with them



Reading with Expression



- Beginners stories: Numbers, Colours, Seasons, Animals, The fruit family
- Intermediate stories: I can move like a..., How a bean sprouts..., When I open my eyes, Darryl don't dawdle.
- Advanced stories: The Little Red Hen, The Dove and The Ant, Henny Penny, The three Billy Goats Gruff, Frogs and the Well
- Expert: Waterfalls, Feelings

Alphabetics activities: (link activity to one of the stories read above)

| | |
|--|--|
| Blending Train  | Auditory Segmenting  |
| Auditory Blending  | Word Changing  |
| Basic Decoding  | Word Families  |
| High Frequency Words  | |

Writing Activity

- Choose the *Spelling Words* (link activity to the story read above)



Weeks 3 & 4

Whole Class Discussion

- 20 mins.
- Refer to Reflection Lesson Plan on your ePEARL Teacher Resource Page: http://grover.concordia.ca/epearl/resources/home_en.php
- Go to Lesson Plans, LTK Curriculum
- Have students sit on the floor
- Talk about Reflecting, what is a reflecting? How do we reflect?
- Have students brainstorm and share.
- Review several times during the week

Individual work

- In week 4, have students login to ePEARL, open the saved reading, click on Reflection tab.
- Students can select a Reflection Question or you can add your own
- Have students answer the question with their goal in mind.
- Record, illustrate or type their answer
- Repeat these steps for different reading throughout the month or until students are comfortable with step

Writing Activity

- Have students select the *Sentence Spelling* activity and practice writing sentence. (If some students are still uncomfortable with spelling, continue Spelling Words activity)
- This is also an opportunity to teach sentence structure, punctuation, capitalization, spacing and rules of keyboarding.
- Tackle one of the above-mentioned objectives at a time



Segment 6: Comprehension and Writing

Go to the **Teacher Resource** page, under Job Aids and Lesson Plans, there are several materials that may be used to develop reading comprehension and writing skills in your students.

Start with:

1. Vocabulary

- Do ABRA activity



2. Sequencing

- Do ABRA activity



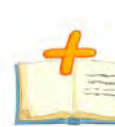
3. Story Elements

- Introduce “WH” questions: Who, what, where, when, how?
- Go to ABRA activities



4. Summarizing

- Use Lesson Plan on ePEARL Teacher Resource page



5. Prediction

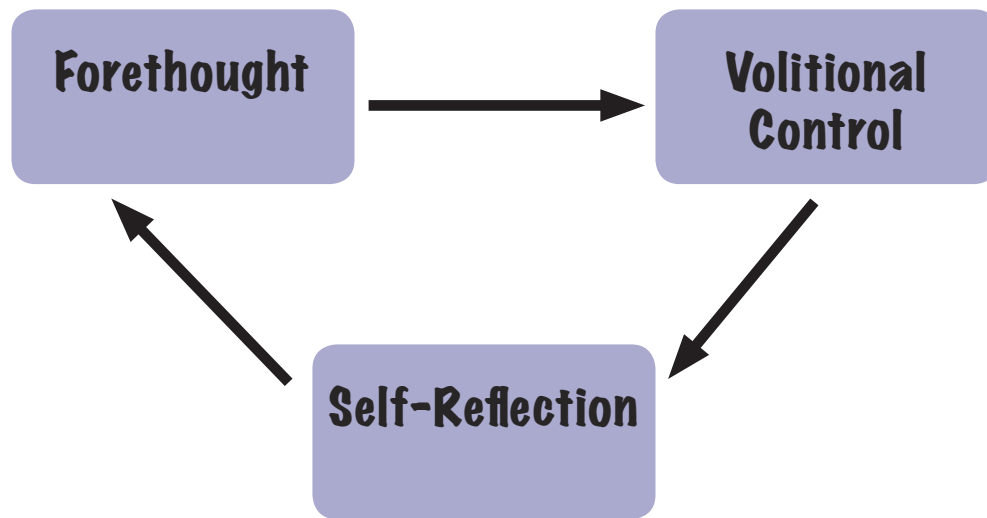
- Use Lesson Plan on ePEARL Teacher Resource page



Segment 7: Review

Using the **QEP**'s evaluation criteria and the ABRA **Assessment Feature**:

- Review and focus on elements and skills of reading and writing, which students still struggle with
- Use worksheets, phonics activities, stories and lesson plans
- Encourage students to engage in SRL activities by using ePEARL:
 1. planning goals and strategies
 2. responding to readings
 3. reflecting





Activities Table

Segment 1: Pre-alphabetic and Phonics Activities

Week 1 & 2

| Week 1 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|----------------------------|-----------------------|---|---------------|--|--|
| ABRA Activity (Phonics) | Matching Sounds | Same Phoneme | Alphabet Song | Letter Bingo | Letter Sound Search |
| Extension Activity (print) | Letter-Sound Matching | Have students take turns to come up and write the alphabet on the Board or place letters in order using the SMART Board | | Create a BINGO game with your students | Letter Spund Search Level 1 (lower case) |
| ABRA Story (Fluency) | The Fruit Family | Counting to Ten | Where am I? | My Town | The Four Seasons |

| Week 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|----------------------------|--|--|---------------------------|---------------------------|--|
| ABRA Activity (Phonics) | Animated Alphabet | Letter Sound Search | Same Phoneme | Matching Sounds | Alphabet Song |
| Extension Activity (print) | Have students come up with their own alterations | Letter Sound Search - Level 2 (lower case) | Do a SMART Board activity | Letter Sound Matching - 2 | Create 3 groups. Have students sing the Alphabet song in canon |
| ABRA Story (Fluency) | Where am I? | Canadian Wild Animals | Counting to Ten | The Fruit Family | My Town |





Week 3 & 4

| Week 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|---------------------------|---|-----------------------|--|--|
| ABRA Activity (Phonics) <i>Change Levels</i> | Letter Sound Search | Animated Alphabet | Same Phoneme | Letter Bingo | Sound Matching |
| Extension Activity (print) | Letter-Sound Matching - 3 | Make 3 groups. Have students create and pair 6 different sounds, then challenge another group to find the matching sounds | | Play the BINGO game you made in Week 1 | Letter Sound Search Level 2 (upper case) |
| ABRA Story (Fluency) | The Four Seasons | Where am I? | Canadian Wild Animals | Counting to Ten | The Fruit Family |

| Week 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|----------------------------|--------------|--|---------------------------|---------------------------|-----------------|
| ABRA Activity (Phonics) | Letter Bingo | Letter Sound Search | Matching Sounds | Animated Alphabet | Choose your own |
| Extension Activity (print) | | Letter Sound Search - Level 2 (mixed case) | Do a SMART Board activity | Letter Sound Matching - 2 | Make your own |
| ABRA Story (Fluency) | Where am I? | Canadian Wild Animals | Counting to Ten | The Fruit Family | My Town |





Segment 2: Phonics Activities and Exposure to Text

Week 1 & 2

| Week 1 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------------------|------------------|---------------------|-------------------|------------------|---------------------|
| ABRA Activity <i>Change levels</i> | Letter Bingo | Letter Sound Search | Animated Alphabet | Letter Bingo | Letter Sound Search |
| ABRA Story (Fluency) | The Fruit Family | Counting to Ten | Where am I? | The Fruit Family | Counting to Ten |
| Collaborative Work | Create cards | Create cards | Do Activity | Do Activity | Do Activity |
| Extension Activity (print) | Worksheet | Worksheet | Worksheet | Worksheet | Worksheet |

| Week 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------------------|--------------------|---------------------|-----------------------|-----------------------|-----------------------|
| ABRA Activity <i>Change levels</i> | Alphabet Song | Letter Sound Search | Letter Bingo | Animated Alphabet | Alphabet Song |
| ABRA Story (Fluency) | My Town | The Four Seasons | Canadian Wild ANimals | My Town | Choose your favourite |
| Collaborative Work | Make a Puppet Show | Make a Puppet Show | Make a Puppet Show | Present a Puppet Show | Present a Puppet Show |
| Extension Activity (print) | Worksheet | Worksheet | Worksheet | Worksheet | Worksheet |





Week 3 & 4

| Week 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| ABRA Story <i>Read your favourite to a friend</i> | I Can Move Like a ... | I Can Move Like a ... | I Can Move Like a ... | I Can Move Like a ... | I Can Move Like a ... |
| ABRA Activity <i>Change Levels</i> | Word Counting | Word Families | Same Word | Word Counting | Word Families |
| Collaborative Work | Create a new Activity | Create a new Activity | Create a new Activity | Create a new Activity | Create a new Activity |

| Week 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| ABRA Story <i>Read your favourite to a friend</i> | How a Bean Sprouts | How a Bean Sprouts | How a Bean Sprouts | How a Bean Sprouts | How a Bean Sprouts |
| ABRA Activity <i>Change Levels</i> | Word Matching | Same Word | Rhyme Matching | Word Matching | Rhyme Matching |
| Extension Activity (print) | Worksheet | Worksheet | Worksheet | Worksheet | Worksheet |





Segment 3: Phonics Activities related to Stories

Week 1 & 2

| Week 1 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|--|--|--|--|--|
| ABRA Story (Fluency) | When I open My Eyes | When I open My Eyes | When I open My Eyes | When I open My Eyes | When I open My Eyes |
| ABRA Activity (Phonics) <i>Change Levels</i> | Blending Train | Auditory Blending | Basic Decoding | Blending Traing | Auditory Blending |
| Collaborative Work | Have students pair up and do a new ABRA activity | Have students pair up and do a new ABRA activity | Have students pair up and do a new ABRA activity | Have students pair up and do a new ABRA activity | Have students pair up and do a new ABRA activity |
| Extension Activity (print) | Worksheet | Worksheet | Worksheet | Worksheet | Worksheet |

| Week 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------------------|---|---|---|---|---|
| ABRA Story (Fluency) | Darryl Don't Dawdle | Darryl Don't Dawdle | Darryl Don't Dawdle | Darryl Don't Dawdle | Darryl Don't Dawdle |
| ABRA Activity <i>Change Levels</i> | High Frequency Words | Basic Decoding | Blending Train | Auditory Blending | High Frequency Words |
| Collaborative Work | In pairs, and students show each other a new Activity | In pairs, and students show each other a new Activity | In pairs, and students show each other a new Activity | In pairs, and students show each other a new Activity | In pairs, and students show each other a new Activity |
| Extension Activity (print) | Worksheet | Worksheet | Worksheet | Worksheet | Worksheet |





Segment 4: Fluency

Week 1 & 2

| Week 1 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|--------------------------------|------------------------|------------------------|------------------------|------------------------|
| ABRA Story | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> |
| ABRA Activity (Fluency) | Tracking | Tracking | Tracking | Tracking | Tracking |
| ABRA Activity (Phonics) <i>Change Level</i> | Word Counting | Blending Train | Auditory Blending | High Frequency Words | Rhyme Matching |
| ePEARL | Planning Lesson Plan | Review Goals | Brainstorm about Goals | Create a bank of Goals | Discuss and Review |

| Week 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|-----------------------------------|------------------------|------------------------|------------------------|------------------------|
| ABRA Story | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> |
| ABRA Activity (Fluency) | Tracking | Tracking | Tracking | Tracking | Tracking |
| ABRA Activity (Phonics) <i>Change Levels</i> | Same Word | Word Counting | Word Matching | Rhyme Matching | Syllable Counting |
| ePEARL Extension Activity | Students review and choose a goal | Planning worksheet | Planning worksheet | Planning worksheet | Discuss and Review |





Week 3 & 4

| Week 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------|---|---|---|---|---|
| ABRA Story | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> |
| ABRA Activity (Fluency) | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression |
| ePEARL Extension Activity | Discuss and review Goals | Demo ABRA New Reading | Have Students log into LTK | Select ABRA New Reading | Select the story/ Enter title |

| Week 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------|---|---|---|--|--|
| ABRA Story | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> |
| ABRA Activity (Fluency) | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression |
| ePEARL Extension Activity | Complete unfinished work from last week | Record a Reading Sample into ePEARL | Continue with Reading Sample in ePEARL | Using the Worksheet: Students enter goal into ePEARL | Using the Worksheet: Students enter goal into ePEARL |





Segment 5: Fluency and Writing

Week 1 & 2

| Week 1 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|-------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| ABRA Story | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> |
| ABRA Activity (Fluency) | Accuracy | Accuracy | Accuracy | Accuracy | Accuracy |
| Extension Activity | Reading Fluency Job Aid | Reading Fluency Job Aid | Reading Fluency Job Aid | Prereading Skim Job Aid | Prereading Skim Job Aid |

| Week 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|---|---|---|---|---|
| ABRA Story | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> |
| ABRA Activity (Fluency) | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression |
| ABRA Activity (Phonics) <i>Change Levels</i> | Auditory Segmenting | Basic Decoding | Auditory Segmenting | High Frequency Words | Auditory Segmenting |
| ABRA Activity (Writing) | Spelling Words | Spelling Words | Spelling Words | Spelling Words | Spelling Words |





Week 3 & 4

| Week 3 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---------------------------|---|---|---|---|---|
| ABRA Story | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> | <i>Choose one of the stories from previous week</i> |
| ABRA Activity (Fluency) | Speed | Speed | Speed | Speed | Speed |
| ePEARL Collaborative Work | Introduce Reflection | Brainstorm ideas | Share with students | Share with Students | Review Reflection |

| Week 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|-------------------------|---|---|---|---|---|
| ABRA Story | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> |
| ABRA Activity (Fluency) | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression | Reading with Expression |
| ePEARL Individual Work | Login to LTK | Open saved reading from previous week, review goal. | Click on Reflection tab. Enter a Reflection | Enter Reflection | Enter Reflection |
| ABRA Writing Activity | Spelling Sentences | Spelling Sentences | Spelling Sentences | Spelling Sentences | Spelling Sentences |





Segment 6: Comprehension and Writing

Week 1 & 2

| Weeks 1 & 2 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|-------------------------------|------------------------|------------------------|------------------------|--|--|
| ABRA Story | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> | <i>Choose your own</i> |
| ABRA Activity (Comprehension) | Vocabulary | Vocabulary | Sequencing | Sequencing | Sequencing |
| ePEARL Individual Work | Login to LTK | Open a new reading | Enter a Goal | Follow steps in Sequencing Lesson Plan | Follow steps in Sequencing Lesson Plan |

Week 3 & 4

| Weeks 3 & 4 | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|-------------------------------|---|---|--|--|---|
| ABRA Story | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> | <i>Choose same story as previous week</i> |
| ABRA Activity (Comprehension) | Story Elements | Story Elements | Story Elements | Summarizing | Summarizing |
| ePEARL Collaborative Work | Introduce 'WH' questions | Brainstorm ideas | Share with students | Share with Students | Review |
| ePEARL Individual Work | Login to LTK | Open a new reading | Choose one of the Lesson Plans Enter a Goal | Follow steps in Story Elements Lesson Plan | Follow steps in Summarizing Lesson Plan |





ePEARL

Chapter 4

Introduction

Welcome to ePEARL, a bilingual, electronic portfolio software. Based on sound research evidence, coupled with feedback from the field, ePEARL has been designed to encourage self-regulated learning within student centered curricula.

ePEARL is best suited for educators who wish to use electronic portfolios in a student-centred way, but who also wish to experiment with multimedia content and a collaborative approach. ePEARL's features encourage planning, reflection, sharing and peer feedback, in addition to the creation and revision of work

More specific support may be found within the software by clicking on the help icon next to most functions, or by accessing the Teacher Resources page.

This Guide

This guide is designed to provide basic information on the ePEARL software to help get teachers started using the software in their classroom. A general overview of ePEARL's features and structure, along with an explanation of the self-regulation process is provided. Followed by a detailed description of each level of ePEARL. In the latter instance, this is divided by:

- Features: A brief explanation of the features of the electronic portfolio.
- Structure: A description of the levels and languages of use.
- What is Self-Regulated Learning: The theory on which the design and development of ePEARL was based.
- Link to ABRACADABRA: The link to readings and extension activities in Level 1.
- TeacherModule: A look at how teachers can contribute and impact students' learning process. Links to a variety of paper-based and multimedia resources, including lesson plans and job aids.



What is self-regulated learning?

ePEARL has been designed to support and foster the self-regulation skills of students.

“Self-regulated learning is a self-initiated action that involves goal setting and regulating one’s efforts to reach the goal, self-monitoring (metacognition), time management, and physical and social environment regulation” (Zimmerman & Risemberg, 1997)

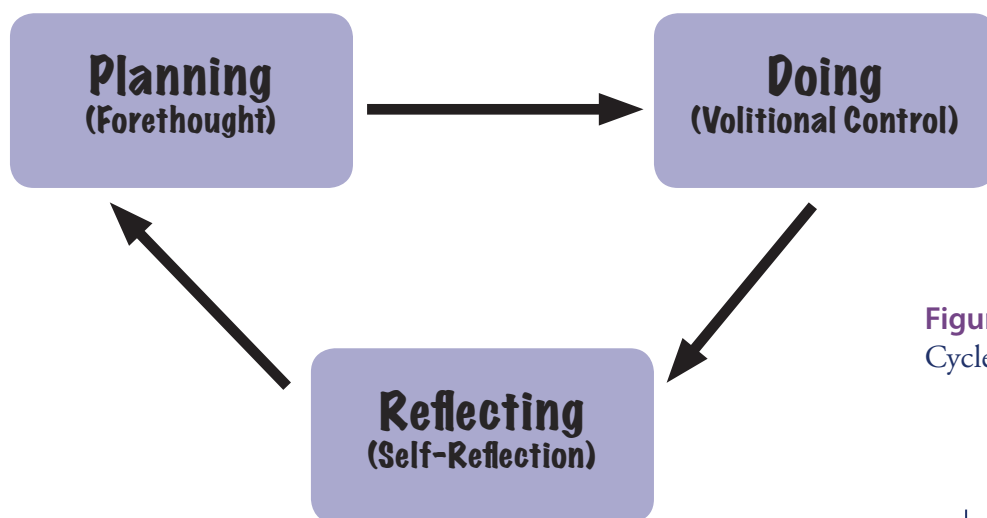


Figure 1: Self-Regulation Cycle

Forethought, Performance, and Self-Reflection are the three cyclical phases called Planning, Doing and Reflecting in ePEARL. Each of these larger phases incorporate smaller sets of behaviors, which support learning and encourage the student to be aware of the process s/he is engaged in. Complex tasks are easily broken down and teachers have a crucial role in scaffolding these steps through feedback. Other important components of self-regulation are: motivation, self-observation and self-experimentation.

Findings from a number of studies reveal that learners with high levels of self-regulation:

- Have good control over the attainment of their goals
- Can focus on the process of how to acquire these skills
- Are better prepared for the ‘real world’
- Feel more ownership over their learning
- Become lifelong learners

Teachers who used ePEARL reported improvements in students’ use of SRL processes including:

- Setting process goals
- Articulating task demands
- Listing strategies
- Providing constructive feedback to peers
- Using teacher & peer comments to improve work
- Evaluating their own work



ePEARL Structure

This section will discuss the conventions underlying ePEARL to help teachers understand why things were designed the way they were and to make it easier for teachers to use the software in their classrooms.

Levels & Users

Three levels have been designed for use in elementary and secondary schools:

Level 1 – Cycle One/Grades 1-2;

Level 2 – Cycles 2 & 3/Grades 3-6; and

Level 3 – Secondary/Grades 7-12.

Note that a Level 4 has been designed for adult learners however this is in a beta version

Level 1 is geared towards beginning readers. The interface design, as well as the type of interaction, are simplified and specially suited to young learners.

Level 2 is designed for Cycle 2 and Cycle 3 students (Grades 3-6).

The design allows for additional learning opportunities as compared to Level 1. ePEARL Level 2 supports students in the portfolio process and promotes emergent self-regulation skills. Students can be guided through the learning process as they set general goals for the term, specific goals for each entry and determine strategies for achieving their goals. They are encouraged to reflect on their own work, provide meaningful feedback on their peers' work and select important artifacts for presentation at the end of a cycle (or grade).

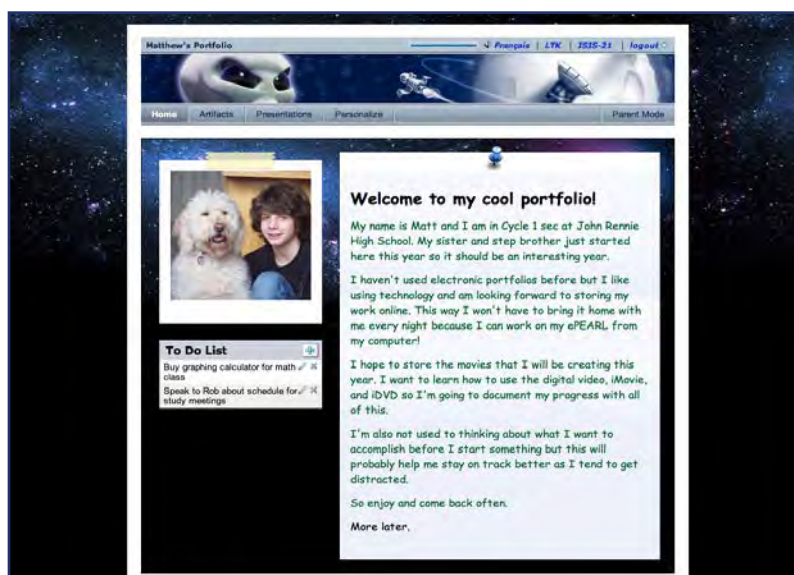


Figure 2: A student's ePEARL portfolio - Level 2

Level 3 is designed for secondary school students (Grades 7-12), hence it provides the opportunity to engage in deeper self-regulation. Additionally, the language and the graphic interface used throughout the software, including the Help, is more mature.

With its Toolbox, Schedule and Tagging features, Level 3 promotes a more flexible and mature environment for this population. ePEARL offers more in-depth self-regulatory language, which allows the student to drill-down on goal-setting, motivation and reflection questions. The new Toolbar offers even more ways of adding content to this multimedia portfolio!

The ability to set notifications, add posts and reply to peers', teachers' and parents' comments creates the feel of a Wall, which students are accustomed to in a social networking era. Students can customize these notifications and their Home Page, which ultimately provides ownership over their portfolio and learning!

In Level 3, Students can create a Personal Orientation Program (POP) artifact, by clicking on 'POP Exploration'.

A teacher guide for POP is available at: http://grover.concordia.ca/epearl/resources/home_en.php, under Guides.

French

All levels are fully bilingual. Students and teachers may toggle between French and English on any screen by clicking on the language icon in the upper right hand corner of the screen.

A French Teacher Guide is available on the Teacher Ressource page.

ePEARL Features



Students can:

- Learn to reflect on their learning meaningfully and to comment constructively on the work of their peers.
- Track their reading and music development, or presentation skills by recording directly into the computer;
- Learn basic word processing commands through the use of a text editor;
- Archive selected artifacts within a presentation portfolio over the course of their education.

Teachers can:

- Create their own portfolios;
- Provide feedback on students' goals, work and reflections;
- Track the development of their students' learning over a term, a year, or a cycle;
- Model effective practices related to goal setting, reflection and conferencing.

Parents can:

- Track their child's learning;
- Become actively involved in their child's education through the provision of feedback on work once it is stored within their child's portfolio.

Figure 3: ePEARL's Level 2 View Artifact page

Level 1

Designed for beginning learners in early elementary classes, Level 1 provides a friendly interface that offers two main features: Reading and Creating. These are presented within the structure of a portfolio environment as students are introduced to basic portfolio processes such as goal setting and reflection.

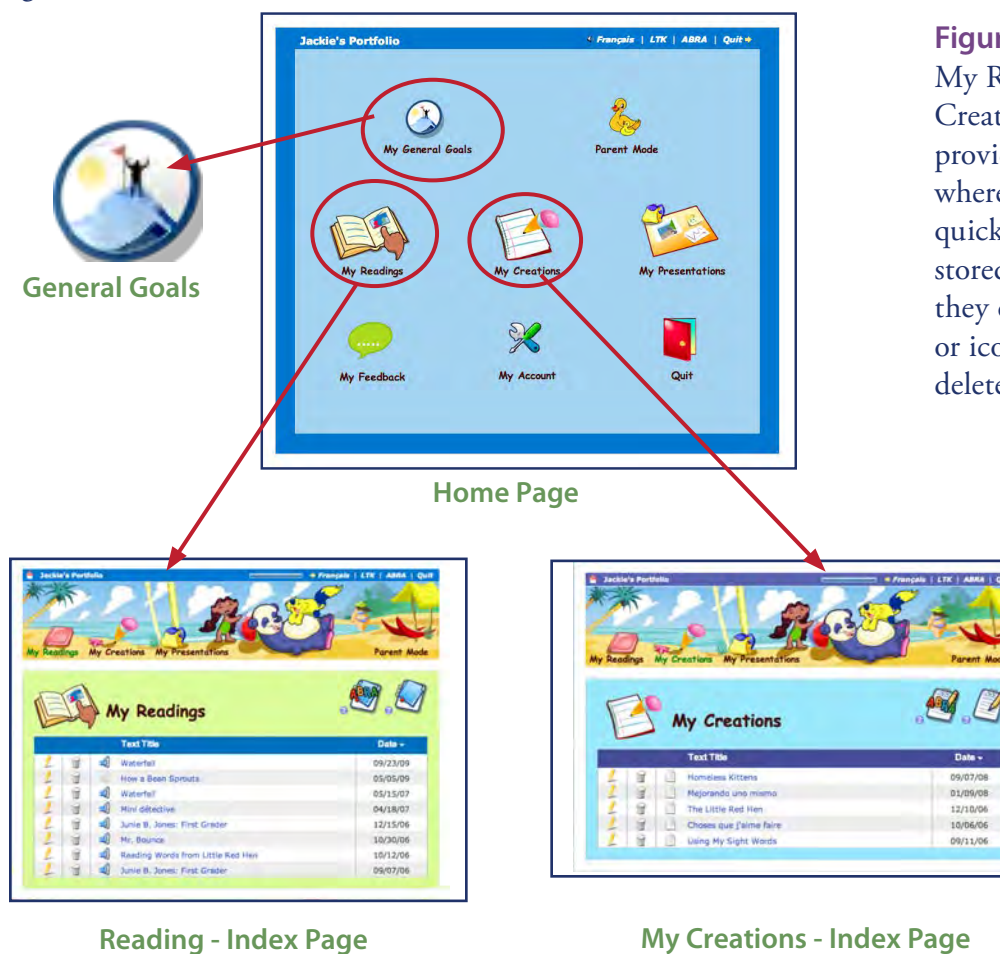


Figure 4: Both the My Readings and My Creations features provide an Index Page where students can quickly review their stored works. From here, they can click on a title or icon to view, edit or delete their work.

General Goals

Older students (those in year 2 of the cycle) should be encouraged to state one or two general (or long term) goals related to the development of their reading, writing, and other types of work. These goals may be changed, deleted or added to throughout the school year. The general goals icon is visible when working on a reading or creation so that students may refer back to their goals when they are reflecting on their work.



My Readings

TIP:

Students can record their reading into ePEARL with a classmate. One person may be designated as the operator of the computer while the other is the reader.

In the My Readings section, the software encourages recognition of the different components of a book, as students are required to list the book's title and author. They may also enter the name of the book's illustrator and the classmate they are reading with. Each entry is automatically date stamped. Students are also encouraged to set small task goals for an individual reading.

Recording a Reading

A recorder is provided for students to record a reading sample (maximum set by the software administrator), which allows students, teachers and parents to track reading development over time. Additionally, up to three files (e.g. a scanned picture of the book cover) may be uploaded to the My Reading page.

Figure 5: The My Reading page

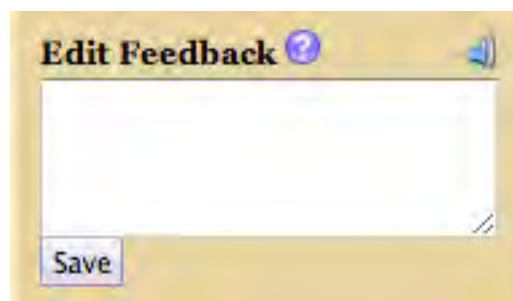


Peer Feedback

TIP:

Teachers can provide feedback on any student's reading by viewing the student's portfolio via the teacher's portfolio environment (using the Manage tab or Share tab)

Once the recording is completed, the reader's partner or other classmate may provide written or recorded feedback on the reader's performance.



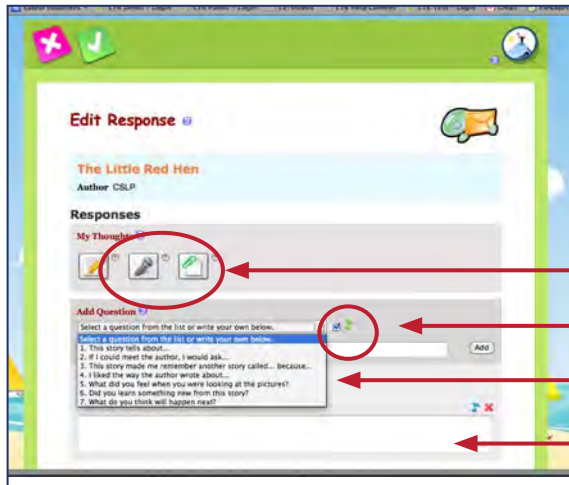
My Response

In the My Response page, students may respond to pre-recorded questions related to the literature, or add a question provided by either the student or the teacher. Students must click on the Add button once they have selected the desired question.

Students' responses may be given in multiple formats, such as typing directly into the text box, handwriting an answer and uploading the scanned file, scanning a picture they have drawn, or recording an answer directly into the portfolio.

TIP:

Check or uncheck the box beside the musical note icon to toggle on/off the recorded question. The default setting is "on."



3. Record an answer or scan in a picture...

2. Listen to a question

1. Select a question

4. Answer in writing

My Reflection

The My Reflection page is identical to the Reading Response, but here the focus is on the learning processes. Questions and guiding statements prompt students to think about the strategies they used while they were reading. For example: "What did you do when you got stuck on a word?" or "How was your reading this time different from the last time you read?"

TIP:

Additional prompts are provided in the Teacher environment to help support students in their reflection



Figure 7: The Reading Reflection environment

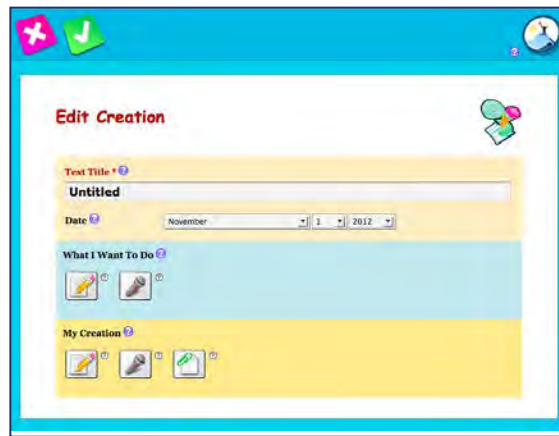


My Creations

In the My Creations section, students are encouraged to employ many different skills in their work, including numeracy, writing and arts. Students are introduced to basic word processing commands through the use of a text editor.

When commencing work on a new piece, students are required to give the piece a title. Each entry is automatically date stamped. Students are also encouraged to set a small task goal for their work, as this promotes self-regulated learning.

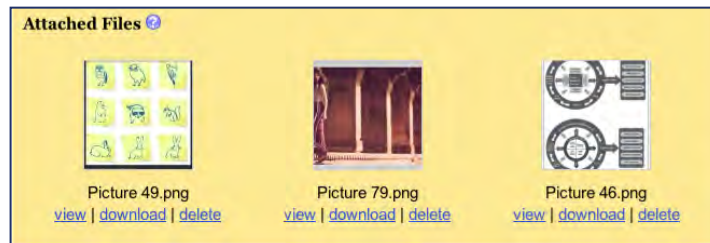
Figure 8: The My Creations environment



Students may also include samples of their handwritten work by scanning and uploading files.

Another way of doing this is to take a picture of the work sample and then upload the file to the student's portfolio. In an ABRA story, the student

Figure 9: Uploaded files in a student's portfolio



can also choose a Story Image (See ABRA-ePERAL Section)

My Creations Reflection

In the Creations Reflection, students may select a question designed to help them think about their work process and the skills that they have acquired or need to develop. As in the My Readings area, students may choose from pre-set questions or students/teachers may add their own questions. Multiple questions may be selected. Reflections may be typed or written/drawn and scanned in.



My Presentations

At key points during the school year such as at the end of a term or cycle, students should be encouraged to select their most important pieces and send these to their Presentations folder. This folder is a place where student work can accumulate over time as items stored here carry forward to the next ePEARL level. Everything is copied over with the artifact, including goals, reflections and feedback, and items are organized in two separate sections: Readings and Creations. Because a copy is transferred over, students should be encouraged to clean up their main portfolio environment and delete their original work so that they can start the next school year (or cycle) with a clean portfolio.



Figure 10: The My Presentations environment

Export

Exporting

Students can copy the entire contents of their Presentations folder by saving all of their portfolio to the desktop using the Export function (disk icon). Clicking on the disk icon sends the portfolio to the desktop as a zipped (compressed) HTML file, which can then be unzipped, and burned to a CD or saved to a USB drive, so students can take their portfolio home with them! This process is designed to allow students to keep their portfolio as long as they want, and it is saved in a standard HTML format for easy viewing with a browser at home. Exporting is easy to do as the software guides the user through this process.



Parental Feedback

Parents may provide feedback by clicking on “Parent Mode” on the banner. All of their child’s work will be in view-only mode; however, the Parent Feedback boxes will be active.

Figure 11: The link to Parent Mode

TIP:

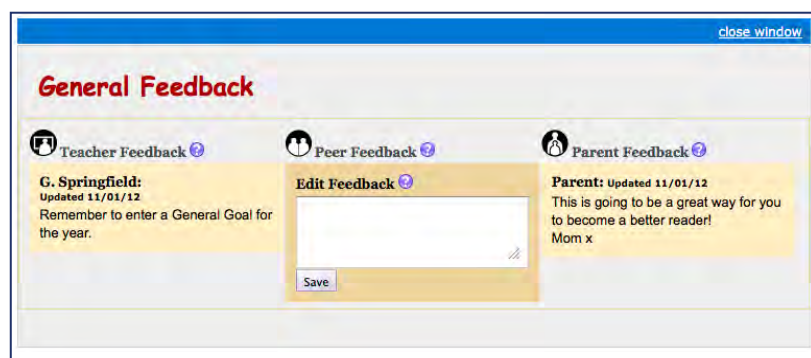
Teachers should encourage parents to add comments throughout the year, and to date each individual comment separately. The software will assign a date for the most recent addition only. A parent guide is available on the teacher resources page. Teachers can post this on your class webpage or make copies for your parent night



My Feedback

Teachers and Peers can also leave feedback for the student. It is important to remind students to always leave positive and constructive feedback for their peers.

Figure 12: The link to My Feedback



Level 2

ePEARL is designed to support self-regulated learning. This cyclical process promotes planning, doing and reflecting, with specific sub-processes under each of these. Self-regulated learning encourages students to be responsible for their own learning and make guided choices about what they need to work on.



Figure 13: The process of self-regulated learning in ePEARL

This guide will go into greater detail about this process as it takes place in the portfolio later in this section.

The Portfolio Environment

In Level 2, ePEARL offers a more sophisticated portfolio space. Here, students can personalize their home page, add and edit general goals, create new work (referred to as Artifacts) and present work once it is completed. When users access the software, they are brought to the home page of their portfolio. Here, they are able to store artifacts that have been created outside of the software or create new ones directly in the portfolio by clicking on “Artifacts.” Once students are in the artifacts index, clicking on “add new artifact” will bring them to the Learning Process pages. In this environment, students may be guided through each step of planning, doing and reflecting as they work.



Figure 14: Storing artifacts in Levels 2

Personalizing the Portfolio

In Level 2, students are able to personalize their portfolios using the “Personalize” option found on the bar just below the banner.



Figure 15: A student's portfolio

Welcome Screen

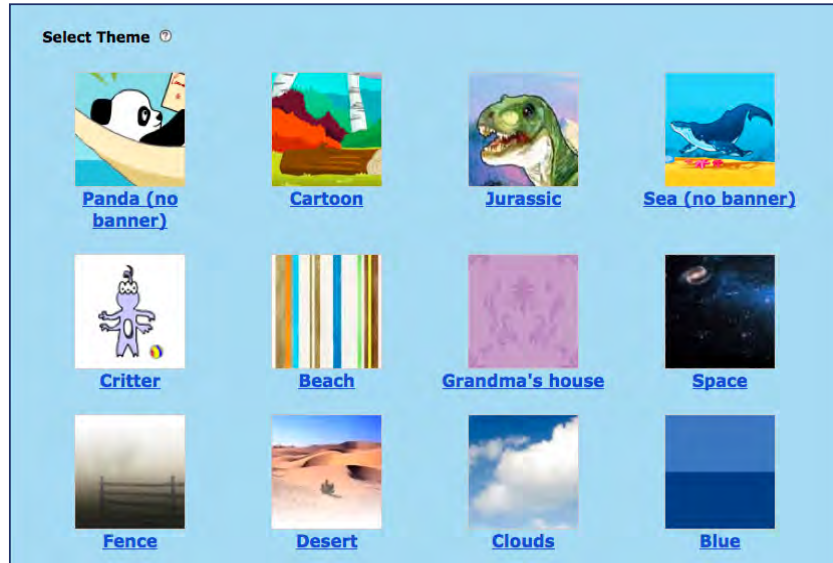
A welcome message may be added using the text editor, an image may be uploaded and used as a banner, and an image can be displayed next to the welcome message. A To Do List is also available to help students organize their activities and plan their time.

Themes

Banners: To further personalize their ePEARL, students can create their own banners to appear across the top of the screen. ePEARL has a gallery of banners to choose from, but students can also upload static images or text (in JPEG, GIF or PNG file formats) or even simple animated text (in the form of animated GIF files). Banners should be approximately 760x75 pixels and 72 dpi. Several programs students can use to create banners, and free websites where banners can be created or downloaded are listed in the Frequently Asked Questions section.



Figure 16: Portfolio personalization options



TIP:

Teachers may request that their students assign one specific colour as “ready for feedback.” This will help flag those items that are new and have not yet been reviewed by the teacher.

Themes: Students may select one of 16 background themes.

Colour Tags

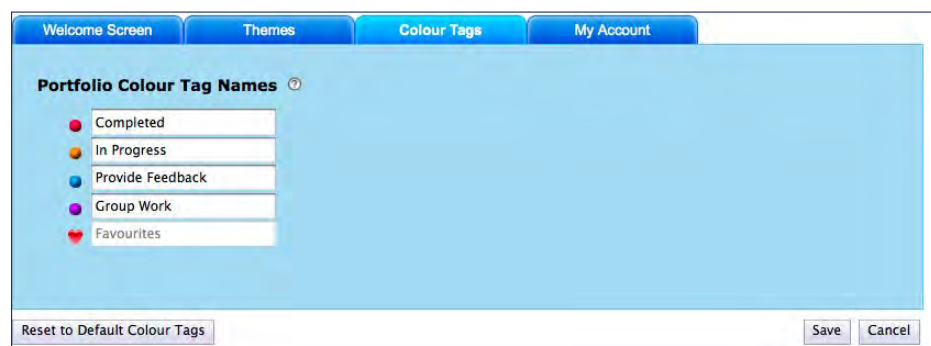
Students may designate four colour tags. These can be used to help flag items (e.g. In Progress, Completed, Responded to Feedback). The software assigns the fifth code, “My Favourite”. Artifacts can be sorted by colour tag.

My Account

Password: If a teacher’s class logs in to ePEARL directly through the software, in level students may change the password that has been assigned to them by the system under the My Account tab. If the class accesses ePEARL through the school’s portal, it is not possible for students to change their ePEARL passwords.

Nickname: Students can also choose to use a nickname rather than the given username to identify their ePEARL. This is useful when there is more than one student with the same name in a class, or if a student uses a different name than his or her given name. A nickname may be used on the Access page instead of the User ID.

Figure 17: Colour personalization options



Adding New Artifacts

An entry in the portfolio is called an artifact. To add a new entry, students must click on the plus icon. Each entry in the portfolio is entered into a page. Students are required to provide a title for the entry and select a folder to save it in. These can be modified later, but this will encourage students to organize their work. All other fields are optional and may be used only if the teacher or student decides to do so.

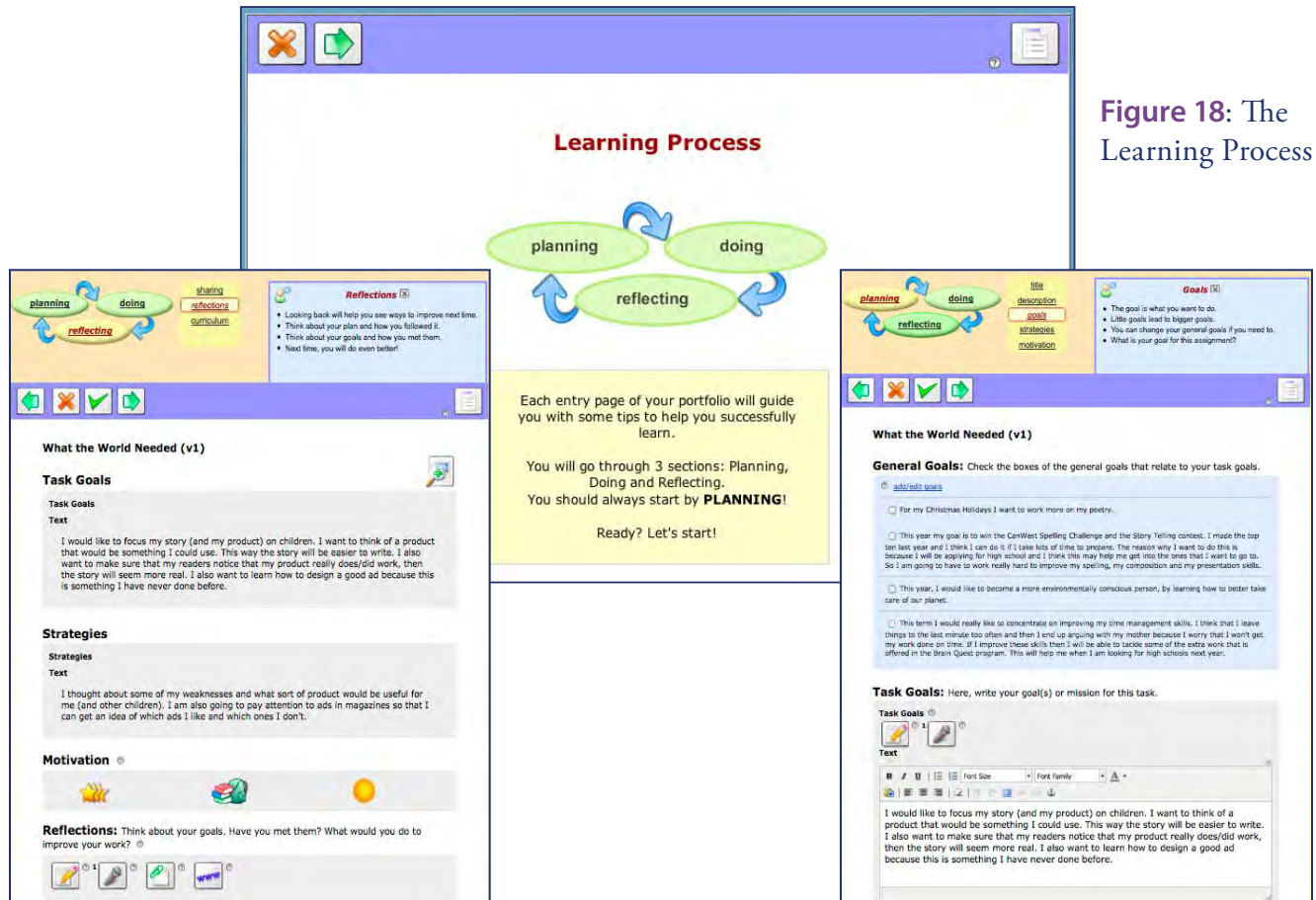


Figure 18: The Learning Process

The Learning Process

In order to support students as they complete their work and to help them learn more about self-regulation, ePEARL has a Learning Process feature that guides them through the creation of an artifact. This feature supports students by walking them through the Planning-Doing-Reflecting cycle. Students are presented with small chunks of manageable tasks as well as detailed instruction about the tasks at hand.



TIP:

When making changes in text boxes, teachers should make sure to add to previous text rather than overwrite it unless they wish to delete that text.

The Learning Process emphasizes the planning and reflection stages, and incorporates motivation as well as self-prediction of achievement and degree of difficulty (see Figure 19). Bringing these aspects to the attention of students helps them realize how much they need to invest in the task at hand. These predictions can also be used as points to reflect on when the work is completed to see whether they were accurate. Why or why not? Is there a pattern to the predictions? These reflections can help students become more aware of themselves as learners.

Work that is created using the Learning Process can be saved and continued at a later date. Clicking on the multiple page icon allows students to systematically work their way through the Learning Process one step at

Figure 19: Motivation and prediction

a time, while clicking on the one-page icon displays the entire Learning Process on a single page for quick additions or changes without going through many screens. Students can easily switch between these two ways of viewing their work at any time.

Figure 20: Multiple page view icon

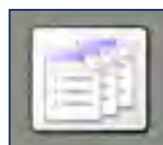
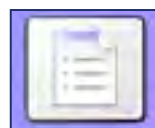


Figure 21: One page icon

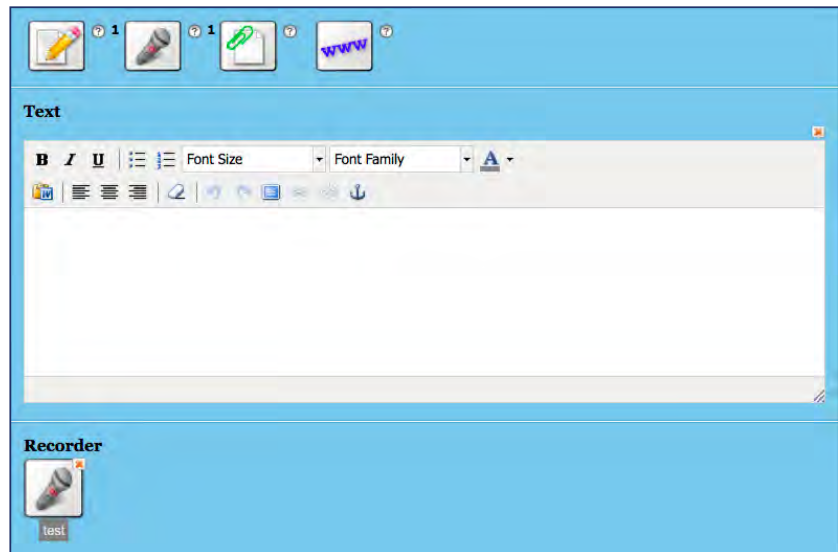


Adding Content

Toolbar

As a means to encourage the display of learning using multimedia. The toolbar provides the opportunity for multiple forms of content development. Each icon may be used an unlimited number of times.

Figure 22: Text editor and audio recorder selected



TIP:

If students wish to record and add a longer segment, they may do so by recording into generic audio software and then uploading this audio file to their artifact as an attached file.

TIP:

Headphones should be used if several students are recording at once.

Text Editor

Students may write stories directly in the text editor, which introduces them to basic word processing commands. Depending on which web browser being used, a spell check function may be available. For example, when using Mozilla's Firefox, words spelled incorrectly will be underlined in red.

Audio Recordings

The recorder allows students to attach audio snippets to their artifacts. The maximum length of the recording is determined by the LTK administrator. Note that lengthy recordings will take a long time to save and load. In Level 1, this means that students can record samples of their reading, but recording an entire story is not recommended. In Level 2 recordings may be any oral material that the student wishes to record. These may include segments of oral presentations or music recordings, as well as reading samples.

File Attachments and Web URLs

Work created outside of ePEARL may be attached. Students can enter hyperlinks to podcasts, websites or blogs.



Reflections

Reflections may be added using the Toolbar, Rubrics and/or Learning Logs.

Rubrics

Rubrics may be used to itemize the various learning outcomes associated with a particular activity. ePEARL provides a place to link rubrics as external documents. A template for rubrics is available on the Teacher Resource page.

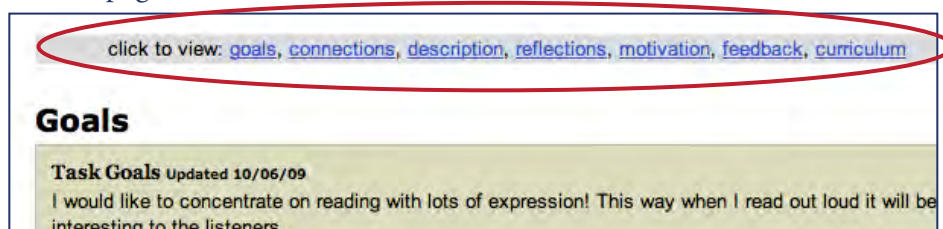


Figure 19: Change the display by choosing another section

Learning Logs

Learning logs created outside of ePEARL can also be linked to an artifact. Logs can be used to track the strategies students use to attain their goals. For example, tally sheets can be designed to track amount of time spent studying, participating in group work, practicing reading, etc.

Focus

One feature that is designed to scaffold students is the Focus arrow, which hides all other sections when it is clicked. When editing an artifact using a one-page display, some section headings have small red arrows beside them. For example, the Content section has a focus arrow.

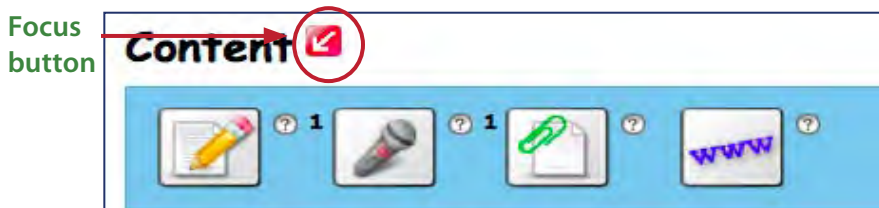


Figure 20: The focus button

When clicked, all ePEARL sections will be hidden except for the Content section and the goals set for this entry. This will help students focus on writing the content while keeping the goals in mind.

The top part of the Focus page displays the active section, while the bottom part displays the task goals and strategies (if any have been entered). The section that is focusing on at the bottom of the page can be changed by clicking on any of the other ePEARL sections in the list above the current selection. This provides a good starting point for completing the task, while still maintaining sufficient flexibility to accommodate individual student and teacher practices.

Viewing and Editing Items

In View mode, the entry is in a read-only format. From this screen, the student can:

- share the entry with others,
- delete it from ePEARL,
- choose to edit it,
- or send it to the Presentations folder.

If the student wishes to print out a copy, a printer-friendly version can also be accessed from this screen.

The only active fields on this screen are the Peer and Teacher Feedback boxes, each of which can be edited only by the respective user. For example, teachers will be able to write only in the Teacher Feedback box (when viewing from the Teacher environment), and peers will be able to write only in the Peer Feedback box (if the item has been shared with that peer).

Figure 21: The Edit icon



To edit the entry, students can click on the Edit button to activate the fields on the artifact screen. Students can also access the Edit screen directly from the artifacts index page by clicking on the Edit icon beside any artifact in the list.

In Edit mode, the features and fields that are available for each entry are activated. Only fields and features that are filled out in Edit mode will appear in View mode. Notice that the top navigation bar disappears in the Edit mode. This is to encourage students to focus on their current entry before navigating away to other areas of ePEARL.

Figure 22: View mode

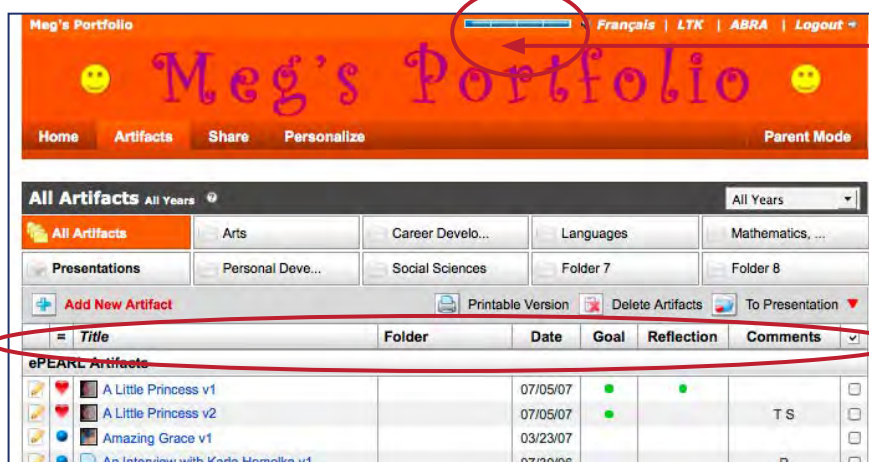


Edit mode



Storage

Each student has been assigned a certain amount of storage space in ePEARL, which is determined at the school board (or district/division) level by the software's administrator. A meter reflecting the amount of storage space used appears at the top of the page. Students will not be able to add new artifacts once the meter is full.



Storage meter

Figure 23: Level 2 portfolio

Column headings

Sorting Items on the Index Page

Items are sorted alphabetically by default. Any column heading can be clicked to sort items accordingly. For example, artifacts may be organized by colour code by clicking on that column heading. Date sorting is in reverse chronological order so that the most recently added items appear at the top of the list.

TIP:

An individual artifact can also be shared when viewing the item by clicking on the Share button.

Sharing in ePEARL

Individual artifacts, the contents of a folder or the entire portfolio can be shared with classmates in the same class, in another class, or in another school using the Share feature. The software automatically shares students' portfolios with the homeroom teacher.



Figure 24: The Share icon



Peer Feedback

Students are encouraged to provide feedback to their peers and to consider feedback given to them. This can be done in ePEARL through the Share feature, which can be accessed from the menu bar just below the banner. This allows students to select what they want to share—their entire portfolio, individual folders or specific entries—and with whom.

Figure 25: The Sharing environment



How to Access Someone Else's ePEARL: Peers who have been granted access to another student's portfolio must enter that portfolio through the Share feature. Click on the tab labeled "Shared With Me" to see a list of the folders or entries that other students have chosen to share.

Figure 26: Access to external students shared portfolios



Clicking on any portfolio in the list will open a new window displaying the shared parts of that portfolio. Peer Feedback boxes will become editable (active) in the appropriate places. Peers are not able to edit or upload anything to another student's ePEARL. Peers can see other peer, teacher, parent comments made on the shared item.

Each peer has access only to previous comments he or she has made. They cannot edit other peer comments. A name and date is automatically stamped above all peer feedback.



How to Stop Sharing With a Peer: When students want to stop sharing an item with a peer, they can simply click on the My Shared Artifacts tab and unshare the desired items by clicking on the red 'x' (see Figure 34, below).

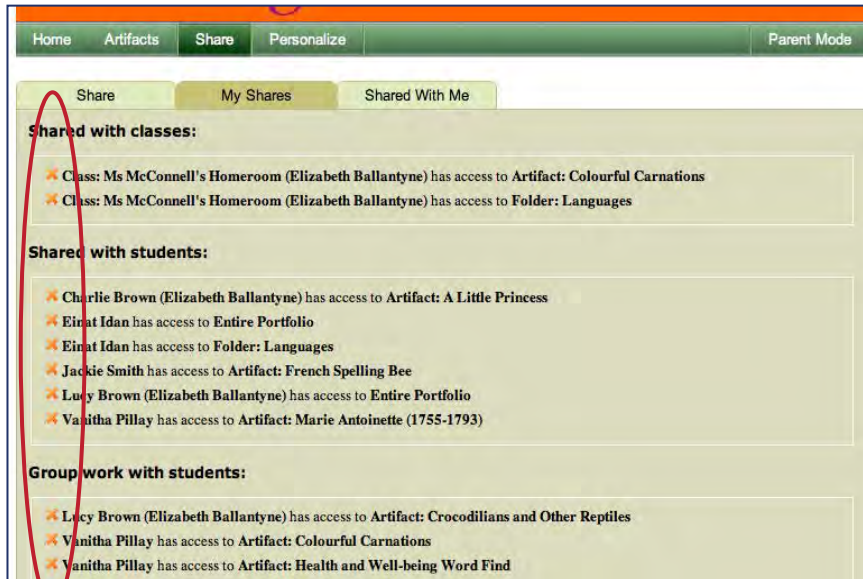


Figure 27: Removing shared access

TIP:

Students may share their work within classes in the same school or within schools in the same board (or district/division). Teachers must first link their class to the appropriate classes in order for sharing to be activated in the students' environment.

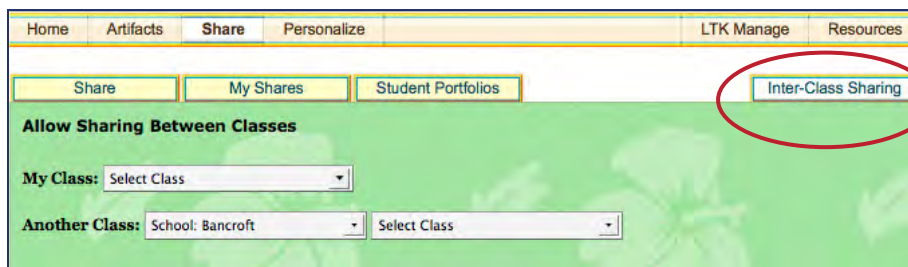


Figure 28: Teacher Portfolio: Interclass sharing



Parent Mode

Students are encouraged to share their portfolios with their parents. Parents do not have separate passwords; they must access the portfolio with their child. Clicking on “Parent Mode” at the right of the bar just below the banner activates the Parent Comments boxes on the Welcome screen as well as within each individual portfolio entry.

Figure 29: Accessing the Parent Mode



TIP:

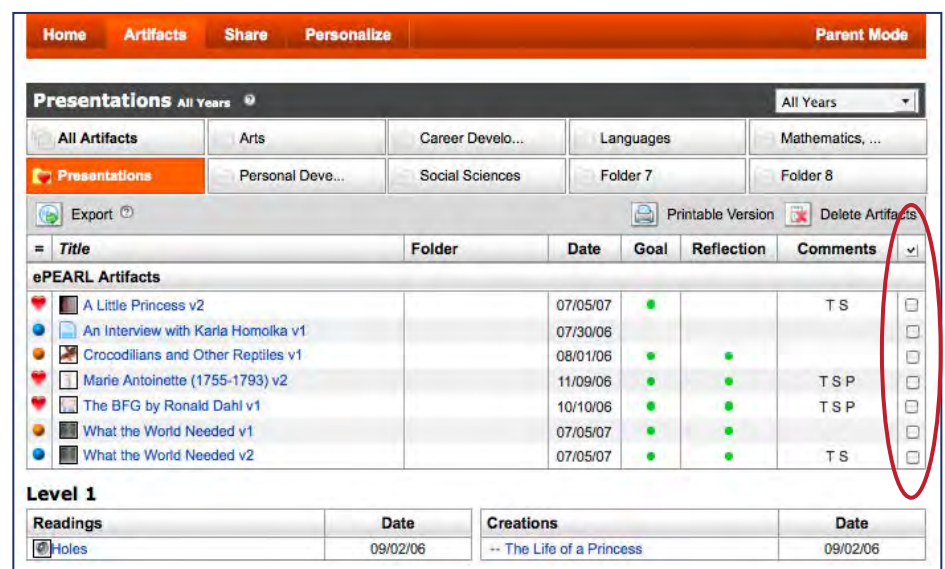
Teachers should instruct their students to copy artifacts over to their Presentations folder at the end of a school year or cycle and then delete the original artifacts from the portfolio using the global delete command on the Index Page. They will then start a new school year or cycle with a blank slate, having saved their most important items to the Presentations folder. This will minimize the amount of space required for the storage of student portfolios.

This also deactivates other features, such as editing capabilities. The rationale is that the purpose of parents navigating through the portfolio with their child is to comment on completed work and achievements. There is no need for the work to be editable while they do this.

The Presentations Folder: Archiving in Level 2

At the end of a term, school year or cycle, students should be asked to select those artifacts that best reflect their learning and send these to their Presentations folder. The Presentations folder is a cumulative storage place for artifacts organized by ePEARL level and by year. An artifact stored from any level will remain in this folder so, in theory, a student may store readings and creations from Level 1 and artifacts from Levels 2 and 3 and have an archive of their entire K-11/12 educational experience.

Figure 30: The Presentation folder



Sending to Presentations: Selecting and Reflecting

When an artifact has been shared and revised several times based on teacher and peer comments and is finally completed, a student may choose to send it to the Presentations folder. At this stage, students are encouraged to reflect on why they made this selection. Many teachers chose to engage in this selection process before a portfolio night, at the end of a term, and at the end of the school year.

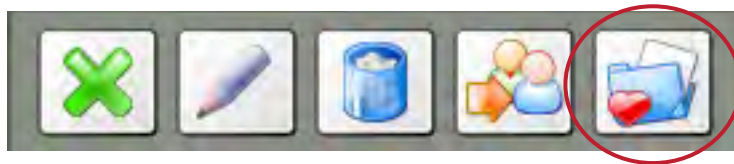


Figure 31: Present an artifact icon

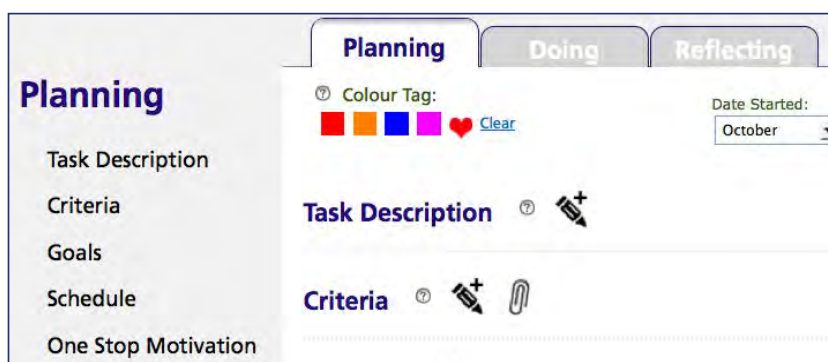
In ePEARL, when students click on the present icon, a new screen prompts them to think about the different reasons why they have selected this piece for the Presentations folder, and provides the option of adding further comments.

Figure 32: Reflection on why this artifact has been chosen

Level 3

ePEARL is designed to support self-regulated learning. This cyclical process promotes planning, doing and reflecting, with specific sub-processes under each. Self-regulated learning encourages students to be responsible for their own learning and make guided choices about what they need to work on.

Figure 33: The Planning phase



The screenshot shows the 'Planning' phase of the ePEARL interface. It features a sidebar on the left with a 'Planning' header and a list of sub-processes: Task Description, Criteria, Goals, Schedule, and One Stop Motivation. The main content area has tabs for 'Planning', 'Doing', and 'Reflecting', with 'Planning' currently selected. Under the 'Planning' tab, there is a 'Colour Tag' section with color-coded buttons (red, orange, blue, pink) and a 'Clear' button. A 'Date Started' dropdown menu is set to 'October'. Below these, there are input fields for 'Task Description' and 'Criteria', each with a question mark icon and a plus sign icon. The 'Criteria' field also has a paperclip icon for attachments.

This guide will go into greater detail about this process as it takes place in the portfolio later in this section.

The Portfolio Environment

In Level 3, ePEARL offers a more mature portfolio space. Here, students can personalize their home page, add and edit general goals, create new work (referred to as artifacts) and archive work once it is completed. When users access the software, they are brought to the Home Page of their portfolio. Here, they are able to edit their General Goals, and view General Feedback posted by peers, teachers and parents. They can store artifacts that have been created outside of the software or create new ones directly in the portfolio by clicking on “Artifacts.” Once students are in the artifacts index, clicking on “add new artifact” will bring them to the Learning Process page. In this environment, students may be guided through each step of planning, doing and reflecting as they work.

Figure 34: Storing artifacts in Levels 3



Personalizing the Portfolio

In Level 3, students are encouraged to take creative ownership over their portfolios using the “Personalize” option found on the bar just below the banner.

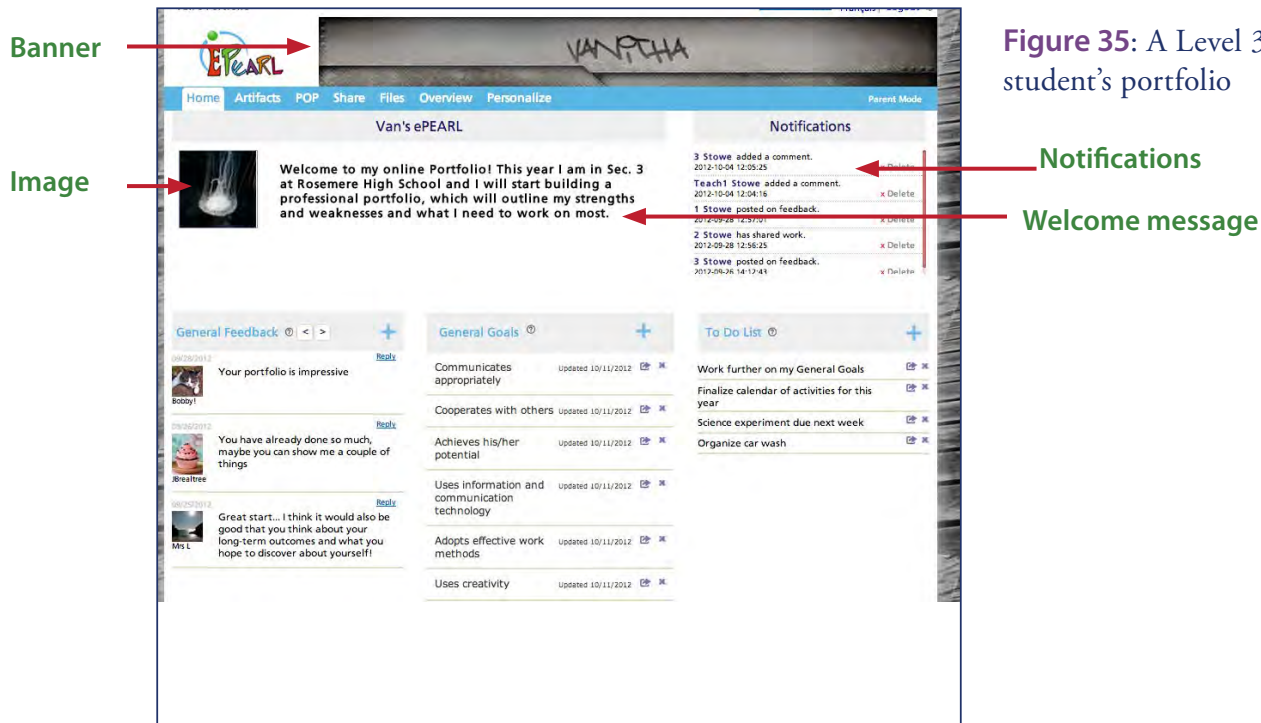


Figure 35: A Level 3 student's portfolio

Welcome Screen

A welcome message may be added using the text editor, an image may be uploaded and used as a banner, and an image can be displayed next to the welcome message. A To Do List is also available to help students organize their activities and plan their time.

General Feedback

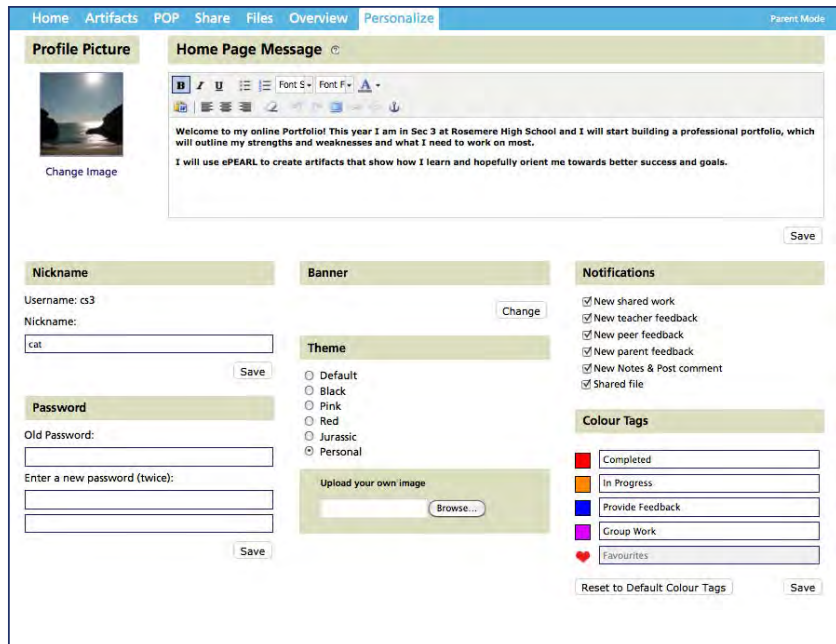
The general feedback area is designed to encourage teachers, peers and parents to write feedback to the student about their portfolio in general. Teachers can use this feature to guide students here about their General Goals.

General Goals

These are goals that the student sets for a term or an entire school year, they can be related to individual subject areas or cross curricular competencies for example.



Figure 36: Portfolio personalization options



The screenshot shows the 'Personalize' page in the ePEARL interface. At the top, there is a navigation bar with links: Home, Artifacts, POP, Share, Files, Overview, and Personalize. The page is titled 'Parent Mode'.

Profile Picture: A small image of a sunset over water is shown with a 'Change Image' button below it.

Home Page Message: A text area with a rich text editor toolbar (bold, italic, underline, font size, font color, background color, bulleted list, numbered list, link, unlink, undo, redo) contains the following text:

Welcome to my online Portfolio! This year I am in Sec 3 at Rosemere High School and I will start building a professional portfolio, which will outline my strengths and weaknesses and what I need to work on most.

I will use ePEARL to create artifacts that show how I learn and hopefully orient me towards better success and goals.
 A 'Save' button is at the bottom right of this section.

Nickname: Username: cs3. Nickname: cat. A 'Save' button is at the bottom right.

Password: Old Password: [text box]. Enter a new password (twice): [text box] [text box]. A 'Save' button is at the bottom right.

Banner: A 'Change' button is present.

Theme: Radio buttons for Default, Black, Pink, Red, Jurassic, and Personal. A 'Personal' theme is selected.

Notifications: Checkboxes for New shared work, New teacher feedback, New peer feedback, New parent feedback, New Notes & Post comment, and Shared file. All are checked.

Colour Tags: Four color-coded tags are listed: Completed (red), In Progress (orange), Provide Feedback (blue), and Group Work (purple). A 'Favourites' tag with a heart icon is also listed. A 'Reset to Default Colour Tags' button and a 'Save' button are at the bottom right.

Banners

To further personalize their ePEARL, students can create their own banners to appear across the top of the screen. ePEARL has a gallery of banners to choose from, but students can also upload static images or text (in JPEG, GIF or PNG file formats) or even simple animated text (in the form of animated GIF files). Banners should be approximately 760x75 pixels and 72 dpi. Several programs students can use to create banners, and free websites where banners can be created or downloaded are listed in the Frequently Asked Questions section.

Themes

Students may select one of 6 background themes. The Personal theme allows the student to select a personalize image and tile it as the background to their portfolio.

Colour Tags

Students may designate four colour tags. These can be used to help flag items (e.g. In Progress, Completed, Responded to Feedback). The software assigns the fifth code, "My Favourite". Artifacts can be sorted by colour tag.



Notifications

Students may select what appears as a notification on their Home Page by checking any of the 6 options. This feature can alert them to newly posted teacher feedback, for example.

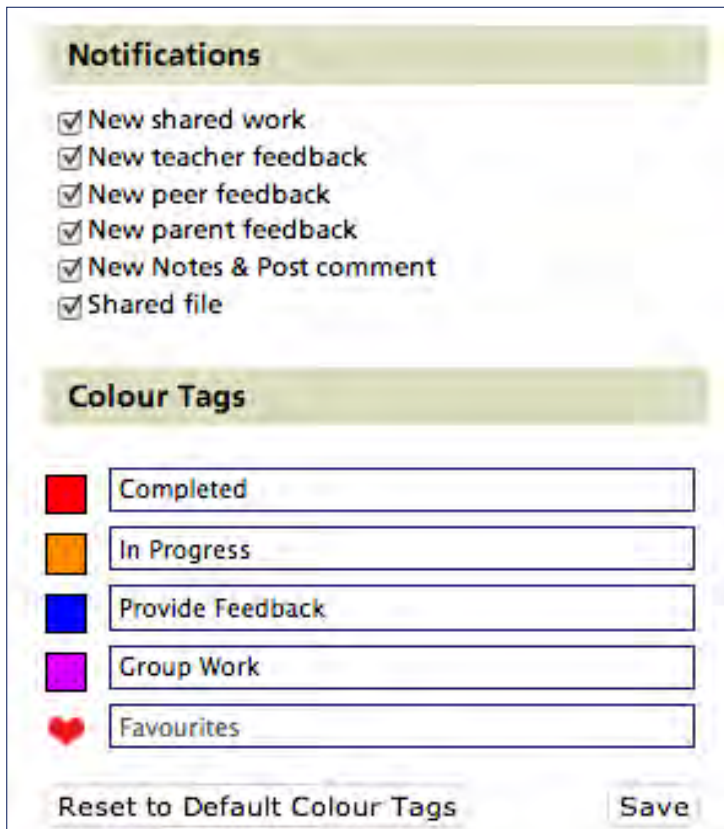


Figure 37: Personalization options

My Account

Password: In level 3 students may change the password that has been assigned to them by the system under the My Account tab. If a teacher's class logs in to ePEARL directly through the LTK login page. If the class accesses ePEARL through the school's portal, it is not possible for students to change their ePEARL passwords.

Nickname: Students can also choose to use a nickname rather than the given username to identify their ePEARL. This is useful when there is more than one student with the same name in a class, or if a student uses a different name than his or her given name. The nickname may be used to log in instead of the User ID.

Adding New Artifacts

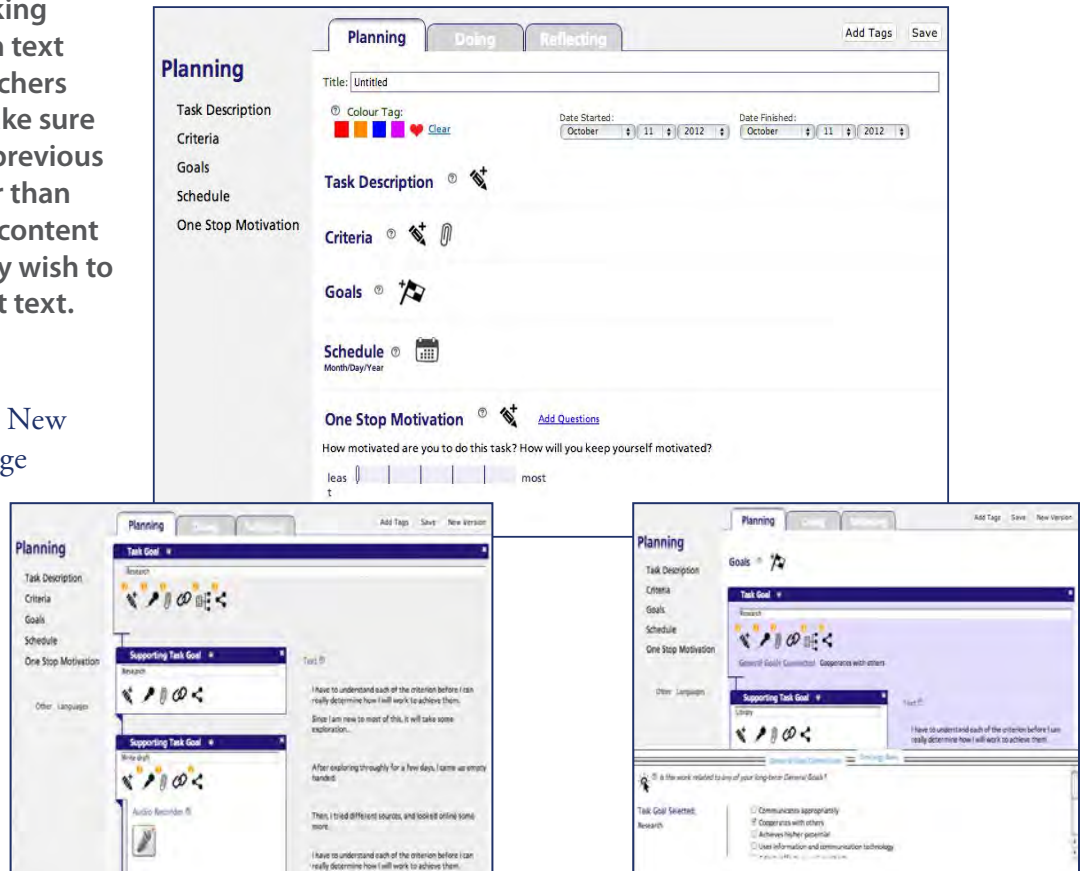
An entry in the portfolio is called an artifact. To add a new entry, students must click on Add New Artifact from the Artifacts Index page. Each entry in the portfolio is entered into a page. Students are required to provide a title for the entry and save it. These can be modified later, but this will encourage students to organize their work.

TIP:

When making changes in text boxes, teachers should make sure to add to previous text rather than overwrite content unless they wish to delete that text.

All other fields are optional, but support the learning process, and so should be considered carefully.

Figure 38: New Artifact page



The figure displays three screenshots of the ePEARL 'Planning' page. The top screenshot shows the initial form with fields for Title, Colour Tag, Date Started, Date Finished, Task Description, Criteria, Goals, Schedule, and One Stop Motivation. The bottom-left screenshot shows the 'Task Goal' section with a text box and a 'Supporting Task Goal' section. The bottom-right screenshot shows the 'Goals' section with a list of goals and a 'Task Goal' section.

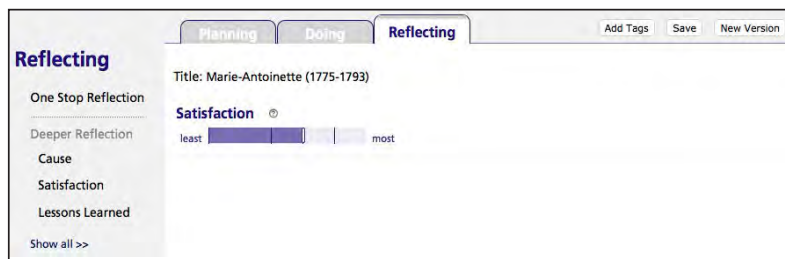
Adding New Artifacts to the Portfolio

Learning Process: In order to support students as they complete their work and to help them learn more about self-regulation, ePEARL encourages the Learning Process that guides them through the creation of an artifact. Students are presented with small chunks of manageable Planning, Doing and Reflection tasks as well as detailed instruction about the task at hand. Students can set task goals and subtask goals, use the toolbox to link to general goals, and pull from their strategy bank.

The Learning Process emphasizes the planning and reflection stages, by incorporating motivation as well as self-satisfaction of achievement and lessons learned.



Bringing these aspects to the attention of students helps them become more aware of themselves as learners.. They realize how much they need to invest in the current task and how best to focus their efforts. These reflections can also be used as points to set goals for a following or up-coming project.

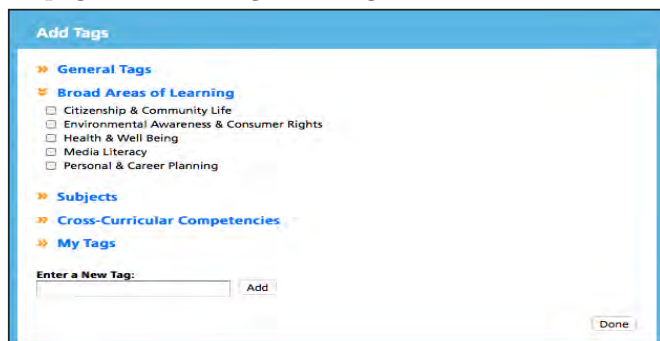


The screenshot shows the 'Reflecting' tab of the EPearl interface. It includes a title field with 'Marie-Antoinette (1775-1793)', a 'Satisfaction' slider ranging from 'least' to 'most', and a sidebar with options like 'One Stop Reflection', 'Deeper Reflection', 'Cause', 'Satisfaction', 'Lessons Learned', and 'Show all >>'. At the top, there are tabs for 'Planning', 'Doing', and 'Reflecting', along with buttons for 'Add Tags', 'Save', and 'New Version'.

Figure 39: Reflecting

System and Student Defined Tags

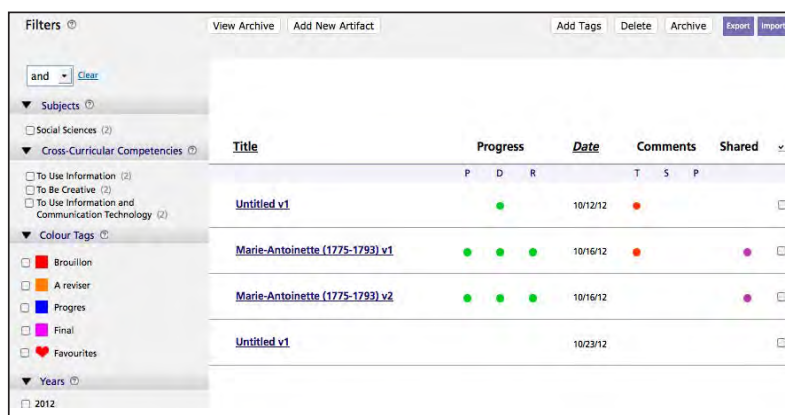
Tags are designed to help students improve their organizational skills , as well as to categorize their workso that they may be easily retrieved. These can be used to assign, cross-curricular competencies, subject areas, or a tag created by the student. A user can add a tag at any time by clicking on the Add Tags button within an artifact or by checking an artifact on the Index page and clicking Add Tags.



The screenshot shows the 'Add Tags' dialog box. It features a tree view with categories: 'General Tags', 'Broad Areas of Learning' (with sub-items like Citizenship & Community Life, Environmental Awareness & Consumer Rights, Health & Well Being, Media Literacy, and Personal & Career Planning), 'Subjects', 'Cross-Curricular Competencies', and 'My Tags'. At the bottom, there is a text input field labeled 'Enter a New Tag:' and an 'Add' button. A 'Done' button is located at the bottom right.

Figure 40: Add New Tags

Tags assigned to the artifact ca be seen from within the artifact on the left-hand column. To see all artifacts within a particular tag or combination of tags, students can use the Filters checklist on the Index page



The screenshot shows the 'Filters' interface. On the left, there is a sidebar with filter categories: 'Subjects' (Social Sciences (2)), 'Cross-Curricular Competencies' (To Use Information (2), To Be Creative (2), To Use Information and Communication Technology (2)), 'Colour Tags' (Brouillon, A reviser, Progres, Final, Favourites), and 'Years' (2012). The main area displays a table of artifacts with columns for Title, Progress, Date, Comments, and Shared.

| Title | Progress | Date | Comments | Shared |
|---------------------------------|----------|----------|----------|--------------------------|
| Untitled v1 | P D R | 10/12/12 | T S P | <input type="checkbox"/> |
| Marie-Antoinette (1775-1793) v1 | ● ● ● | 10/16/12 | ● | <input type="checkbox"/> |
| Marie-Antoinette (1775-1793) v2 | ● ● ● | 10/16/12 | ● | <input type="checkbox"/> |
| Untitled v1 | | 10/23/12 | | <input type="checkbox"/> |

Figure 41: Filters

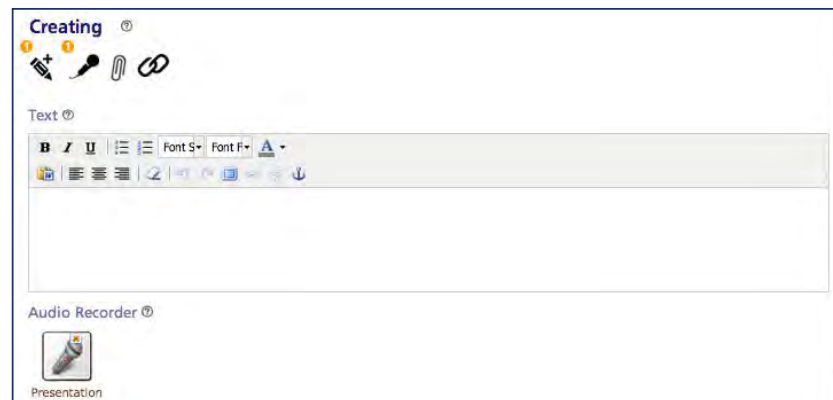


Adding Content

Toolbar

As a means to encourage the display of learning using multimedia, the toolbar provides the opportunity for multiple forms of content development. Each icon may be used an unlimited number of times.

Figure 42: Toolbar-Multimedia Content



TIP:

If students wish to record and add a longer segment, they may do so by recording into generic audio software and then uploading this audio file to their artifact as an attached file.

TIP:

Headphones should be used if several students are recording at once.

Text Editor

Students may write essays directly in the text editor. Depending on which web browser you are using, a spell check function may be available. For example, when using Mozilla's Firefox, words spelled incorrectly will be underlined in red.

Audio Recordings

The recorder allows students to attach audio snippets to their artifacts. The maximum length of the recording is determined by the LTK administrator. Note that lengthy recordings will take a long time to save and load. Recordings may be any oral material that the student wishes to record. These may include segments of oral presentations or music recordings, as well as reading samples.

File Attachments

Work created outside of ePEARL may be attached. Any type of file is accepted here, .doc, .xls, .ppt, etc..., opening up the infinite possibilities of materials that can be included in the portfolio.

Web URLs

Students can enter hyperlinks to podcasts, websites or blogs.



Toolbox

The Toolbox feature, which is designed to scaffold students' learning, scaffolds learning according to the theory of self-regulation. It appears at the bottom of the screen at each of the three phases: Planning, Doing and Reflecting. Depending on the phase the student is working on, the toolbox includes different items that further support the SRL process.

Planning

The toolbox promotes better planning by featuring the following scaffolds:

- **General Goal Connections:** Provides the opportunity for students to link their Task goal(s) to their General goal(s). Helps students understand how working on a specific task moves them closer to achieving their larger objectives.

Figure 43: Toolbox
- Planning

General Goal Connections Strategy Bank

Ⓢ Is this work related to any of your long-term General Goals?

Task Goal Selected:

- ☐ Communicates appropriately
- ☐ Cooperates with others
- ☐ Achieves his/her potential
- ☐ Uses information and communication technology
- ☐ Adapts effective work methods

- **Strategy Bank:** Allows students to pull from a list of strategies they have used and built over time.

Doing

Following and adjusting the plan is critical in the Doing phase. The toolbox features the following scaffolds:

- **My Plan:** Helps students keep track of their goals and strategies and to modify their plan as needed during the Doing phase.
- **Checklist:** Allows students to check off which strategies they have used and make quick notes about the effectiveness of each.

My Plan Checklist Timer Journal Progress

Ⓢ Which strategies are you using today? Save your comments in the textbox

- ☐ Reread several times
- ☒ Consult writing guidelines
This is a strategy best used when I am writing long essays
- ☐ Review handouts from
- ☐ Talk to sophomore

Save

Figure 44: Toolbox
- Doing

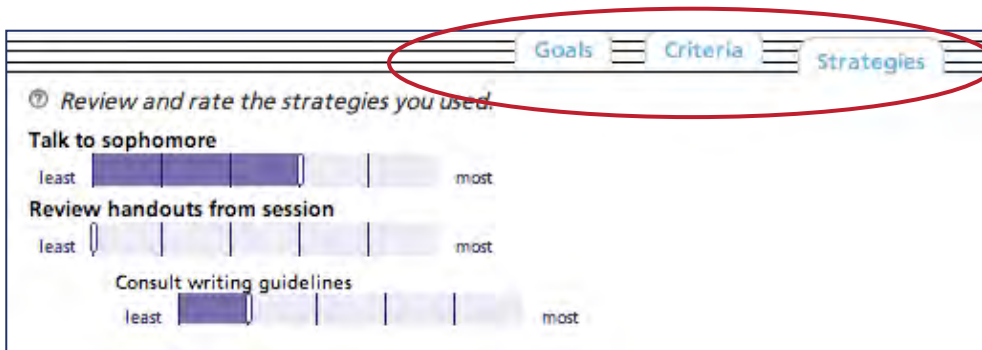


- **Timer:** Helps students organize their time efficiently.
- **Journal:** Encourages student to keep track of their learning behaviours.

Reflecting

Looking back at the process is as important as assessing achievements. The toolbox provides the following scaffolds:

- **Goals:** Provides the opportunity for students to rate how close they came to achieving their goals that, in turn, helped them work towards their general goals.
- **Criteria:** Provides the opportunity for students to review the criteria for the work, make sure they have met all of them, and will be evaluated fairly.
- **Strategies:** Provides the opportunity for students to rate and review their strategies, so that the next time they are doing a similar task they can pull out the most effective and useful strategies.



Goals **Criteria** **Strategies**

Review and rate the strategies you used.

Talk to sophomore

least most

Review handouts from session

least most

Consult writing guidelines

least most

Figure 45: Toolbox
- Reflecting



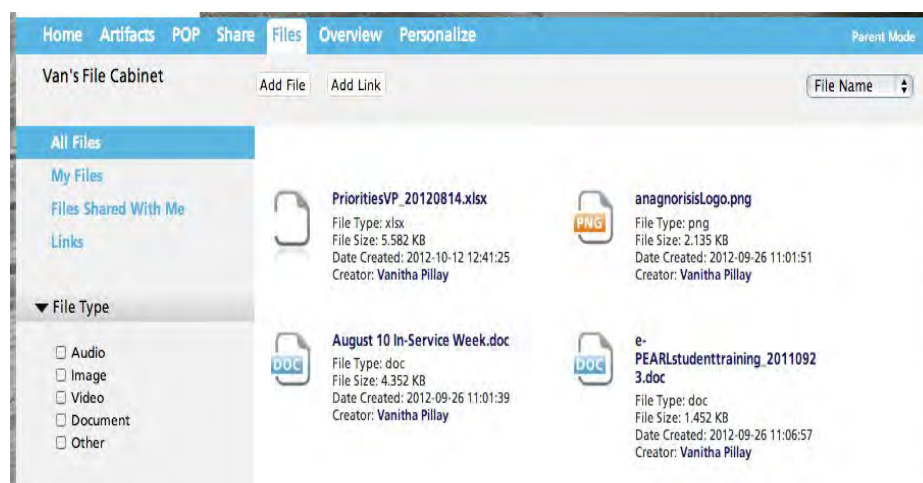
Files

Students can store a number of files of any kind in their file cabinet. Students can easily retrieve files when working from home, even if the document was started at school, simply by uploading the saved document to their file cabinet. Files can be shared amongst students by clicking on the icon and selecting who you would like to share it with. Shared files will automatically appear in the student's file cabinet. This can be quite practical for peer editing! Teachers can also share files with students, such as criteria rubrics, and assignment description.

Figure 46: The File Cabinet

TIP:

Students can set their notifications to alert them when a new file has been shared with them



Overview

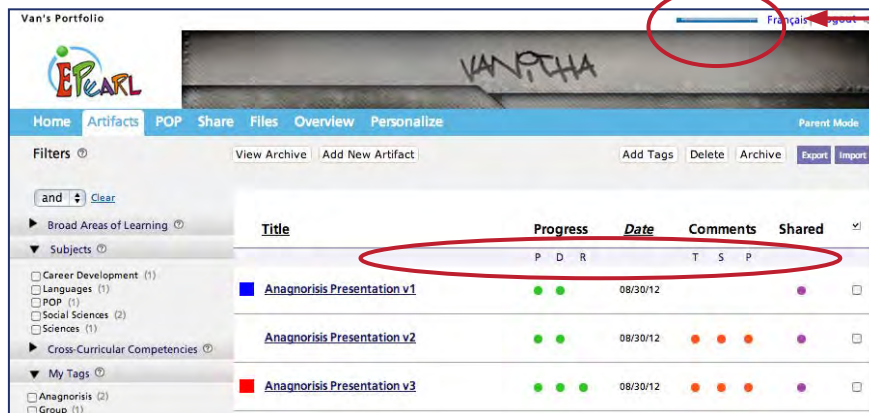
An overview can be generated for two important SRL processes: Strategies and General Goal Connections. The overview allows the student to see how often he/she has used a strategy, rate its usefulness and make notes about it. Furthermore, students can see how often they have linked to a specific General Goal. This can help the student, as well as the teacher to assess which goals are being neglected, and work towards them.

Figure 47: Overview

| Strategy | Usage | Rating | Notes |
|------------------------------|--------------------------|--------|--|
| Talk to sophomore | <div><div></div></div> 3 | | |
| Review handouts from session | <div><div></div></div> 3 | | Science experiment v3 somewhat helpful |
| Consult writing guidelines | <div><div></div></div> 2 | | Science experiment v3 new guidelines Anagnorisis Presentation v3 This is a strategy best used when I am writing long essays |

Storage

Each student has been assigned a certain amount of storage space in ePEARL, which is determined at the school board (or district/division) level by the software's administrator. A meter reflecting the amount of storage space used appears at the top of the page. Students will not be able to add new artifacts once the meter is full.



Storage meter

Figure 48: Level 3 portfolio

Column headings

Sorting and Filtering Items on the Index Page

Items can be sorted on the Index page, either alphabetically by clicking on the Title column heading or chronologically by clicking on the Date column. By checking any of the items and selecting 'and' or 'or' in the Filters sidebar, students can search the contents of their portfolio using Boolean logic. For example students can search for artifacts that fall under 'POP' and 'To be creative', or under 'To work with others' or 'Group', which will yield different search results.

TIP:

An individual artifact can also be shared while creating the item in Doing.

Sharing in ePEARL

Individual artifacts or the entire portfolio can be shared with classmates in the same class, in another class, or in another school using the Share tab. The software automatically shares students' portfolios with the homeroom

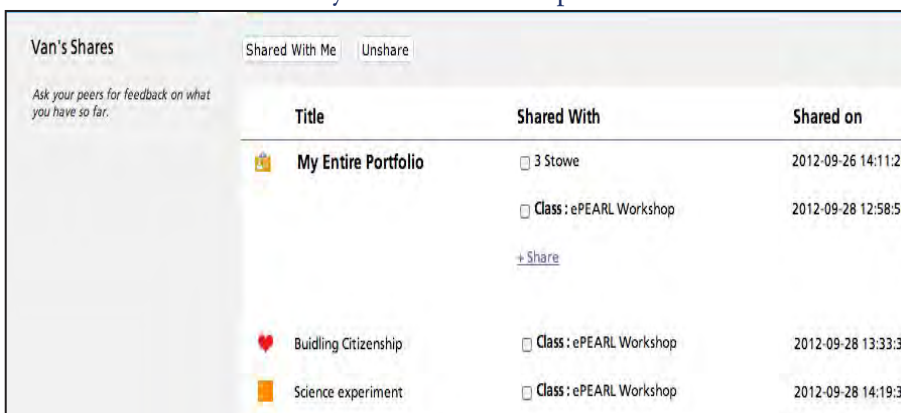


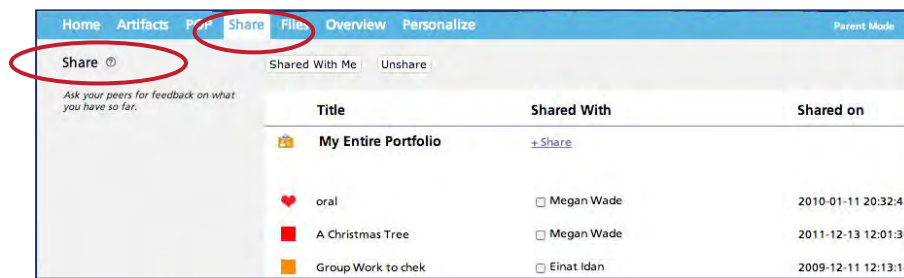
Figure 49: Sharing



Peer Feedback

Students are encouraged to provide feedback to their peers and to consider feedback given to them. This can be done in ePEARL through the Share tab, which can be accessed from the menu bar just below the banner. This allows students to select what they want to share—their entire portfolio or specific entries, depending on how they access Share—and with whom.

Figure 50: The Sharing environment



How to Access Someone Else's ePEARL: Peers who have been granted access to another student's portfolio must enter that portfolio through the Share feature. Click on the button labeled "Shared With Me" to see a list of the entries that other students have chosen to share.

Figure 51: Access to external students shared portfolios



TIP:

Students can set their notifications to laert them when a peer has shared new work with them

Clicking on any portfolio in the list will open a new window displaying only the shared parts of that portfolio. General Feedback on the home page and Peer Feedback boxes will become editable (active) in the appropriate places. Peers are not able to edit or upload anything to another student's ePEARL.

Each peer has access only to previous comments he or she has made. They cannot edit other peers, teacher or parent comments. A name and date is automatically stamped above all peer feedback.



How to Stop Sharing With a Peer: When students want to stop sharing an item with a peer, they simply check the person's name on the My Shares page and click the unshare button.

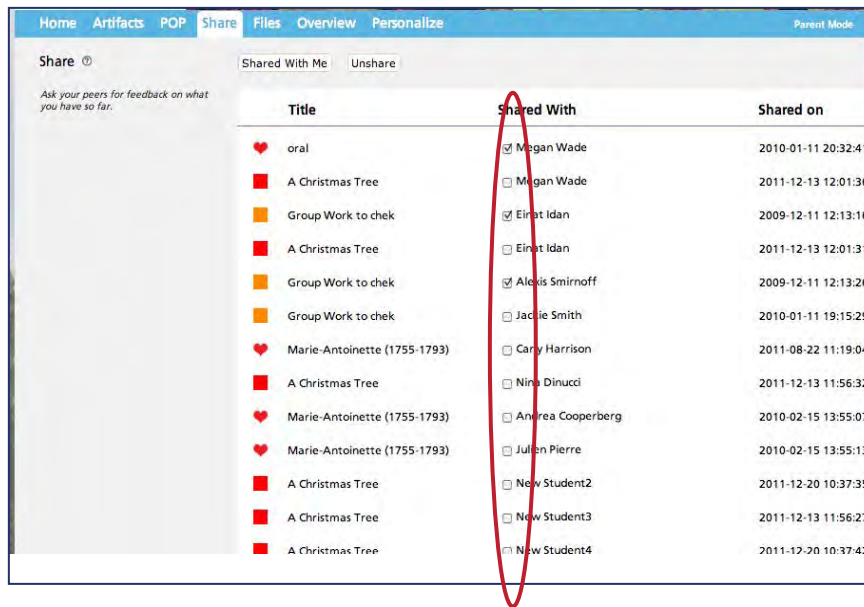


Figure 52: Removing shared access

Inter-class Sharing: Students may share their work within classes in the same school or within schools in the same board (or district/division). Teachers, in their own portfolios, must first link their class to the appropriate classes and allow inter-class sharing, in order for sharing to be activated in the students' environment.

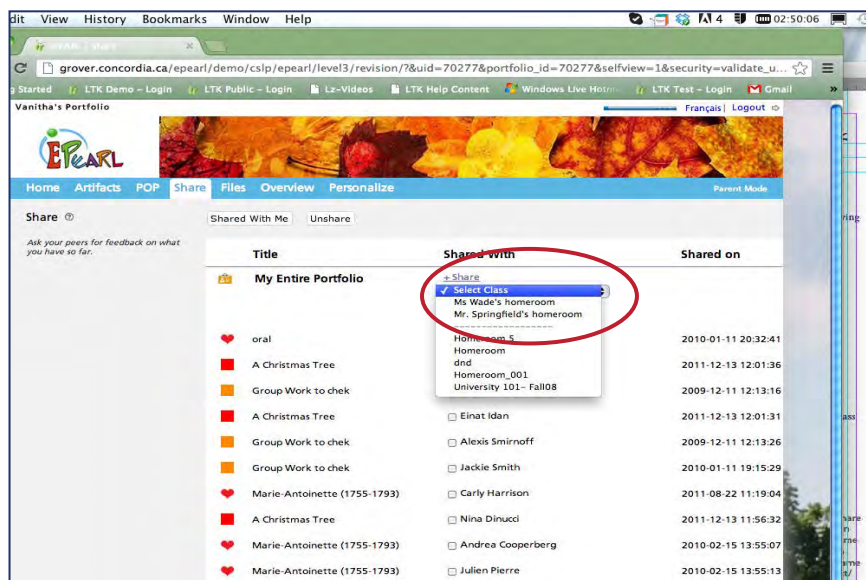


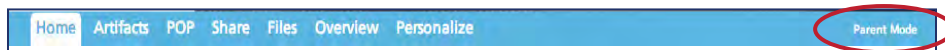
Figure 53: Interclass sharing



Parent Mode

Students are encouraged to share their portfolios with their parents. Parents do not have separate passwords; they must access the portfolio with their child. Clicking on “Parent Mode” at the right of the bar just below the banner activates the Parent Mode. Parents can then enter General Feedback, as well as comments within each individual artifact.

Figure 54: The link to Parent Mode



This also deactivates other features, such as editing capabilities. The rationale is that the purpose of parents navigating through the portfolio with their child is to comment on completed work and achievements. There is no need for the work to be editable while they do this.

Archiving in Level 3

At the end of a term, school year or cycle, students should be asked to select those artifacts that best reflect their learning and send these to their Archive, then delete the original artifacts from the portfolio using the global delete command on the Index Page. The Archive is a cumulative storage place for artifacts organized by ePEARL level and by year. This will minimize the amount of space required for the storage of student portfolios. They will then start a new school year or cycle with a blank slate, having saved their most important items to the Archive. An artifact stored from any level will remain in this folder, so in theory, a student may store readings and creations from Level 1 and artifacts from Levels 2 and 3 and have an archive of their entire K-11/12 educational experience.

Figure 55: Accessing the Archive

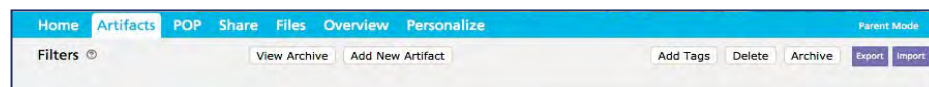
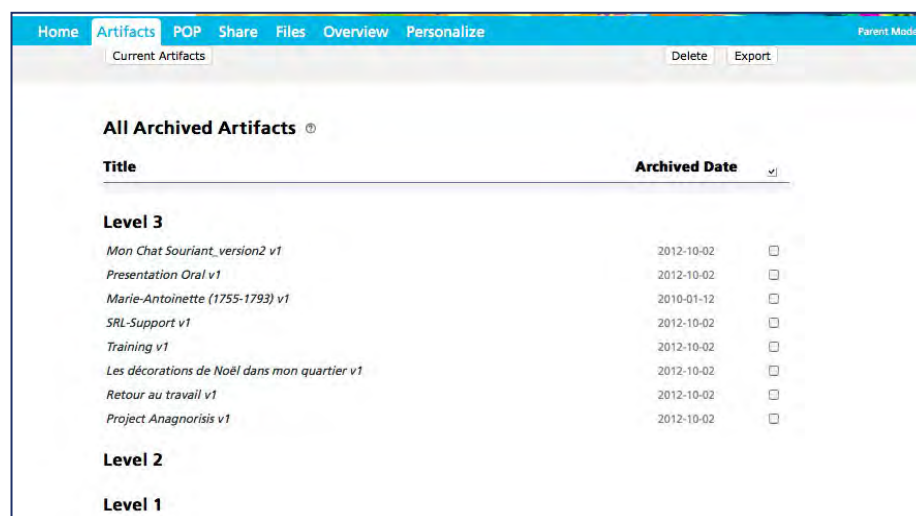


Figure 56: Archive



Exporting Artifacts in ePEARL

The artifacts in Level 3 can be exported from the online environment. They can then be saved on the computer and burned on a CD or other portable memory device. This will allow students to see their work as it appears in ePEARL without internet access or having to log in to the software. This makes a nice record of accomplishments that can be taken home, given as a gift or transferred if the student is moving. Only items within the Presentations folder at that time will be exported.

The process requires only that students select the artifact they wish to export from the Artifacts Index page, or from the Archive, and then click the Export button.

Figure 57: The Export icon

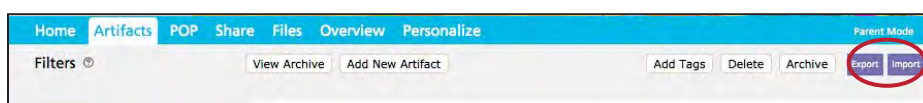


Figure 58: Level 3 - Export



Figure 59: The Logout icon



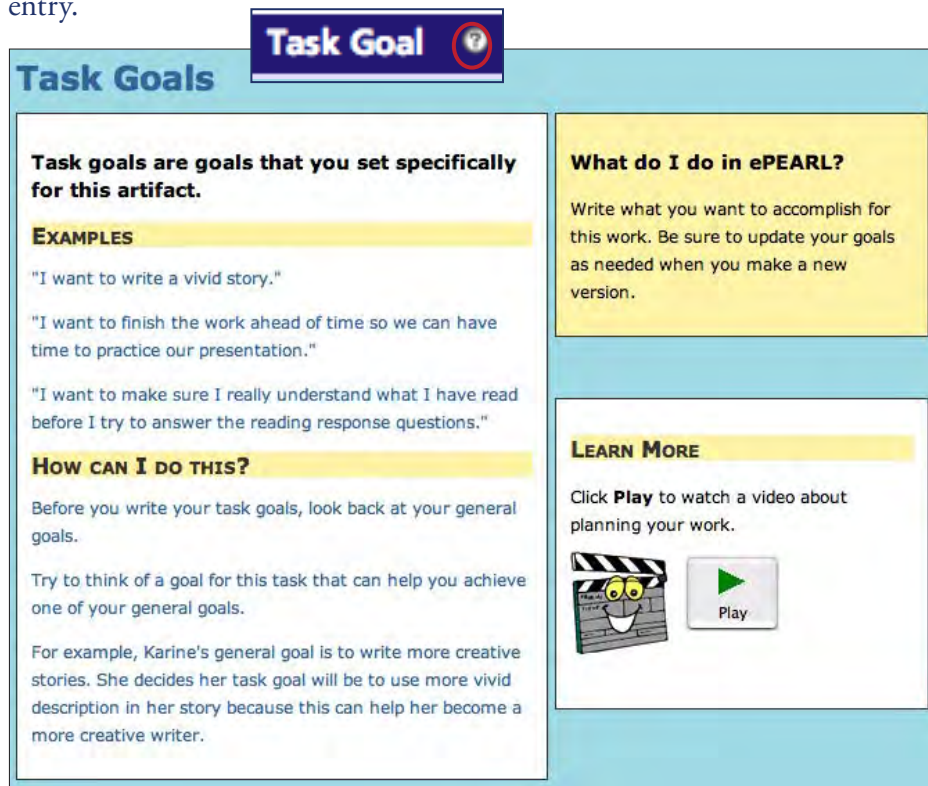
Navigation and Logging Out

It is best to use the navigation buttons within the software rather than the browser's. To log out properly, use the logout button in the top right corner. When a new window is opened (for example, when viewing someone else's ePEARL), use the close window button located in the same place.



Embedded Support

Support for each feature within an entry is available for students, teachers, peers and parents (where necessary). However, the support is available only when the feature is active. Therefore, support for students filling out information about an entry will be available in the Edit screen of the entry. Information for a peer, teacher or parent commenting on an entry will be available near their respective text boxes in the View screen of the entry.



Task Goals

Task Goal

Task goals are goals that you set specifically for this artifact.

EXAMPLES

"I want to write a vivid story."

"I want to finish the work ahead of time so we can have time to practice our presentation."

"I want to make sure I really understand what I have read before I try to answer the reading response questions."

HOW CAN I DO THIS?

Before you write your task goals, look back at your general goals.

Try to think of a goal for this task that can help you achieve one of your general goals.

For example, Karine's general goal is to write more creative stories. She decides her task goal will be to use more vivid description in her story because this can help her become a more creative writer.

What do I do in ePEARL?

Write what you want to accomplish for this work. Be sure to update your goals as needed when you make a new version.

LEARN MORE

Click **Play** to watch a video about planning your work.

Play

Figure 60: Embedded support

Video Support

In addition to the embedded textual support, ePEARL also contains short video clips to model and support pivotal self-regulation steps. These videos provide just-in-time modeling for students and teachers to help integrate self-regulation theory into daily classroom practice. These videos can easily be part of the teacher's introduction of tasks such as setting goals, meaningful reflection and providing peer feedback. Students may access them independently in class as refresher videos for concepts they have learned and practiced offline.

The videos were designed to be level-specific and support critical information with textual reinforcement. Level 2 videos include an advanced visual organizer to explain the process, a "testimonial" style exposition of the topic and then practical examples.



The videos conclude with a review of the main points using both visual and verbal cues, and finally a practical tip to get students started on the task. Videos are also offered in French. Support videos and other teacher's materials are on the teacher resources page accessible from within ePEARL. As material is developed, it will be posted to this website so that support will grow over the year.

Figure 61: Link to the Teacher Resource page

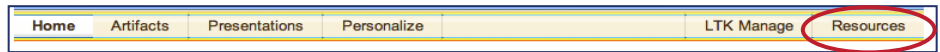
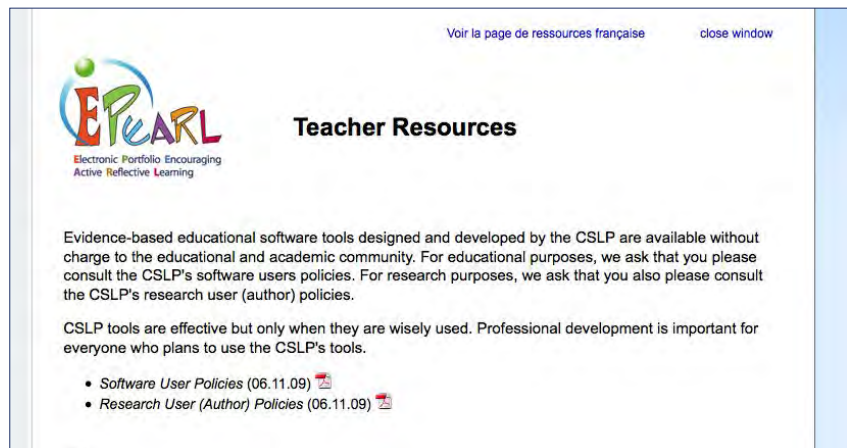


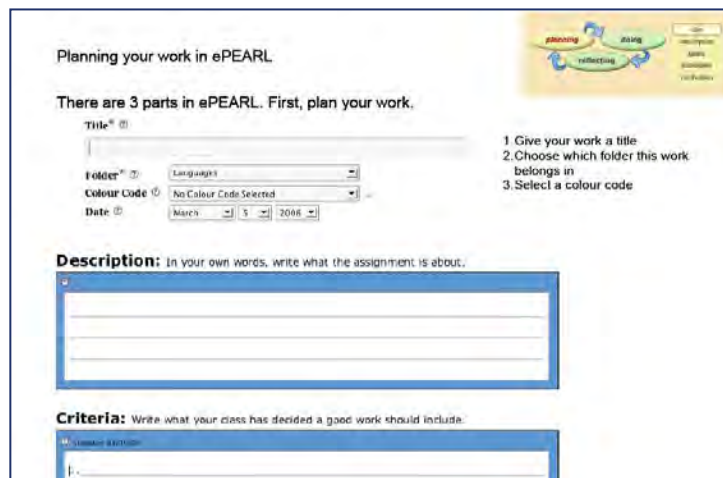
Figure 62: The Teacher Resources page



Offline Integration

Because it may be difficult to use video in the classroom, in order to facilitate incorporation of the lessons learned into classroom practice, ePEARL also provides printable worksheets that prompt students to follow the main points in the videos by writing their own answers about their task. These worksheets can be printed from the teacher resource page.

Figure 63: Printable worksheet for the classroom



Planning your work in ePEARL

There are 3 parts in ePEARL. First, plan your work.

Title:

Folder:

Colour Code:

Date:

Description: In your own words, write what the assignment is about.

Criteria: Write what your class has decided a good work should include.



The Teacher Module

The teacher portfolio environment is similar to the Student one, but has additional administrative features, sharing privileges and links to resources. All homeroom teachers are linked to their homeroom class. This means that teachers can view the students in their class (along with the students' access information) and view students' portfolio, through the LTK Manage function.

It is recommended that teachers review the set-up for their students prior to using ePEARL with a class. For example, if students are missing from the class list, they can be added or if ePEARL levels have been incorrectly assigned they can be changed.

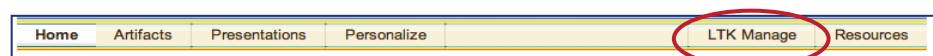


Figure 64: Link to the LTK Management environment

Classroom management

ePEARL users now have access to the LTK Manage section, from the LTK Lobby page. This section allows users to easily manage their classes and students in one convenient location for all the LTK tools. Here, teachers can:

- View their students portfolios
- Provide feedback on their student's work
- Edit student levels
- Edit their own information such as password, colour codes etc.
- Link to more classes
- New this year: Notification!

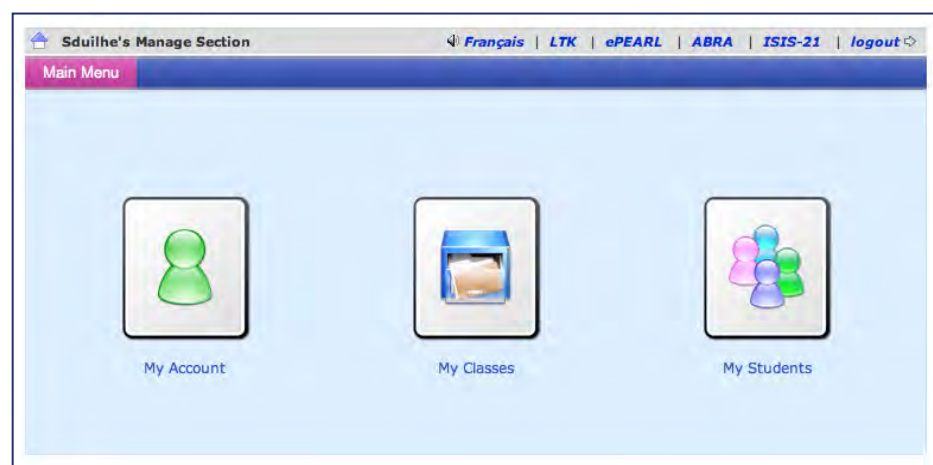


Figure 65: The LTK Management homepage

Check Assigned ePEARL Levels

Teachers should check that their students have been assigned the correct ePEARL level. These are the levels recommended by the CSLP:

K-2: Level 1

3-6: Level 2

7-12: Level 3

Any student's ePEARL level can easily be changed by accessing the My Students tab in LTK Manage, clicking the pencil icon beside the student's name and choosing the correct level from the menu.

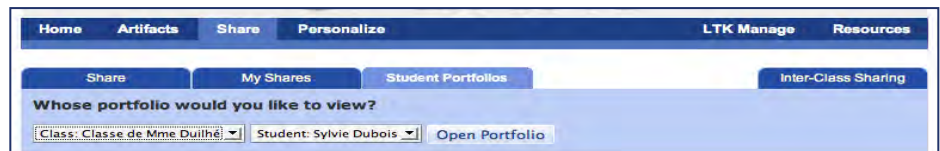
Viewing Student Portfolios and Providing Feedback

Teachers automatically have access to their students' portfolios, and can view them in two ways:

- 1) by clicking on "Share" in the navigation bar, then on "Shared with me"
- 2) from the LTK manage section, by clicking on the class and then the folder icon next to a student's name.

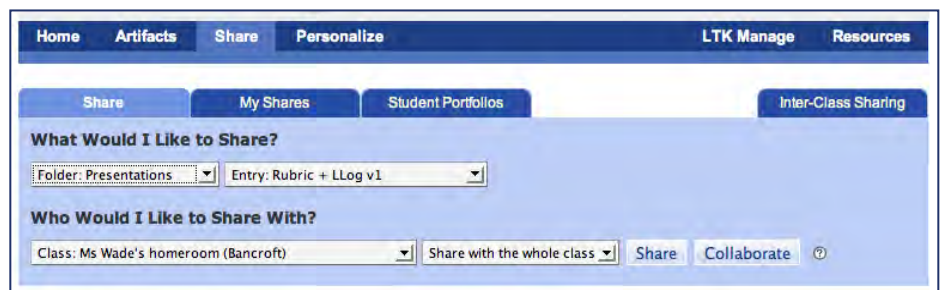
Feedback may be provided on artifacts, a student's general goals, task goals/strategies, reflections, or the portfolio as a whole.

Figure 66: Viewing students' portfolios



In order to view a student's portfolio in Level 2, from the Share area, click on the Student Portfolios tab and select the appropriate class (only those classes you are linked to will be displayed). Select a student name from the drop-down list. on "Artifacts" in the bar just below the banner in a student's ePEARL, teachers can display a specific piece and provide feedback on the goals, the reflection or the artifact itself.

Figure 67: Level 2 - Sharing portfolios or artifacts



In Level 3, teachers may view their students' portfolios through the LTK manage function . Teachers can provide general feedback on the home page, on the portfolio as a whole and on task goals/strategies and reflections.

New Work

Teachers are notified when students create new artifacts, or add goals, recordings or reflections to existing work under the New Work tab. This is a simple and efficient way for teachers to go through their students' portfolios.

Teachers can filter students by class using the drop down menu.

Figure 68: LTK Manage - New Work tab



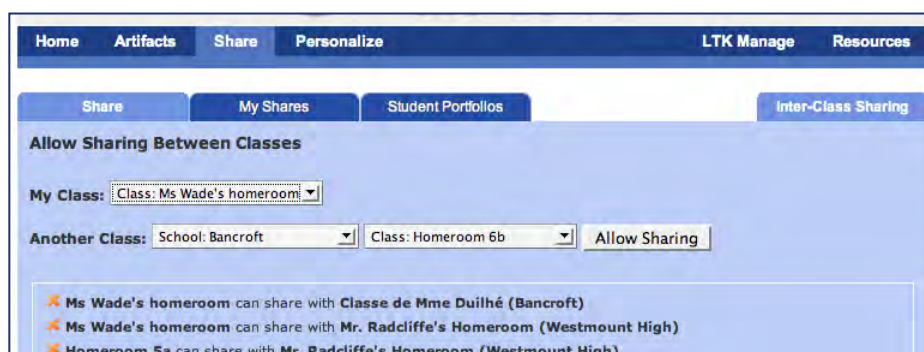
Teachers may also opt to share specific artifacts or entire folders with their students.

Sharing with Other Classes

Teachers can allow students from their class to share with students in another class in the school. To do this, teachers can click on the Inter-Class Sharing tab in the Share section in their own portfolio. Teachers can select their class and then the school and class they would like their class to share with, then click on "Allow Sharing" to connect them.

Until this connection is severed (by clicking on the 'x' in the list below), students in these two classes will be able to share their artifacts with each other through the regular sharing function.

Figure 69: Sharing with other classes



Printing Teacher Comments

All the comments a teacher has given a student so far can be organized and printed from a student's portfolio, click on "Artifacts." then on "Teacher Comments" (in red). The teacher will be able to read and print a list of their comments grouped by Artifact, by Type (feedback on task goals, on reflections, etc.) or by Date.

This feature can be used to:

- Prepare for a parent-teacher interview
- Keep track of students' development through the year or in a particular subject area
- Help write report cards on students' performance
- Organize! It will help teachers provide regular feedback on each student's portfolio.

Figure 70: Level 2 - Viewing Teacher Comments from the artifact page

Home

Artifacts

All Artifacts

All Years

All Artifacts

Language

MSA

Social

Art

Presentations

Personal

Professional

Spanish

Hebrew

Teacher Comments

Printable Version

| | | Title | Folder | Date | A | G | R | C | BAL | CCC | SA | SK |
|---|--|------------------|----------|----------|---|---|---|-----|-----|-----|-----|-----|
| ✓ | | eportfolio v1 | Art | 11/02/07 | 1 | X | - | --- | -- | --- | --- | --- |
| ✓ | | hola v1 | Language | 12/12/07 | - | - | - | --- | --- | --- | --- | --- |
| ✓ | | Job Interview v1 | Language | 11/12/07 | - | X | X | --- | O- | 4-- | R-- | --- |



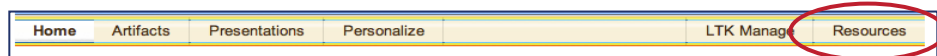
Sub-administrators

There may be instances in which teachers would like to add a new teacher (e.g. a student teacher or substitute teacher) or student to the 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 their board.

Resources

Teachers are encouraged to consult the Resources tab as the CSLP team continues to develop bilingual job aids and supplemental materials to help support the use of ePEARL in classrooms. All of the embedded video support and virtual tutorials can be accessed from this page as well. Materials will be added to this page on a continuous basis.

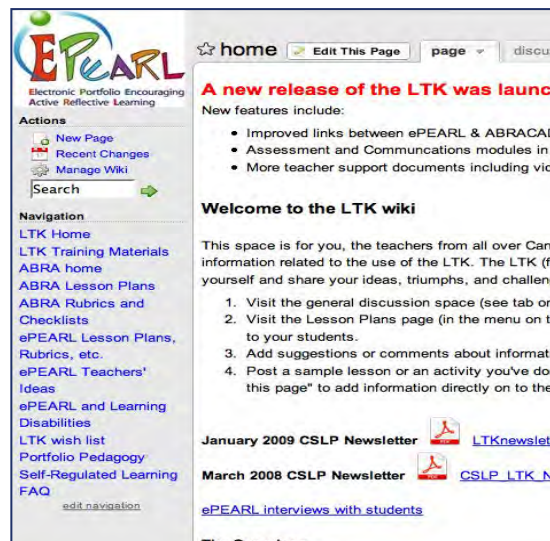
Figure 71: Link to the Teacher Resources page



Online community

Teachers are encouraged to join the CSLP online community of educators working with ePEARL. We have built a wiki (an online forum that anyone can add information to) to connect educators from around the world. On this wiki we have a discussion page, links to other sources of information on self-regulated learning and portfolio pedagogy, as well as new lesson plans and support materials in development that get posted

Figure 72: The LTK Wiki



here before being added to the teacher resources page. This is also meant to be a place where teachers can share ideas, post lesson plans, ask questions, and get support from other educators using ePEARL. To join, email ltkhelp@education.concordia.ca and include “wiki invite” in the subject line. We will send the invitation and link to join this moderated online community.

Virtual Tutorial

To assist new users in learning all of the features of ePEARL, the CSLP has created an online Virtual Tutorial that can be accessed through the teacher Resources page. This Virtual Tutorial is a series of 3-5 minute videos that provide instruction on how to use ePEARL and pedagogical tips to help teachers make the most of the software. The Virtual Tutorial includes printable guides and access to a demo account to practice what is demonstrated in each video. These can be used by teachers learning the software on their own, or can be used to introduce students to new features by showing the videos to the whole class.



Figure 73: The ePEARL Virtual Tutorial

For further information on using ePEARL please email ltkhelp@education.concordia.ca. Teachers in Quebec can also contact their local RECIT.



Frequently Asked Questions

- Q1. How are images or other files uploaded?
- Q2. How large a file can be uploaded?
- Q3. What size should a banner file be?
- Q4. How can students create their own banners?
- Q5. When viewing an artifact, I am unable to edit. Why is this?
- Q6. How can students record something in their portfolio in Levels 2 and 3?
- Q7. What should students do when asked to “trust a CSLPIERI certificate” when using the recorder?
- Q8. Why isn’t the recorder working?
- Q9. Can I link/unlink students to my class list?
- Q10. How are Level 1, Level 2 and Level 3 different?
- Q11. How can I move students’ work from one level to the next?
- Q12. How do students move things from their portfolio to the Presentations folder?
- Q13. When should students clean up their portfolios?
- Q14. Where do I provide feedback to my students?
- Q15. Can students provide feedback to each other?
- Q16. What if students forget to save?
- Q17. What is the Learning Process for, and can students work outside the portfolio?
- Q18. How can I view a student’s work?
- Q19. Can a parent modify an artifact?
- Q20. What if I am not connected to my classes?
- Q21. How can I get rid of the garbage characters when I cut and paste from Word into the text editor?



Q1. How are images or other files uploaded?

Users are able to upload a file anywhere they see a paperclip icon. To do this, click on the icon, to bring up a directory of files and folders stored on the computer. Locate the file and double-click on it. The file will appear immediately. To remove the file, click on “deselect” below to the file name and the file will disappear immediately. Don’t worry if you see only the file name without the image at first. Once the artifact is saved, all attachments will appear as they should.

Q2. How large a file can be uploaded?

The maximum file size is set by your ePEARL Administrator. We recommend allowing files of up 8 MB to be uploaded; however, the actual value may be different. When uploading pictures, iPhoto or Photoshop should be used to compress the image files. Large video or audio files can be edited into two or three parts and uploaded as separate attachments if they exceed the set file size limit.

Q3. What size should a banner file be?

The banner should be saved as a 760x75 pixel JPEG, GIF or PNG file. If the banner is a different size, ePEARL will automatically center and crop the image to the correct number of pixels. Please note that users can use animated GIFs in their banner only if they are the correct size.

Q4. How can students create their own banners?

Students can use many different programs to create their banners, such as Paint, Kid Pix, Photoshop, GIMP or Tux Paint (open source). They can also go online to download or create banners for free at websites such as <http://www.bannerbreak.com/>, <http://www.aaa-banners.com/> or <http://www.graffitinet.com/>. Make sure the banner has the correct dimensions (approximately 760x75 pixels), and is saved in a recognized file format (JPG, GIF or PNG). Once the banner has been created using either software or a website, it must be saved to the computer. It can then be uploaded in ePEARL in the banner section of the Customize feature.



Table 1: Images in ePEARL: Summary Table

| Type | Dimensions | File Format | Size Limit |
|-----------------------------------|----------------|-----------------------------|------------|
| Banner | 760x75 pixels | JPG, PNG, GIF, animated GIF | 8 MB* |
| Welcome Image | 200x200 pixels | JPG, PNG, GIF | 8 MB* |
| Thumbnail in Artifact View Screen | 100x100 pixels | JPG, PNG, GIF | 8 MB* |

* This is the recommended maximum; the actual maximum is set by the administrator.

Remember that with the exception of animated GIFs in the banner, any image with the correct aspect ratio will work just as well (for example, a long rectangular image for the banner or a square image for the Welcome screen image).

Q5. When viewing an artifact, I am unable to edit. Why is this?

In order to make a change to an artifact in the portfolio, users must click on the edit icon at the top of the page. This will activate all fields.

Q6. How can students record something in their portfolio in Levels 2 and 3?

Students can record when creating a new artifact or add a recording when editing an existing artifact. First, click on the record icon on the Toolbar. After the recorder opens in a new window, click the Record button once ready to start. Click the Stop button when finished. Once the recorder displays the message “Sound saved successfully,” the recorder may be closed.

Q7. What should students do when asked to “trust the CSLPIERI certificate” when using the recorder?

The first attempt to use the recorder may prompt a message asking the user to “trust the CSLPIERI certificate.” This may happen when starting a new browser session, or when the browser cache has been emptied. Students have to accept this certificate to continue loading the recorder. We strongly recommend that the option “Always accept this certificate” be selected.

TIP:

If the user erases a recording a number of times and attempts to re-record, this may cause the recorder to malfunction. If this happens, exit the artifact and quit the browser, then log back in and retry.



Q8. Why isn't the recorder working?

There are three reasons why this may occur:

- The browser does not support the recorder.
 - The sound card in the computer does not support the recorder.
 - The appropriate plug-ins have not been installed on the computer.
- The most likely cause is missing plug-ins. Please see the section titled End User Requirements for details on this. If the plug-ins have been installed and teachers are still experiencing problems, they must double-check that they meet all the technical requirements. It is also important that they save the recording when they are finished to avoid losing the recording.

Q9. Can I link/unlink students to my class list?

Yes. To do this, go to the Manage tab (on the bar just below the banner), click on "My Students" and then "Link/Unlink Students" and follow the instructions on the page. Note: If teachers wish to link a student to their class but they are not in the database, ask the sub-administrator to add this student.

Q10. How are Level 1, Level 2 and Level 3 different?

The differences between the levels are essentially based on age and level of schooling. Level 1 is designed for children in Grades 1 & 2, so it has a single environment in which students create, edit and save readings, writing and other work. In addition, the interface relies more heavily on icons than text and introduces students to basic goal-setting and reflection activities. Level 2 is designed for Grades 3-6, and offers more structured guidance for goal setting and reflection. Similar in structure to Level 2, Level 3 is designed for secondary school students and even adults. It offers more sophisticated guidance through the process of planning, goal setting and reflection. In addition, teachers are able to change passwords in Level 1, but can only view students' passwords in Levels 2 and 3.

Q11. How can I move students' work from one level to the next?

Teachers do not need to move work from one level to the next. Before changing a student's level, make sure the student has moved everything he or she wants to keep into the Presentations folder. All works created in earlier levels of ePEARL are accumulated here and they may be viewed or exported from within this folder. Please note that Level 2 and Level 3 artifacts cannot be viewed from a Level 1 portfolio.



Q12. How do students move things from their portfolio to the Presentations folder?

When students want to send an artifact to their Presentations folder, they should click on the Present button. They must be in edit mode to do this. The artifact will be copied over to the Presentations folder. This is a “presentation version” of the artifact, which means they will not be able to edit it from within this folder. However, the original artifact is still available in its original folder to edit as they wish. These edits will not be reflected in the Presentations version of the artifact.

Q13. When should students clean up their portfolios?

Portfolios should be cleaned up at the end of a grade or cycle, either by the student or the teacher, although it is recommended that the students do the clean up, with a teacher’s supervision. This is important because it frees up storage room on their school board’s server. (The amount of free space remaining in a portfolio is indicated in the ePEARL meter at the top of the page.) We recommend that teachers encourage students to move their important artifacts to their Presentations folder periodically throughout the school year. At the end of a school year, students should delete all their artifacts from all other folders under the guidance of their teacher. ePEARL provides the ability to delete multiple artifacts in one step.

Q14. Where do I provide feedback to my students?

When a teacher is viewing a student’s portfolio, they will have the opportunity to provide feedback in several ways. He or she can comment on the student’s entire portfolio, general goals and artifacts in general, or they can comment on a specific artifact within the portfolio. When viewing an artifact, a teacher will be able to provide feedback on the associated goals, the work itself and the reflection. When he or she is in an area in which they can provide feedback they will see a white box with the heading “Edit Comments.” The teacher can type their feedback in the box and then click the Save button. If he/she want to review the artifact again and provide a new comment, add it to the old comment. Do not write over previous comments because this will delete them.

Q15. Can students provide feedback to each other?

Students provide feedback to each other in exactly the same way a teacher or parent provides feedback: only in designated spaces. The only difference is that the portfolio owner will need to share their portfolio or an artifact with another student using the Share feature in order for the other student to provide feedback. Students do not have access to anyone else’s portfolio unless a student has specifically shared it with them. A peer will be able to view the artifact, but will only be able to write in the designated Peer Feedback boxes.



Q16. What if students forget to save?

It is very important that saving after each entry, edit or comment becomes routine for your students. If a user logs out of his or her portfolio without saving, any changes made will be lost. However, it is impossible to leave edit mode (aside from closing the browser) without choosing the option of saving or canceling.

Q17. What is the Learning Process for, and can students work outside the portfolio?

The Learning Process guides students in the creation and editing/modification of and reflection on their work. Students can work directly with the features provided in the template (i.e. the text editor and the recorder) or work with another application outside of ePEARL, such as PowerPoint or Excel. In the latter instance, files may be uploaded as part of an artifact. When creating a new artifact using the blank template, users will be guided by its format through a process of thinking about their work. The flow of the process follows the diagram below.



Figure 74: The learning process

Q18. How can I view a student's work?

Click on the Share tab in the menu bar of the artifacts index page, then click on the Student Portfolios tab and use the drop down menus to select a class and then the student whose work you would like to review. Click on "Open Portfolio." Once here, teachers will be able to view the student's work and leave comments. To return to their own portfolio, simply click on "close window" in the top right corner of the screen (where the logout option usually is).

Q19. Can a parent modify an artifact?

No. When students share their portfolio with their parents, they should click on the Parent Mode button in the top right corner. This will ensure that parents can view all artifacts, but only comment in the designated spaces.

Q20. What if I am not connected to my classes?

If, after the beginning of a new school year, a teacher finds that they are not connected to their classes, it is possible that there was an importing problem. They should contact their administrator and ask him or her to check whether there are two portfolios under their name. If there are two portfolios under their name, ask the administrator to merge them into one account. Note: the teacher's username and password may change after this happens.



Q21. How can I get rid of the garbage characters when I cut and paste from Word into the text editor?

Word sometimes automatically modifies text, and includes invisible characters that become visible when pasted in the text editor. This can be reduced if a student uses a simple text application (such as notepad) to compose his/her writing, or pastes from Word into notepad before pasting into the Text Editor. This can also be solved by changing certain features in Word. For example, by replacing straight quotation marks with “fancy” or “smart” quotes. These characters are problematic to work with and will generate garbage characters within the text editor. Disabling them may solve the problem.

Follow these instructions to permanently eliminate smart quotes within Word:

- 1** Under the Tools menu, select “AutoCorrect...”
- 2** When the AutoCorrect dialog box appears, click on the AutoFormat tab at the top.
- 3** Uncheck “Straight quotes with smart quotes.”
- 4** Click on the “AutoFormat As You Type” tab.
- 5** Uncheck “Straight quotes with smart quotes.”
- 6** Click on “OK” to close the dialog box.

Users can also get rid of garbage characters in your text by copying and pasting the text into Notepad or TextEdit, and then copying and pasting it from there into the text editor.



Table 1: Resources available on the ePEARL Teacher Resource Page

| Type of Resource | Resource Name |
|---------------------------------|--|
| Job Aid | Prereading Skim |
| Job Aid | Reading Fluency |
| Job Aid | Setting Task Goals |
| Job Aid | Setting General Goals for Level 1 |
| Job Aid | What is Self-Regulated Learning? |
| Job Aid | Teaching Vocabulary |
| Job Aid | Creating a New Artifact |
| Job Aid | Exporting from the Presentation Folder |
| Job Aid | How to Customize Your ePEARL |
| Job Aid | LTK Management (student passwords, etc...) |
| Job Aid | Setting General and Task Goals |
| Job Aid | Using ePEARL in Your Lessons |
| Lesson Plans | Lesson 1 - Intro |
| Lesson Plans | Lesson 2 - General Goals |
| Lesson Plans | Lesson 3 - Organizing |
| Lesson Plans | Lesson 4 - Planning |
| Lesson Plans | Lesson 5 - Doing |
| Lesson Plans | Lesson 6 - Reflecting |
| Lesson Plans | Lesson 7 - Sharing & Feedback |
| Lesson Plans | Lesson 8 - Selecting & Reflecting |
| Lesson Plans | Sample Lesson Plan - Recycling |
| Lesson Plans - ABRA-ePEARL link | Basic Decoding |
| Lesson Plans - ABRA-ePEARL link | Setting Reading Goals |
| Lesson Plans - ABRA-ePEARL link | Sequencing |
| Lesson Plans - ABRA-ePEARL link | Prediction |
| Lesson Plans - ABRA-ePEARL link | Teaching Vocabulary |
| Lesson Plans - ABRA-ePEARL link | Comprehension Monitoring |
| Lesson Plans - ABRA-ePEARL link | Segmenting - Three-sound Word |
| Lesson Plans - ABRA-ePEARL link | Segmenting - Four-sound word |
| Lesson Plans - LTK Curriculum | Planning |
| Lesson Plans - LTK Curriculum | Planning worksheet 1 (Level 1) |
| Lesson Plans - LTK Curriculum | Planning worksheet 2 (Level 1) |



| Type of resource | Resource Name |
|-------------------------------|--|
| Lesson Plans - LTK Curriculum | Prediction |
| Lesson Plans - LTK Curriculum | Sequencing |
| Lesson Plans - LTK Curriculum | Summarizing |
| Lesson Plans - LTK Curriculum | Story Elements |
| Lesson Plans - LTK Curriculum | Story El. worksheet 1 |
| Lesson Plans - LTK Curriculum | Story El. worksheet 2 |
| Videos - Teacher PD | Level 1: Using ePEARL in Early Elementary Classrooms |
| Videos - Teacher PD | Level 1: The Benefits of Using ePEARL for Portfolio Assessment |
| Videos - Teacher PD | Level 2: Implementing ePEARL in Late Elementary Classrooms |
| Videos - Teacher PD | Level 3: Implementing ePEARL with Secondary Students |
| Videos - Teacher PD | Level 3: Using ePEARL with POP (Personal Orientation Program) Secondary Classrooms |
| Videos - ABRA-ePEARL Link | Level 1: Integrating ABACADABRA & ePEARL in the Classroom |
| Videos - ABRA-ePEARL Link | Level 1: The Benefits of Using ABACADABRA and ePEARL Together |
| Videos - student-centred | Level 2: Planning - Overview |
| Videos - student-centred | Level 2: Planning - Creating General Goals |
| Videos - student-centred | Level 2: Planning - Creating Task Goals |
| Videos - student-centred | Level 2: Planning - Strategies for Goals |
| Videos - student-centred | Level 2: Doing - Overview |
| Videos - student-centred | Level 2: Reflecting - Overview |
| Videos - student-centred | Level 2: Reflecting - (Works in Progress) |
| Videos - student-centred | Level 2: Reflecting - (Presentations) |
| Videos - student-centred | Level 2: Providing Feedback |
| Videos - student-centred | Level 3: Portfolio Process |
| Videos - student-centred | Level 3: My General Goals |
| Videos - student-centred | Level 3: Setting General Goals |
| Videos - student-centred | Level 3: Peer Feedback |
| Videos - student-centred | Level 3: Giving Feedback |
| Videos - student-centred | Level 3: Receiving Feedback |

Find these resources and more: http://grover.concordia.ca/eppearl/resources/home_en.php





ABRA - ePEARL Link

Chapter 5

Introduction

Welcome to the section on ePEARL and ABRACADABRA, the link between these two highly interactive tools was intuitive! This link increases the possibilities for diverse reading materials, writing opportunities, as well as for extension activities.

Teachers who use these two tools for early literacy instruction in the classroom speak to the numerous benefits:

- Students are now able to quickly navigate all tools due to daily practice.
- ABRA activities prepare students to read ABRA books in ePEARL.
- ABRA spelling sentence activity helps students to type successfully in ePEARL.
- ABRA motivates students to complete ePEARL work in a timely manner.
- My students are becoming self regulating learners. They are setting goals, reflecting and giving feedback.
- From ABC to Level G, my students are now readers.
- They hear themselves read immediately after reading. This helps them to read fluently and with greater expression.
- Oral Presentations have improved. Students are thrilled to see themselves present! They are excited to see and their work.
- Students are able to recognize alphabet letters and sounds.
- Students are able to decode during guided reading.
- Students immediately and independently hear themselves read.
- Students think about their work, feel pride in their achievements, and make improvements to their work.
- Students are excited to see themselves, hear themselves, and share themselves through technology.

Shared by Miss Tanya Beccat, Cycle 1 Teacher, EMSB (CSLP International Conference, 2011)



ABRACADABRA and ePEARL are linked to facilitate student learning. Teachers are able to link their activities or stories in ABRA with ePEARL at any time simply by clicking on the ePEARL button at the bottom right of the screen. When students click on the ePEARL link they are brought to the welcome page in his/her portfolio.

Incorporating ePEARL in your ABRA activities will help teachers introduce students to the basic concepts of self-regulated learning.



Self-Regulated Learning

| Stage | Activity |
|------------|--|
| Planning | ePEARL allows students to set goals about what they want to do during the ABRA activity. |
| Doing | Clicking on My Readings allows students to record an ABRA reading, complete a reading response or reflect on developing abilities. Clicking on My Creations, students are able to use the text editor to answer a question prompted in ABRA, create an alternate ending to the story or draw and attach files to their portfolio. |
| Reflecting | Students can receive feedback on their work from parents and teachers. |

Why is this link important?

By implementing the ABRA-ePEARL link teachers can track their students' development. For example, teachers can use ePEARL for assessment purposes when doing the following ABRA activities: Comprehension monitoring, predicting, sequencing, summarizing, developing vocabulary, responding to texts, reading fluently and accurately, reading with expression, spelling words, spelling sentences, and writing their own pieces

How does the link work?

ABRACADABRA (hereafter referred to as ABRA) is built around five different modules. ePEARL provides a link to the Instructional module, which includes over 20 digital books with illustrations. Each book may be viewed and read from within ePEARL, thereby enabling students to store and monitor their reading progress. It also allows teachers and parents to track their students' or child's reading development.



Figure 1: The link to ABRA from My Readings

Link to ABRA

Digital Stories

The stories in ABRA are divided into five different genres, including: folk and fairy tales, poetry, fiction, non-fiction, and multicultural. Under folk and fairy tales, three french stories are now available.



Figure 2: Choosing an ABRA story

Choose a genre

Choose a story

ABRA has two features that are valuable for readers and teachers: 1) the "birdie" icon that is used to read aloud from the page on the screen; and 2) clickable words in the stories for phonetic sounding out and sight word help.

Scaffolding is important for the beginner reader. ABRA provides extra help so students can obtain the support they need to develop reading skills, when they work independently.

Figure 3: An ABRA reading in ePEARL

Birdie - read aloud

Record as student reads



ABRA Stories in French

Three ABRA stories are now available from the French environment.

TIP:

For additional ideas on how to use this link with students, teachers should click on the resources icon



Extension Activities

Students can also practice their creative writing skills in the My Creations area, which has similar features to the My Readings area and is also linked to ABRA. Here, teachers can encourage their students to write a new ending to a story or to imagine new characters.

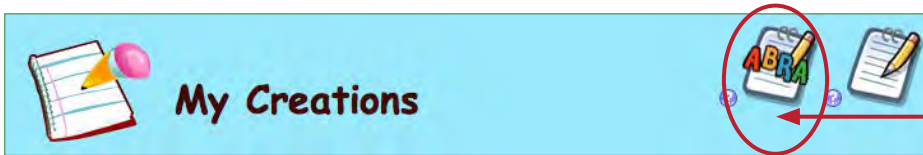


Figure 4: The link to ABRA from My Creations

[Link to ABRA](#)

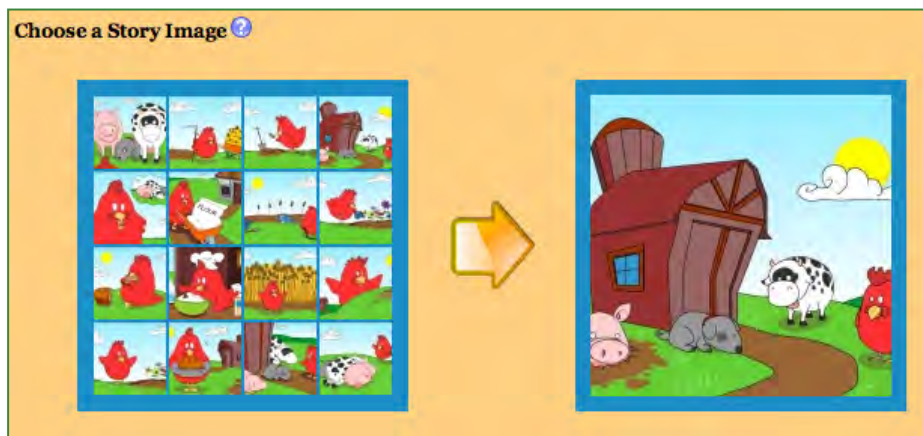


Figure 5: A selection of images available for each story

NOTE:

The link to ABRA is turned on/off at the school board (or district/division) level. Sub-administrators (see p. 30) may also turn the link on/off for individual schools within a board. If teachers do not see the ABRA icon on the My Readings and My Creations pages, they should contact a consultant within your board (division/district) and request that this feature be turned on.

Image Bank

Students may also choose their favourite picture or page from the story from the ABRA image bank simply by selecting one of the images. In addition, up to three files can be uploaded, offering the same flexibility as a regular reading.



Table 1: Resources available on the ABRACADABRA and ePEARL Teacher Resource Pages

| Type of Resource | Resource Name |
|---------------------------------|---|
| Lesson Plans - ABRA-ePEARL link | Basic Decoding |
| Lesson Plans - ABRA-ePEARL link | Setting Reading Goals |
| Lesson Plans - ABRA-ePEARL link | Sequencing |
| Lesson Plans - ABRA-ePEARL link | Prediction |
| Lesson Plans - ABRA-ePEARL link | Teaching Vocabulary |
| Lesson Plans - ABRA-ePEARL link | Comprehension Monitoring |
| Lesson Plans - ABRA-ePEARL link | Segmenting - Three-sound Word |
| Lesson Plans - ABRA-ePEARL link | Segmenting - Four-sound word |
| Videos | Level 1: Integrating ABRACADABRA & ePEARL in the Classroom |
| Videos | Level 1: The Benefits of Using ABRACADABRA and ePEARL Together |
| Videos | Using ABRA with ePEARL to Develop Prediction in Your Classroom |
| Videos | Introduction to Using ABRA-ePEARL in your classroom |
| Videos | The Benefits of Using ABRACADABRA and ePEARL Together (Level 1) |





ABRA - ePEARL Curriculum

Chapter 6



Planning

The planning resource was created to meet the needs of teachers and students early in the school year (September-October). The goal here is to engage students into forethinking about the outcomes in reading comprehension that they would like/expect to attain and about the methods that will help them achieve the outcomes. It includes 3 worksheets and a simple guide to introducing general and task goals to young students. This resource also links to other existing resources, print-based and multimedia.

Based on the Theory of Self-regulation, we know that part of students' achievement in the classroom heavily relies on some fundamental organizational, and regulatory skills; planning and reflecting are amongst these.

Links to major elements of the Quebec Education Program (QEP)

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|---|--|---|--|
| <p>Self-Regulation Theory</p> <p>Setting goals in ePEARL focuses on learning rather than performance goals and the setting of hierarchical goals which show the evidence of progress (Zimmerman, 2000)</p> <p>Strategic planning- implies identifying the methods which are appropriate for the task (Zimmerman, 2000)</p> | <p>Cross-Curricular Competencies:</p> <p>Competency 5 – To adopt effective work methods Key features: to espouse the objective, understand the instructions and visualize the elements of the task and understand the context of the task</p> <p>Evaluation Criteria: Understanding of the task to be performed</p> <p>Competency 6 - To use information and communications technology (ICT) Evaluation Criteria: Effective use of computer tools Recognition of successes and difficulties</p> | <p>Text Types, Structures and Features:</p> <p>-Self-expressive text: reflective texts: focussing on reflecting and evaluating own learning in reading/writing/production conferences, including sharing of integrated Portfolio</p> | <p>To use language to communicate and learn - 33%</p> <p>To write self-expressive, narrative and information-based texts</p> <p>To represent her/his literacy in different media 34%</p> |
| | <p>ELA Competency</p> <p>Competency 1: To read and listen to literary, popular and information-based texts.</p> | | |





Planning

| | | | |
|-----------|---|---------------------------------|---|
| Time | 30 minutes- 1 hour (1 - 2 ELA blocks) Good to review | ABRA-ePEARL connection activity | |
| Material | Worksheet, Computer, and ePEARL Level 1 | ABRA: Any text | ePEARL: My Readings: Planning activity |
| Objective | Students will be able to set a goal for themselves. | | |

PLANNING

1. Distribute the Planning activity worksheet (see last three pages)
2. Have students complete the worksheet, explain each of the features to them:
 - a. What is a goal?
 - b. The importance of setting a goal.

For example: A goal is a challenge, a way for you to improve on something that is difficult for you. Before you start to think of what you want to be better at...

Write your goal under *What I want to do*. Complete this sentence: *I want to...*

- c. What is an author? where will I find this information? where do I enter this information in ePEARL?
3. Login to the LTK and go to ePEARL
4. Click on New ABRA Reading and help your student choose an appropriate ABRA text (story)
5. Using the Planning activity worksheet, have students recopy the information into their ePEARL.

Tip: Help your students set **SMART** goals, **S**pecific, **M**easurable, **A**ttainable, **R**ealistic and **T**imely. See *worksheet for sample goals*.

Teacher Tip:

For more information on Logging in, Planning and Goal-setting, please visit:
<http://grover.concordia.ca/epearl/resources/>





Planning

WORKSHEET

In ePearl:



Planning your work in ePEARL

Edit Reading

Record a few pages of the book you are reading

Attached Audio

Record

Text Title * Write the book title here

Author * Who wrote the book?

Illustrator Who drew the pictures?

Who I am Reading With

None Dad Brother Sister

Date September 21 2010

What I Want To Do

Example of Goals:

1. I want to read faster
2. I want to read without making mistakes
3. I want to learn 2 new words
4. I want to finish this book before the end of the week
5. I want to choose harder books
6. I want to choose different books

Tip: - Help your students set specific, personal and challenging goals for themselves.
- Build a bank of goals for your class every couple of months

Teacher Tip:

- Help your students set specific, personal and challenging goals for themselves.
- Build a bank of goals for your class every couple of months





Summarizing

This teaching resource was created to help teachers scaffold the various elements of a story by introducing 'Wh' questions. Summarizing includes 4 activities and links to other existing print-based and multimedia resources.

Links to major elements of the Quebec Education Program

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|--|---|--|--|
| <p>Self-Regulation Theory</p> <p>Goal setting with a focus on learning rather than performance goals and the setting of hierarchical goals which show evidence of progress (Zimmerman, 2000)</p> <p>Reflection - Self evaluation comparing results to a standard goal</p> <p>Look back in the text to try and solve a problem (NRP)</p> <p>Restate or paraphrase a text in terms more familiar to readers (NRP)</p> | <p>Cross-Curricular Competencies:</p> <p>Competency 5 To adopt effective work methods Key features: to espouse the objective, understand the instructions and visualize the elements of the task and understand the context of the task</p> <p>Evaluation Criteria:</p> <ul style="list-style-type: none"> – Understanding of the task to be performed – Completion of the task – Analysis of the steps in the procedure – Perseverance in performing the task – Formulation of conclusions <p>Competency 6 - To use information and communications technology (ICT)</p> <p>Evaluation Criteria:</p> <ul style="list-style-type: none"> - Effective use of computer tools - Recognition of successes and difficulties | <p>Language-learning Processes:</p> <p>A. Response process: during reading/viewing: f. Recognizes the most common rhetorical conventions to build meaning: - sequence/chronology - cause/effect</p> <p>B. Writing process: - sequencing events or information to enhance reader's comprehension</p> <p>Text Types, Structures and Features: The student understands the purpose of the following structures and features and uses this knowledge to construct meaning when reading, listening to, and producing spoken or written texts(narrative; literary and information-based): plot structures and features (e.g. sequence of events)</p> | <p>To read and listen to literary, popular and information-based texts -33%</p> <p>Evaluation criteria:</p> <ul style="list-style-type: none"> - Constructing meaning; - Making connections; -Using structures and features of the text <p>To write self-expressive, narrative and information-based texts – 34%</p> <p>Evaluation criteria:</p> <ul style="list-style-type: none"> - Organizing texts; - Applying structures and features of the text. |
| <p>Goal Setting and Planning Sequencing, timing, completing, time management and pacing</p> <p>Keeping records and monitoring note-taking , lists of errors made , record of marks portfolio, keeping all drafts of assignments</p> | <p>ELA Competency</p> <p>Competency 1: To read and listen to literary, popular and information-based texts. Essential knowledge, reading strategies:</p> <ul style="list-style-type: none"> -Personal experience of the content of a text (semantic) - Perseverance when meaning making breaks down by making connections | | |



Summarizing

| | | | |
|-----------|--|----------------------------------|---|
| Time | 1 - 3 hours (2-4 ELA blocks) | ABRA-ePEARL connection activity: | |
| Material | Computer, an ABRA activity, text and ePEARL Level 1 | ABRA: Summarizing activity | ePEARL: Planning -->Setting a task goal |
| Objective | By summarizing, readers improve memory and identification of main ideas (NRP, 4-44). | | |

PLANNING

In ABRA

1. Go to your ABRA Teacher Resource Page
2. Click on *Skills, Understanding the Story* and select the *Summarizing* activity



• ABRA Teacher Resources



• ePEARL Teacher Resources



The screenshot shows the ABRA Teacher Resource Page interface. At the top, there are navigation tabs: Home, Stories, Skills, Resources, Best Practices, Assessment, and Communication. The 'Skills' tab is selected. Below the tabs, there are four main skill areas: Sounds, Letters and Words; Reading; Understanding the Story; and Writing. Under 'Understanding the Story', there are icons for 'activity', 'related stories', 'lesson plans', 'extension activities', and 'printables'. The 'related stories' section is expanded, showing a list of stories under the heading '> Summarizing > related stories'. The stories listed are: Folk and Fairy Tales (The Little Red Hen, The Dove and the Ant, The Three Billy Goats Gruff, Henny Penny, The Frogs and the Well), Fiction (Waterfall), and Multicultural (Waterfall).

In ePearl

1. Think about 3-4 goals related to Summarizing that would be appropriate for your students.
2. Always assess your students' readiness before moving on to more difficult activities. You may wish to stay on the same step for several weeks.
3. For example: "I want to remember the main points of this story."
4. Give your students some sentence starters:

"The main characters are..."

"After (main event) this happened..."

"The story started/finished by..."

"The lesson learnt was that..."



Summarizing – 1st Activity

DOING

In ABRA:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity (Tracking) and *Story Genre* (you selected).
2. Have students read the story individually

Discussion:

Talk about the main elements of the story (important, emotional, i.e sad, funny).

Review characters, places, and lessons learnt at the end of the story

Strategy: Question answering (who, what, when, where, why and how?)

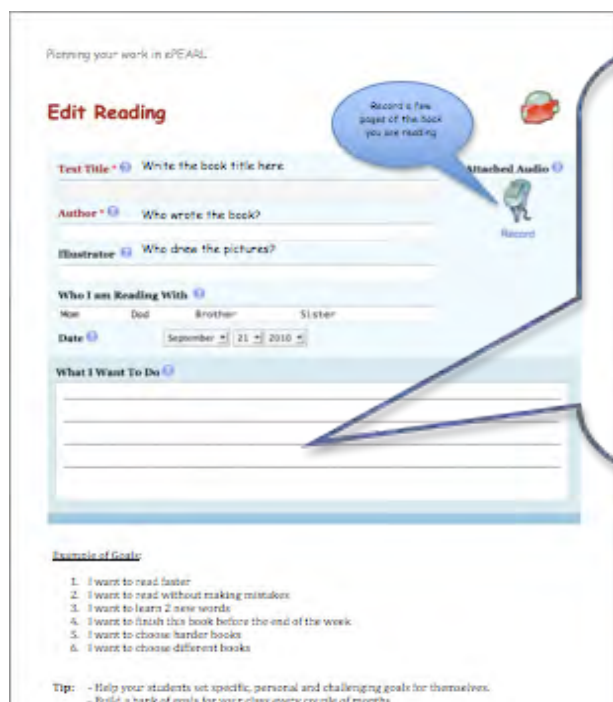


In ePEARL:

Discuss the importance of *Planning* with your students and introduce the task goals you came up with.

Watch the Video http://grover.concordia.ca/eppearl/videos/play.php?video=level2_english_task_goals

Distribute and have students complete the Planning worksheet. Each students should select one task goal.



Edit Reading

Record a few pages of the book you are reading

Text Title * Write the book title here

Author * Who wrote the book?

Illustrator * Who drew the pictures?

Who I am Reading With

Mom Dad Brother Sister

Date September 21 2010

What I Want To Do

Example of Goals

1. I want to read faster
2. I want to read without making mistakes
3. I want to learn 2 new words
4. I want to finish this book before the end of the week
5. I want to choose harder books
6. I want to choose different books

Tip: - Help your students set specific, personal and challenging goals for themselves.
- Build a bank of goals for your class every couple of months

Sample Goals

I will talk about the main ideas in the story

I will name the characters

I will describe the main ideas

I will remember what happened after...

Come up with your own:



Summarizing – 2nd Activity

DOING

Discussion:

- Talk about what you did in the first activity
- Review the main events in the story
- What was your favourite part of the story? Explain.



Teacher Tip:

For classroom management around recording, please go to: Teacher Resource Page and Click on Job Aid: Using ePEARL in your Lessons

In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Pair up students.
3. Take your students to 'My Readings', click on 'New ABRA Reading'.
4. Have them select the story they read in ABRA from the drop down menu.
5. Click on 'Record'.
6. Have one student operate the recorder and the other read the story (*then switch, don't forget to have student logout and have next student login with his information*).
7. The Recording saves automatically and can be continued and/or erased at any time (Go to: http://grover.concordia.ca/epearl/tutorial/l23_record.php for more info on recording).
8. Remind them to 'Save' their Reading.
9. If they read with a partner, have them enter the name under "Who I am reading with".
10. Students should enter their chosen goal (use worksheet for help).





Summarizing – 3rd Activity

DOING

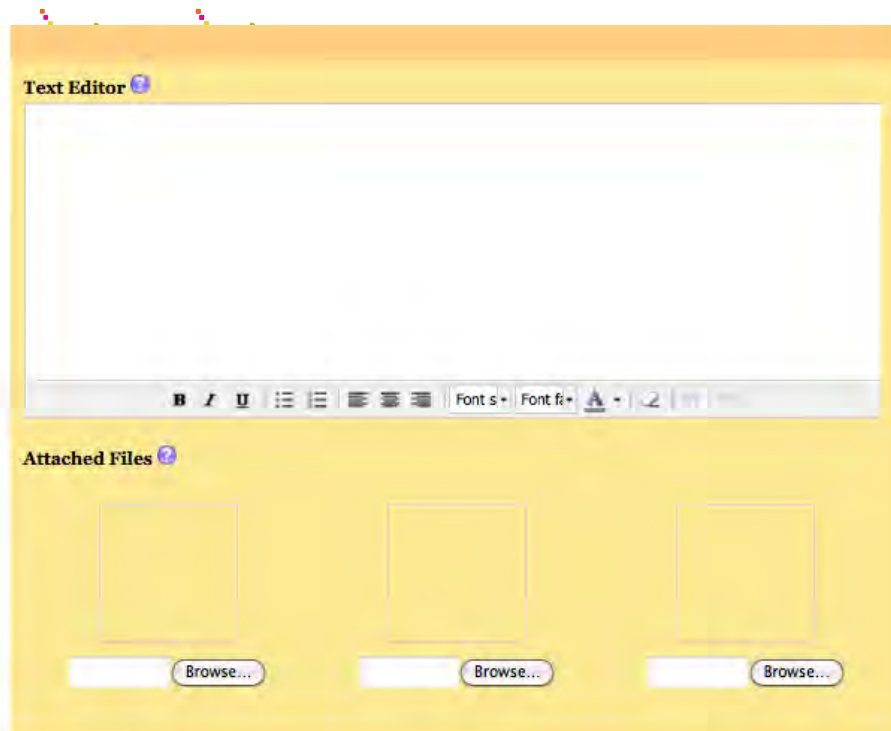
In ABRA:



1. Use Icon/logo to direct students to the appropriate activity.
2. Have students complete the Summarizing Activity in pairs or individually.

In ePearl:

1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Pair up students
3. Take your students to 'My Creations', click on 'New ABRA Creation'
4. Have them select the story they read in ABRA from the drop down menu.
5. Enter Story title
6. Students should type and answer questions about the story (Select 3 from who, what, where and when)
7. For the students who need an extra challenge, you may add *how* or *why* questions.
8. Students create a short summary of the story using their own words.
9. This may take several sessions. Allow students to work at their own pace.





Summarizing – 4th Activity

REFLECTION

In ePearl:




1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Open the reading or creation piece that was previously saved by the student related to the Summarizing activity. Click on Edit.
3. Have students review their goal.
4. Guide them to the '*Reflection*' tab and click on it.
5. Have the students Reflect on their goal or summary.
6. They can select a Question from the drop down menu, or answer a question you have asked them. For example: "Was your summary accurate?", "how could you have made it better?"



My Readings

| Text Title | Date |
|-----------------------------|----------|
| The Three Billy Goats Gruff | 01/09/09 |
| Canadian Wild Animals | 02/13/09 |
| La petite poule rouge | 03/24/09 |
| The Little Red Hen | 06/11/09 |
| Travail en art | 09/22/10 |
| Counting to Ten | 10/21/10 |
| The Four Seasons | 11/15/10 |
| I Can Move Like a ... | 11/18/10 |

The Little Red Hen
Date: 02/28/11

Illustration

Illustration

Browse...

Reflection

My Reflection

Add Question

Select a question from the list or write your own below.

Add

Students can answer the questions by:

1. *Illustration*
2. *Typing*
3. *Recording*

Teacher Tip:
For more information on Reflecting, go to:
<http://grover.concordia.ca/eppearl/tutorial/1-reflection.php>





Prediction

Prediction is an important strategy to develop in order to comprehend text when reading. It has been shown to be closely related to gains in reading comprehension. Prediction allows students to retrieve stored information about story genres based on the book cover, title page, author, illustration, etc... This prediction can shift or change based on the information provided in the text.

Links to major elements of the Quebec Education Program

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|---|---|---|---|
| <p>Self-Regulation Theory</p> <p>Goal setting - Analyzing the task and setting task goals in ePEARL can help students achieve and work towards the following competencies</p> <p>Strategic planning - Self evaluation comparing results to a standard goal</p> <p>Identifying the methods which are appropriate for the task (Zimmerman, 2000)</p> | <p>Cross-Curricular Competencies:</p> <p>Competency 3 Strategies for constructing meaning</p> <p>Evaluation Criteria:</p> <ul style="list-style-type: none"> – Understanding of the task to be performed – Completion of the task – Analysis of the steps in the procedure – Perseverance in performing the task – Formulation of conclusions | <p>Response Process:</p> <p>1. Prereading/viewing:</p> <p>a. Previews the text (e.g attends to the cover, dedication, title page and author's notes for clues that will add to understanding or enjoyment of the text)</p> <p>2. Reading/viewing</p> <p>b. Applies knowledge of cueing systems to construct meaning</p> <p>c. Uses a variety of reading strategies to make meaning of different text types</p> | <p>Communicating Ideas</p> <p>Constructing Meaning - 33%</p> |
| <p>Evidence</p> <p>"A record of the student's reading is maintained in an integrated ELA portfolio that may include reading samples, responses, drawings, preferences, presentations of group work or role-plays, self-evaluations, reflections and goals." (QEP, p74)</p> | <p>ELA Competency</p> <p>Competency 1: To read and listen to literary, popular and information-based texts.</p> <p>To construct meaning by applying appropriate reading strategies</p> <ul style="list-style-type: none"> - Drawing on prior knowledge | <p>Writing:</p> <p>1. Prewriting: Understands the purpose for the writing</p> <p>2. Drafting: Writes to a specific familiar audience</p> <p>3. Revision: Sequences information, events</p> | <p>To write self-expressive, narrative and information-based texts – 34%</p> <p>Evaluation criteria:</p> <ul style="list-style-type: none"> - organizing texts; - applying structures and features of the text. |
| <p>Keeping records and monitoring</p> <p>note-taking</p> <p>lists of errors made</p> <p>record of marks</p> <p>portfolio, keeping all drafts of assignments</p> | <p>Essential knowledge, reading strategies:</p> <ul style="list-style-type: none"> -Personal experience of the content of a text (semantic) - Perseverance when meaning making breaks down by making connections (p.77) | | |



Prediction

| | | | |
|-----------|--|---------------------------------|--|
| Time | 1 - 3 hours (2-4 ELA blocks) | ABRA-ePEARL connection activity | |
| Material | Computer, an ABRA activity, text and ePEARL Level 1 | ABRA: Prediction activity | ePEARL: My Readings: Reflection --> Writing activity |
| Objective | Students will be able to predict based on a feature of the book what the story is about. | | |

PLANNING

In ABRA

1. Go to your ABRA Teacher Resource Page.
2. Click on *Skills, Understanding the Story* and select the *Prediction* activity.
3. Review the Activity and Stories affiliated to this activity.
4. Select the most appropriate story for your students' current reading level.



• ABRA Teacher Resources



• ePEARL Teacher Resources



The screenshot shows the ABRA Prediction activity interface. At the top, there are icons for Sounds, Letters and Words; Reading; Understanding the Story; and Writing. Below these are tabs for activity, related stories, lesson plans, extension activities, and printables. The 'Prediction' activity is selected, showing a large open book with a red rooster on the left page and a white bear on the right page. The text 'Discuss then go to the next page' is on the right page. To the right of the book, there is a section titled 'Prediction' with an 'Activity Objective' and 'Group Facilitation Tips'.

Prediction

Activity Objective

Based on information from the story, the students will predict future events.

Group Facilitation Tips

This activity can be done as an oral or written project, individually, group, or whole class. Students can read the story as a group using the tracking function or have the page read by the computer using the audio icon. If done orally, encourage students to discuss their ideas with peers. You can add questions that may not be embedded in the program.

Teacher Tip:

If this is the first time your students are doing such an activity, encourage them to pick a story they have read before

In ePearl

1. Go to Creations.
2. Have students make a prediction (guess) about the story based on the book cover.
3. For Grade 2 students, choose a new and more challenging story.

For example: "This story is about farm or animals" and give your students some sentence starters:

"I think..." "This story is about..." "The picture shows..." "They look like..."




Prediction – 1st Activity



In ABRA:




1. Setup a station with computers and use icon/logo to direct students to the appropriate *Activity* (Prediction) and *Story Genre* (you selected).
2. Have students in small groups (3-4) answer the questions prompted by the computer.
3. Print out the attached worksheet and have one student make notes about the group's predictions.



ABRA-ePEARL Curriculum

Prediction

Worksheet



During the group Activity, have students use the following worksheet to write down their ideas and answers about the story.

Attached Text:

I think this story is about _____

The picture shows _____, I think this story is about

Discussion:

4. Introduce 'WH' questions: Who, What, Where, When and How? (*Review several times before moving on*)
5. Talk about the main elements of the story. Use the questions from the Prediction activity, and ask students orally.
6. Review main events.





Prediction– 2nd Activity



In ePearl:



1. Go to Creations and select the Story you chose for your students.
2. Encourage your students to type a goal if they want to and are confident doing so on their own, but it's not the objective of this activity.



3. Sample goals:

- "I want to guess what this story is about".
- "I want to think about what will happen next".
- "I want to write clearly".
- "I want to make no spelling mistakes".
- "I want to make a good sentence."

What I Want To Do

I want to write a complete sentence

Edit Creation

Text Title *
The Little Red Hen

Date * February 28 2011

What I Want To Do

Choose a Story Image

Text Editor

Attached Files

Browse... Browse... Browse...

1. Have students use their completed worksheet from the group discussion. They should select one of their predictions.
2. In the text editor, have students recopy their prediction. Allow them enough time to type.
3. Have one student type, while the other acts as an 'editor'. The editor monitors spelling mistakes, punctuation and capitalization while the other student focuses on typing. (then switch, *don't forget to have student logout and have next student login with his/her information*)





Prediction – 3rd Activity

DOING

Discussion: As a whole class, read the selected story from the Prediction activity. Talk about how students' predictions changed or varied.



1. Why did students have different predictions, based on what facts?
2. How did you say your predictions?
3. What made you to think...?
4. Have students complete the activity. Discuss. Encourage them to use facts and evidence from the story.

In ePEARL: As a whole class, read the selected story from the Prediction activity. Talk about how students' predictions changed or varied.



1. Go to Creations and select the Story you chose for your students. How did you say your predictions?
2. Click the 'edit' pencil icon next to the previously saved Creation on the Index page.

| My Creations | | | | | |
|--------------|--|--|--------------------------------|----------|--|
| Text Title | | | | Date ▼ | |
| | | | Black Bear | 11/12/08 | |
| | | | The Little Red Hen | 05/04/09 | |
| | | | The Little Red Hen-omar | 06/11/09 | |
| | | | The Frogs and the Well-coralie | 06/11/09 | |
| | | | Nancy and Cheryl | 09/04/09 | |
| | | | The Little Red Hen | 11/30/09 | |
| | | | The snow storm | 12/10/09 | |
| | | | grandpa dan | 01/22/10 | |
| | | | Untitled | 12/09/10 | |
| | | | The Little Red Hen | 02/28/11 | |

1. In the same text editor, have students write a sentence about their new interpretation of the story.
2. Allow them enough time to type. Use the suggested questions above in the Discussion section.
3. Have one student type, while the other acts as an 'editor'.
4. The editor monitors spelling mistakes, punctuation and capitalization while the other student focuses on typing. (then switch, don't forget to have student logout and have next student login with his/her information).

Text Editor ?

This story is not about _____, it's about _____

B *I* U [List Bulleted] [List Numbered] [List Disc] [List Circle] Font s Font f [Color] [Background Color] [Link] [Unlink]





Prediction – 4th Activity

REFLECTION

In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Open the Creation that was previously saved by the student related to the Prediction activity. Click on Edit.



| Text Title | | | Date ▾ |
|------------|--|--------------------------------|----------|
| | | Black Bear | 11/12/08 |
| | | The Little Red Hen | 05/04/09 |
| | | The Little Red Hen-omar | 06/11/09 |
| | | The Frogs and the Well-coralie | 06/11/09 |
| | | Nancy and Cheryl | 09/04/09 |
| | | The Little Red Hen | 11/30/09 |
| | | The snow storm | 12/10/09 |
| | | grandpa dan | 01/22/10 |
| | | Untitled | 12/09/10 |
| | | The Little Red Hen | 02/28/11 |

1. Have students review their goal(s) and predictions.
2. Guide them to the 'Reflection' tab and click on it.
3. Have the students Reflect.
4. They can select a Question from the drop down menu, or answer a question you have asked them.
5. For example: "How did your guess/prediction about the story change? Why did it change?"




The Little Red Hen
Date: 02/28/11

Illustration

Illustration ?

Browse...

Reflection

My Reflection ?

Add Question ?

Select a question from the list or write your own below.

Add

Students can answer the questions by:

← Illustration

or

← Typing

Teacher Tip:

To help your students, give them sentence starters:
"My prediction changed because..."





Sequencing

This teaching resource was created to help teachers scaffold the various elements of a story by introducing 'Wh' questions. Sequencing includes 4 activities and links to other existing print-based and multimedia resources.

Links to major elements of the Quebec Education Program (QEP)

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|--|--|---|---|
| <p>Self-Regulation Theory Goal setting with a focus on learning rather than performance goals and the setting of hierarchical goals which show evidence of progress (Zimmerman, 2000)</p> <p>Reflection - Self evaluation comparing results to a standard goal.</p> <p>Look back in the text to try and solve a problem (NRP).</p> <p>Restate or paraphrase a text in terms more familiar to readers (NRP).</p> | <p>Cross-Curricular Competencies: Competency 5 - To adopt effective work methods Key features: to espouse the objective, understand the instructions and visualize the elements of the task and understand the context of the task Evaluation Criteria: – Understanding of the task to be performed – Completion of the task – Analysis of the steps in the procedure – Perseverance in performing the task – Formulation of conclusions</p> <p>Competency 6 - To use information and communications technology (ICT)</p> <p>Evaluation Criteria: – Effective use of computer tools – Recognition of successes and difficulties</p> | <p>Language-learning Processes: a. Response process: during reading/viewing: b. Recognizes the most common rhetorical conventions to build meaning: – sequence/chronology – cause/effect c. Writing process: – sequencing events or information to enhance reader's comprehension</p> <p>Text Types, Structures and Features: The student understands the purpose of the following structures and features and uses this knowledge to construct meaning when reading, listening to, and producing spoken or written texts (narrative; literary and information-based): plot structures and features (e.g. sequence of events)</p> | <p>To read and listen to literary, popular and information-based texts -33%</p> <p>Evaluation criteria: – Constructing meaning – Making connections – Using structures and features of the text</p> <p>To write self-expressive, narrative and information-based texts – 34%</p> <p>Evaluation criteria: – Organizing texts – Applying structures and features of the text</p> |
| <p>Goal Setting and Planning Sequencing, timing, completing, time management and pacing</p> <p>Keeping records and monitoring note-taking, lists of errors made, record of marks portfolio, keeping all drafts of assignments</p> | <p>ELA Competency Competency 1: To read and listen to literary, popular and information-based texts. Essential knowledge, reading strategies:</p> <p>– Personal experience of the content of a text (semantic)</p> <p>– Perseverance when meaning making breaks down by making connections</p> | | |
| <p>Keeping records and monitoring note-taking lists of errors made record of marks portfolio, keeping all drafts of assignments</p> | <p>Essential knowledge, reading strategies: – Personal experience of the content of a text (semantic) – Perseverance when meaning making breaks down by making connections (p.77)</p> | | |





Sequencing

| | | | |
|-----------|--|---------------------------------|--|
| Time | 1 - 3 hours (2-4 ELA blocks) 1 - 3 hours (2-4 ELA blocks) | ABRA-ePEARL connection activity | |
| Material | Computer, an ABRA activity, text and ePEARL Level 1 | ABRA: Sequencing activity | ePEARL: Reflection -->Recording activity |
| Objective | Students will be able to analyze the structure of the text and reflect on the sequences of events in the text. | | |

PLANNING

In ABRA

1. Go to your ABRA Teacher Resource Page.
2. Click on *Skills, Understanding the Story* and select the *Sequencing* activity.



ABRACADABRA

• ABRA Teacher Resources



ePEARL

• ePEARL Teacher Resources

The screenshot shows the ABRA Teacher Resource Page with the 'Skills' tab selected. The page is divided into several sections:

- Top Navigation Bar:** Home, Stories, Skills (selected), Resources, Best Practices, Assessment, Communication.
- Skills Section:** Sounds, Letters and Words; Reading; Understanding the Story (circled in red); Writing.
- Activity Section:** activity, related stories, lesson plans, extension activities, printables.
- Sequencing > related stories:**
 - Folk and Fairy Tales:**
 - The Little Red Hen
 - The Dove and the Ant
 - The Three Billy Goats Gruff
 - Henny Penny
 - The Frogs and the Well
 - Fiction:**
 - Waterfall
 - Non-Fiction:**
 - How a Bean Sprouts
 - Multicultural:**
 - Waterfall
- Left Sidebar:** Prediction, Comprehension Monitoring, Sequencing (circled in red), Summarizing.

In ePearl

1. Use the 'Planning' teaching materials you got during training: TM1_Planning & TMI_PlanningWS
2. Review these, and think about some goals (3-4) related to Sequencing that would be appropriate for your students.
3. For example: "I will put this story in the right order."
4. Prepare enough copies of the Planning worksheet for each of your students.





Sequencing – 1st Activity

DOING

In ABRA:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity (Tracking) and *Story Genre* (you selected).
2. Have students read the story as a whole class or individually.

Discussion:

Talk about the main elements of the story (beginning, middle, end).

Number them (either 3 or 5).

Review main events.



Extension Activity (ePEARL):

Use the attached worksheets and have students complete. This can be done in pairs or individually.

In ePEARL:

Discuss the importance of *Planning* with your students and introduce the task goals you came up with and write them up on the board.

Watch the Video http://grover.concordia.ca/eppearl/videos/play.php?video=level2_english_task_goals

Have students complete the Planning worksheet (when they are ready for this step, in the meantime do orally). Each students should select one task goal.

Planning your work in ePEARL

Edit Reading

Text Title * Write the book title here

Author * Who wrote the book?

Illustrator * Who drew the pictures?

Who I am Reading With

None Dad Brother Sister

Date September 21 2010

What I Want To Do

Examples of Goals

1. I want to read faster
2. I want to read without making mistakes
3. I want to learn 2 new words
4. I want to finish this book before the end of the week
5. I want to choose harder books
6. I want to choose different books

Tip: - Help your students set specific, personal and challenging goals for themselves.
- Build a bank of goals for your class every couple of months

Sample Goals

I will put this story in order
I will find the first part of the story
I will know what comes after...
I will understand the story

Come up with your own:





Sequencing – 2nd Activity



In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Pair up students.
3. Take your students to 'My Readings', click on 'New ABRA Reading'.
4. Have them select the story they read in ABRA from the drop down menu.
5. Click on 'Record'
6. Have one student operate the recorder and the other read the story (*then switch, don't forget to have student logout and have next student login with his information*)
7. The Recording saves automatically and can be continued and/or erased at anytime
8. Remind them to 'Save' their Reading



9. If they read with a partner, have them enter the name under "Who I am reading with".

Teacher Tip:

Teacher Tip: For classroom management ideas around recording, please go to:
http://grover.concordia.ca/epearl/resources/home_en.php
 Click on Job Aid: Using ePEARL in your Lessons



Sequencing – 3rd Activity

DOING

In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Take your students to 'My Readings', click on 'New ABRA Reading'.
3. Have them select the story they read in ABRA.
4. Using their Planning worksheet they completed last time, have them type in their goal under "What I want to do".
5. If they read with a partner, have them enter the name under "Who I am reading with".



Edit Reading

Text Title * 

I Can Move Like a ...

Author * 

CSLP

Illustrator 

CSLP

Who I am Reading With 

Sam

Date 

November 18 2010

What I Want To Do 

Sample Goals

I want to put this story in order

I want to find the first part of the story

I want to know what comes after...

I want to understand the story

Record

In ABRA:



1. Use Icon/logo to direct students to the appropriate activity.
2. Have students complete the Sequencing Activity in pairs or individually.

Teacher Tip:

Encourage your students to watch the Demo at the beginning of each ABRA activity.



Sequencing – 4th Activity

REFLECTION

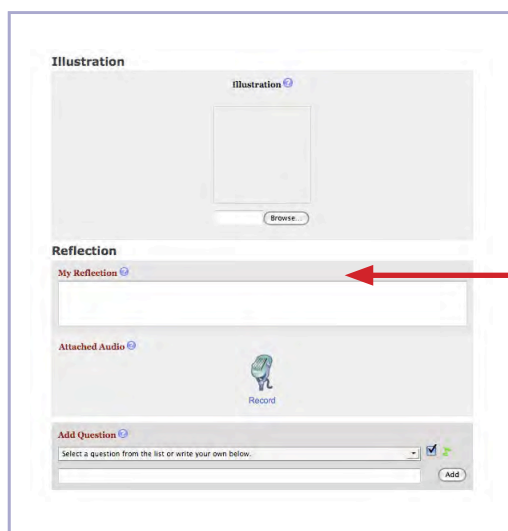
In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Open the reading piece that was previously saved by the student related to the Sequencing activity. Click on Edit.
3. Have students review their goal.
4. Guide them to the '*Reflection*' tab and click on it.
5. Have the students Reflect on their goal.
6. They can select a Question from the drop down menu, or answer a question you have asked them.
For example: "Did you meet your goal? Why? Why not?"



| Text Title | Date |
|-----------------------------|----------|
| The Three Billy Goats Gruff | 01/09/09 |
| Canadian Wild Animals | 02/13/09 |
| La petite poule rouge | 03/24/09 |
| The Little Red Hen | 06/11/09 |
| Travail en art | 09/22/10 |
| Counting to Ten | 10/21/10 |
| The Four Seasons | 11/15/10 |
| I Can Move Like a ... | 11/18/10 |

Students can answer the questions by:

1. *Illustration*
2. *Typing*
3. *Recording*

Teacher Tip:
For more information on Reflecting, go to:
<http://grover.concordia.ca/epearl/tutorial/reflecting.php>





Story Elements

This teaching resource was created to help teachers scaffold the various elements of a story by introducing 'Wh' questions. Story Elements includes 5 activities and links to other existing print-based and multimedia resources.

Links to major elements of the Quebec Education Program

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|---|---|---|---|
| <p>Self-Regulation Theory</p> <p>Goal setting with a focus on learning rather than performance goals and the setting of hierarchical goals which show evidence of progress (Zimmerman, 2000)</p> <p>Reflection - Self evaluation comparing results to a standard goal.</p> <p>Look back in the text to try and solve a problem (NRP).</p> <p>Restate or paraphrase a text in terms more familiar to readers (NRP).</p> | <p>Cross-Curricular Competencies:</p> <p>Competency 5 To adopt effective work methods Key features: to espouse the objective, understand the instructions and visualize the elements of the task and understand the context of the task</p> <p>Evaluation Criteria:</p> <ul style="list-style-type: none"> – Understanding of the task to be performed – Completion of the task – Analysis of the steps in the procedure – Perseverance in performing the task – Formulation of conclusions <p>Competency 6 - To use information and communications technology (ICT)</p> <p>Evaluation Criteria:</p> <ul style="list-style-type: none"> - Effective use of computer tools - Recognition of successes and difficulties | <p>Language-learning Processes:</p> <p>a. Response process: during reading/viewing: b. Recognizes the most common rhetorical conventions to build meaning: - sequence/chronology - cause/effect c. Writing process: - sequencing events or information to enhance reader's comprehension</p> <p>Text Types, Structures and Features: the student understands the purpose of the following structures and features and uses this knowledge to construct meaning when reading, listening to, and producing spoken or written texts(narrative; literary and information-based): plot structures and features (e.g. sequence of events)</p> | <p>To read and listen to literary, popular and information-based texts -33%</p> <p>Evaluation criteria:</p> <ul style="list-style-type: none"> - Constructing meaning; - Making connections; - Using structures and features of the text <p>To write self-expressive, narrative and information-based texts – 34%</p> <p>Evaluation criteria:</p> <ul style="list-style-type: none"> - Organizing texts; - Applying structures and features of the text. |
| <p>Goal Setting and Planning Sequencing, timing, completing, time management and pacing.</p> | <p>ELA Competency</p> <p>Competency 1: To read and listen to literary, popular and information-based texts.</p> | | |
| <p>Keeping records and monitoring note-taking, lists of errors made, record of marks portfolio, keeping all drafts of assignments.</p> | <p>Essential knowledge, reading strategies:</p> <ul style="list-style-type: none"> -Personal experience of the content of a text (semantic) - Perseverance when meaning making breaks down by making connections (p.77). | | |



Story Elements

| | | | |
|-----------|--|---------------------------------|--|
| Time | 1 - 3 hours (2-4 ELA blocks) 1 - 3 hours (2-4 ELA blocks) | ABRA-ePEARL connection activity | |
| Material | Computer, an ABRA activity, text and ePEARL Level 1 | ABRA: Story Elements activity | ePEARL: My Readings: Response --> Writing activity |
| Objective | Students will be able to analyze the structure of the text and reflect on the text's events. | | |

PLANNING

In ABRA

1. Go to your ABRA Teacher Resource Page.
2. Click on *Skills, Understanding the Story* and select the *Story Elements* activity.
3. Review the Activity and Stories affiliated to this activity.
4. Select the most appropriate story for your students' current reading level.
5. Take the Questions in the activity, and discuss orally as a group activity.



• ABRA Teacher Resources



• ePEARL Teacher Resources



The screenshot shows the ABRA Teacher Resource Page with a navigation bar at the top: Home, Stories, Skills, Resources, Best Practices, Assessment, and Communication. Below the navigation bar, there are icons for 'Sounds, Letters and Words', 'Reading', 'Understanding the Story', and 'Writing'. A sidebar on the left contains icons for 'Prediction', 'Comprehension Monitoring', 'Sequencing', 'Summarizing', and 'Vocabulary'. The main content area is titled '> Story Elements' and features a colorful illustration of a piñata. To the right of the illustration, the text reads: **Story Elements**, **Activity Objective** (The students must answer questions about events that took place in a story.), **Group Facilitation Tips** (This activity can be done individually or in small groups. After reading a story, students are asked story related questions where they must select the correct one out of three possible answers. They can take turns selecting the answer and hitting the piñata.), and **Content/Levels**.

Teacher Tip:

Prepare enough copies of the Planning worksheet for each of your students.

In ePearl

1. Use the 'Planning' teaching materials you got during training: TM1_Planning & TMI_PlanningWS
2. Review these, and think about 3-4 goals related to Story Elements that would be appropriate for your students.

For example: "I will think about important parts of the story."



Story Elements – 1st Activity



In ABRA:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity (Tracking) and *Story Genre* (you selected).
2. Have students read the story as a whole class or individually.

Discussion:

Introduce 'WH' questions: Who, What, Where, When and How? (Review several times before moving on)

Talk about the main elements of the story.

Use the Questions from the Story Elements activity, and ask students orally.

Review main events.

Extension Activity:

Use the attached worksheets and have students complete them. This can be done in pairs or individually.

Teacher Tip:

Make sure you use the Questions from the story the students read. If it is not available, create your own.

Story Elements Worksheet

The three Billy Goats Gruff

Draw a line to the correct answer. Trace over the first line.

| | |
|--|--|
| Who were the main characters in the story? | <input type="checkbox"/> The three goats living in the forest <input type="checkbox"/> The fish in the water under the bridge <input type="checkbox"/> The three Billy Goats Gruff |
| When did the story take place? | <input type="checkbox"/> A long time ago <input type="checkbox"/> Late at night <input type="checkbox"/> In the summer |
| What was the problem about? | <input type="checkbox"/> The goats and the big brown troll, and the two were in a jam <input type="checkbox"/> The goats decided not to cross the bridge after all <input type="checkbox"/> The goats crossed the bridge in a race |
| Where did the story take place? | <input type="checkbox"/> Deep in the forest <input type="checkbox"/> On a bridge outside the forest <input type="checkbox"/> On a ship in the ocean |



Story Elements – 2nd Activity

DOING

Discussion:

Talk about what you did last time and review 'WH' questions and the main elements of the story.

In ABRA:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Pair up students.
3. Take your students to Story Elements and choose the same story as in the 1st Activity.
4. Have students complete the activity. Discuss.



Story Elements – 3rd Activity

DOING

In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Following the Recording activity, now have students write a story response.
3. Have them select 1, 2 or 3 questions, which they answered in the Story elements ABRA activity (refer to worksheet if necessary).

My Creation

 Creation
  Reflection

The Three Billy Goats Gruff

Date 07/13/11



What I Wanted To Do Updated 07/13/11
I will practice 'when' questions more

Story Image



Attached Text:

When did Big get off the bridge?

When did Bigger come on the bridge

When did the huge troll come out?

When did biggest cross teh bridge?

Feedback

Edit Feedback

Save

Story Elements Worksheet

The Three Billy Goats Gruff

Draw a line to the correct answer. Then over the first box.

| | |
|---|---|
| When were the goat characters in the story? | <input type="checkbox"/> The oldest goats living in the forest <input type="checkbox"/> The kids in the water under the bridge <input type="checkbox"/> The whole Billy Goats Gruff |
| When did the troll come out? | <input type="checkbox"/> A long time ago <input type="checkbox"/> Last night <input type="checkbox"/> In the summer |
| When was the problem solved? | <input type="checkbox"/> The goats did not go over the bridge and the troll was sad <input type="checkbox"/> The goats did not go over the bridge and the troll was happy <input type="checkbox"/> The goats crossed the bridge in a safe |
| When did the troll come out? | <input type="checkbox"/> Deep in the forest <input type="checkbox"/> On a bridge outside the forest <input type="checkbox"/> On a step in the ocean |

4. Go to [Creations](#).
5. Have students enter/type:
 - a. Their questions
 - b. Their goals
6. Then you can Print the sheet and answer the questions or type directly into ePEARL and answer questions.

Teacher Tip:

Skip the Planning worksheet step, if your students are now comfortable typing directly into ePEARL



Story Elements – 4th Activity



In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.
2. Take your students to 'My Readings', click on 'New ABRA Reading'.
3. Have them select the story they read in ABRA, i.e. The Three Billy Goats Gruff.
4. Have students complete the Planning worksheet first.
5. Using the Planning worksheet, have them type in their goal under "What I want to do".
6. If they read with a partner, have them enter the name under "Who I am reading with".

Edit Reading

Text Title * ⓘ
I Can Move Like a ...

Author * ⓘ
CSLP

Illustrator ⓘ
CSLP

Who I am Reading With ⓘ
Sam

Date ⓘ
November 18 2010

What I Want To Do ⓘ

Record

Teacher Tip:

Skip the Planning worksheet step, if your students are now comfortable typing directly into ePEARL

Sample Goals

- I will answer questions about the story
- I will learn about 'WH' questions
- I will create new questions
- I will practice more 'When' questions





Story Elements – 5th Activity

REFLECTION

In ePearl:



1. Setup a station with computers and use icon/logo to direct students to the appropriate activity.

2. Open the writing piece that was previously saved by the student related to the Story elements activity. Click on Edit.
3. Have students review their goal.
4. Guide them to the '*Reflection*' tab and click on it
5. Have the students Reflect on their goal.
6. They can select a Question from the drop down menu, or answer a question you have asked them.
For example: "How did you meet your goal?"

| Text Title | Date |
|-----------------------------|----------|
| The Three Billy Goats Gruff | 01/09/09 |
| Canadian Wild Animals | 02/13/09 |
| La petite poule rouge | 03/24/09 |
| The Little Red Hen | 06/11/09 |
| Travail en art | 09/22/10 |
| Counting to Ten | 10/21/10 |
| The Four Seasons | 11/15/10 |
| I Can Move Like a ... | 11/18/10 |



Illustration

Illustration

Reflection

My Reflection

Attached Audio

Add Question

Select a question from the list or write your own below.

Students can answer the questions by:

1. *Illustration*
2. *Typing*
3. *Recording*

Teacher Tip:

For more information on Reflecting, go to:
<http://grover.concordia.ca/epearl/tutorial/reflecting.php>





Reflection

This teaching resource was created to help teachers encourage their students' reflections. Reflecting is a multi-step process and scaffolding at every level can help make reflections deeper and more meaningful.

Links to major elements of the Quebec Education Program (QEP)

| ePearl | QEP | Progression of Learning | New Evaluation Framework |
|---|--|---|---|
| <p>Self-Regulation Theory</p> <p>Analyzing the task - setting task goals and reflecting in ePEARL can help students achieve and work towards the following competencies --></p> <p>Strategic planning-Reflection</p> <p>Identifying the methods which are appropriate for the task</p> <p>Reflecting on what worked and didn't work. Thinking about what we will do differently next time (Zimmerman, 2000)</p> | <p>Cross-Curricular Competencies:</p> <p>Competency 3 – To exercise critical judgment. Relevant key feature: To express his/her judgment - to articulate and communicate his/her viewpoint, to justify his/her position with reasons and arguments.</p> <p>ELA Competencies</p> <p>Competency 2 - To write self-expressive, narrative and information-based texts.</p> <p>Relevant key features: To construct a profile of self as writer, to evaluate his/her writing development</p> <p>Evaluation Criteria: Talks about own writing in the context of portfolio</p> <p>Competency 4 - To use language to communicate and learn. Essential knowledges: Talk for learning and thinking (p.103)</p> <p>Self-evaluation (p.107):</p> <ul style="list-style-type: none"> - Participating in student/ teacher conferences to identify and discuss strategies, and set personal and group learning goals; - Maintaining an integrated portfolio. | <p>Text Types, Structures and Features:</p> <p>Self-expressive text</p> <p>Speaking: reflective texts: focusing on reflecting and evaluating own learning in reading/ writing/ production conferences, including sharing of Integrated Portfolio</p> <p>NOTE: All these above are done with the teacher's guidance in Cycle One, as per the Progression of Learning</p> | <p>To use language to communicate and learn - 33%</p> <p>To write self-expressive, narrative and information-based texts – 34%</p> <p>To represent her/his literacy in different media 34%</p> |





Reflection

"I believe that the theme 'again and again' is paramount in cycle one. Children (people) don't always 'get it' on the first round, or second, or third. Children love to do the same activity again and again." Peter Simons, Cycle 1 teacher, CQSB

PLANNING

Reflection is the ability to look back on something, connect with your feelings about it and evaluate the experience (Boud, Keogh and Walker, 1985). For Cycle 1 students, reflection is an abstract concept. Unless they have heard the term before or have had it explained to them, Cycle 1 students will most likely draw a developmental normal blank. Tying their reflections to their goals allows young learners to begin to see the path of learning.



Classroom Ideas for Reflection:

1

Introduce an activity or creation the way you usually do it. It should be something that students are

somewhat familiar with and something not completely new. For instance, if it is their first time writing for you, skip goal setting and come back to it when they are familiar with the task.

2

Before getting started with the actual activity or creation, *set goals together*. With your students sitting

together on the floor, ask them what kinds of things they remember about what they will be working on. For example, what do they remember about writing, reading, math or working together? Let's use writing as an example.

Students might say things like:

- "we learned about capitals"
- "putting a dot at the end"
- "making a space between the words"

Teacher Tip:

Repeat steps 2 & 3 several times!

Write these down on a flip chart, on the board or model through SMART board (whatever you usually do). Suggest some goals of your own that are important to you, such as: "use a new word" or "use a word from the Word Wall" or whatever you happen to be working on at the time. Ask students what their goals will be and listen to a few students. This will allow student who don't quite get it to listen to other children work through goal setting.

3

With students back in their seats, ask them to *choose one or two goals for themselves* and write them on a

goal-setting sheet. Students choose their goals and write them in. If they are very early or non-writers, you have a few options: they can illustrate their goals, you can choose to scribe for them or hand out a small sheet with the goals that you chose for the whole class. Initially, goals and strategies will be mixed together. Using the Word Wall is a strategy, but also a goal for a Cycle 1 student.





Reflection – 1st Activity

PLANNING

In ePEARL:



In ePEARL, use the Planning worksheet and do Step 3 again: “Ask students to choose one or two goals for themselves and write them on a goal-setting sheet. Students choose their goals and write them in.” This time have students recopy the chosen goals onto their Planning worksheet.

Planning your work in ePEARL

Edit Reading

Record a few pages of the book you are reading

Text Title * Write the book title here

Author * Who wrote the book?

Illustrator * Who drew the pictures?

Who I am Reading With

None Dad Brother Sister

Date September 21 2010

What I Want To Do

Example of Goals:

1. I want to read faster
2. I want to read without making mistakes
3. I want to learn 2 new words
4. I want to finish this book before the end of the week
5. I want to choose harder books
6. I want to choose different books

Tip: - Help your students set specific, personal and challenging goals for themselves.
- Build a bank of goals for your class every couple of months.

Overview

A. Set Goals

1. Introduce the activity
2. Brainstorm goals in a group
3. Choose a goal

B. Do the Activity

1. Reflect orally in a group setting
2. Conference one-on-one or in small groups
3. Use prompts and scaffolding
4. Consider a journal

Introduce ‘WH’ questions (Review several times before moving on)

Talk about the main elements of the story.

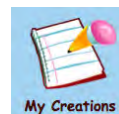
Use the Questions from the Story Elements activity, and ask students orally.

Review main events.

Extension Activity:

Use the attached worksheets and have students complete. This can be done in pairs or individually.

In a separate session, have students login to *ePEARL* and go to *My Creations*.



Have students give a title to their writing task and choose one of the goals they transcribed onto their planning worksheet and type it into the provided space in *ePEARL* (see below).

What I Want To Do

I want to write a complete sentence

Allow enough time for students to type their goal. This should be the only task for this session.



Reflection– 2nd Activity

DOING

Do the activity or creation you were planning with your students - for example, writing workshop: Remind them about their goals as they are working. Keep the goal-setting sheet with their work, either stapled to the back or in their folder.

If you think your students are ready to take this next step, try it!

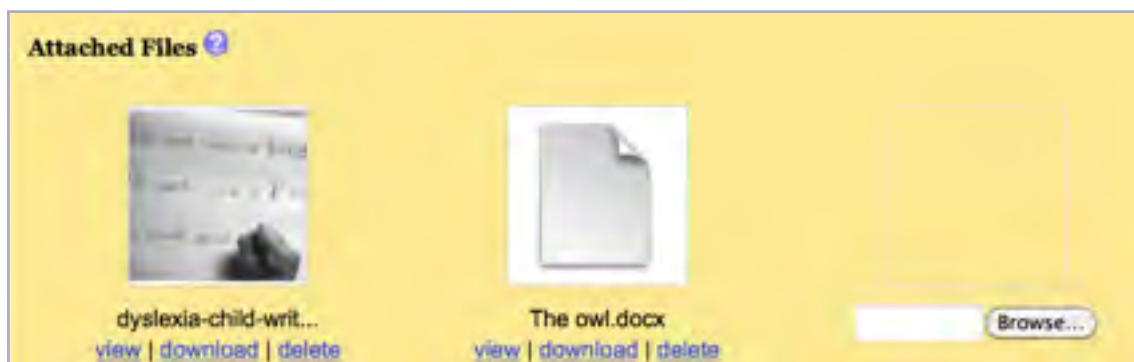


In ePearl:

Go to [My Creations](#). Open the writing task previously saved. Have students complete their writing task.



Students can type their work/sentences/paragraph directly into the text editor. The font size, style and colour can be changed.



You can also attach a written copy of the students' work by scanning the sheet or taking a digital picture, and attaching it to the student's [ePEARL Creation](#).

Don't forget to Save!

Reflection – 3rd Activity

REFLECTION

In ePearl: Now comes the time to look back on what you wanted to do (goals) and what you actually did. This is *Reflection*! You might be tempted to skip this step, but don't! Reflection is what allows students to see the link between their goals and their learning. This link sets them up for a lifetime of success in whatever they try to do.



1

There are different ways of approaching reflection in Cycle 1. Bring back the goal-setting sheet you made with your students at the beginning, or write the different goals on the board. ***Start with all the children on the floor with you.*** Ask them if they remember what their specific goals were and listen as they tell you.

Questioning the students allows them to dig deeper and be more precise. You are looking for two things when you ask them about their goals: proof and strategies. Ask students:

- Did you reach the goal you set for yourself?
- How do you know?
- What did you do to reach this goal?
- How do you feel about your work?
- What will you do next time?

At this stage, it might be helpful if students had their work in front of them, so that they could provide proof and identify or remember their strategies.

2

Conferencing with a student one-on-one or in small groups is another way to approach reflection. It is easiest to do when the other students are busy with a task that is familiar to them. The same questions can be asked at that time.

3

Prompts and scaffolding help Cycle 1 students when it is time to reflect in writing. Prompts can be written on the board or on a flip-chart paper.

Sample Prompts:

I liked...

I can ...

I feel...

Next time, I will ...

4

Journals are another way to encourage reflection on learning. Children can illustrate their journals at first and write key words, or record their thoughts orally. As they become confident writers, their journal/portfolio can contain more written pieces.



In *ePEARL* have students open the writing task they previously worked on and saved. Click on the *Reflection* tab and *Edit*. Students can then enter their reflection or answer different questions related to their goals and creative piece.



Reflection

REFLECTION

Reflection is specific, targeting selected pieces and providing a rationale

In Cycle 1, students begin by choosing pieces based on how much they enjoyed working on them, or what mark they got. After goal setting becomes the norm, most

Reflection is on-going, taking place naturally as

Rare is the Cycle 1 teacher who doesn't reflect with her students in some manner, regardless of portfolios. Most of the time, this reflection is done in a whole-group setting, with children sitting on the floor and the teacher

Reflection is modeled, by the teacher and by peers, to share vocabulary and

In Cycle 1, this is what carpet time, floor time, circle time, whatever you call it, is for. This is where students can listen to other students share their reflections. A teacher can also reflect out loud on some of her own actions. She can say "Last time, I asked you to bring me your work, but that didn't work so well. because there

Reflection is...

Reflection is scaffolded so that students get used to

Cycle 1 students need prompts. They need sentence starters on a large sheet on the wall and partially-filled in photocopied reflection sheets. It also helps if reflection is done orally for a while

Reflection is linked to goal setting, so that students see a clear link

When students set a goal, they have something about which to reflect. It is easier to look at something and say "I feel good about this because I wrote my name on it" than it is to look at something and wonder what on

Reflection is general, as students may be asked to sum up

This is fun in Cycle one because progress is so obvious, even to the students! Every three months, have students take a look back at their work and compare something from the beginning of that





ISIS-21

Chapter 7



An Introduction to ISIS-21

This collaborative project titled ISIS-21 (named after the Egyptian goddess of magic and giver of life) seeks to teach children and adolescents about the inquiry process and develop their competencies in information literacy.

The entire multi-year \$1.5 million project will involve the research and development of web-based bilingual software geared to students, teachers, parents, and school library personnel from late elementary to grade 12. Each module will address the fundamental components of the inquiry process, including, how to articulate an information need, effectively use internet search tools, evaluate sources, and synthesize, integrate and use the information. These skills and competencies are part of every provincial curriculum throughout Canada. For example, in Quebec, all nine cross curricular competencies will be addressed, especially Using information, Exercising critical judgment, Using information and communication technology, and Communicating appropriately. See also the American Association of School Librarians' Standards for the 21st Century Learner at <http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>

In 2009, a \$100,000 grant from Inukshuk Wireless funded a pilot project that resulted in the development of our ISIS-21 prototype. The prototype has been designed according to current research evidence on effective pedagogical strategies for online learning, coupled with input from pedagogical consultants, teachers and librarians. It is designed to be used in student-centred, constructivist classrooms.

The software introduces late elementary/early secondary students (and their teachers) to the fundamental components of information literacy by guiding students through the inquiry process. Topics covered in the tool include the articulation of a research topic and corresponding sub-topics, the selection of appropriate retrieval tool(s), the construction

of search strategies, the evaluation of the information found, and the compilation of a final list of sources used.

ISIS-21 is linked to the CSLP-LEARN's electronic portfolio software called ePEARL, thereby enabling students to conduct their research within an environment that supports self regulated learning. (For further information on this link, please refer to the section entitled Self-regulated Learning Components: Links to ePEARL.) Additional funding is being pursued for further development.

TIP:

Students should be introduced to each of the concepts presented within ISIS-21 prior to using the software. It is highly recommended that a class activity be conducted for each step as many of these concepts will be new for the students. Students should also be encouraged to consult the Help as required.





We ultimately hope to help ensure that all Canadians are adequately prepared for the knowledge society by providing them with a solid foundation in these important lifelong learning skills.

Please note, although the LTK is installed at all nine English school boards in Quebec, ISIS-21 has been activated for our EMSB and LBPSB pilot schools only. Outside of Quebec, the software is being field tested by some schools in Alberta. Please contact Anne Wade at wada@education.concordia.ca if you wish to gain access to the software.

We hope you enjoy using our prototype and we look forward to receiving important feedback from you and your students so that we can continue to improve the software.

This Guide

This guide is designed to provide basic information on the ISIS-21 software to help get teachers started using the software in their classroom. A general overview of the features as seen by the students, structure of the software and inquiry process is provided, followed by a detailed description of each step of the process. In the latter instance, pages are divided by:

- Purpose: A brief explanation of the purpose of the step.
- Screen capture: A screen capture of the step.
- Teacher Tips: Advice on how to instruct students on the particular step.
- Additional Resources: Links are provided for further information on the particular concept being addressed or for examples of learning evaluation situations.
- Help: Specific support may be found within the software by clicking on the help icon next to most functions. The Help text has also been included here.

This guide also provides an overview of the Teacher Environment, including information on how to view ISIS-21 student work and provide feedback (see page 52).



ISIS-21 Features




The Toolbar



Figure 1: ISIS-21 Toolbar located at the bottom of the ISIS-21 screen.

1. Start New Project: Students create a new project, describe the task at hand, and their understanding of the task.

2. ISIS-21 Steps: Please refer to the section titled “ISIS-21 Steps” for a complete review of these steps. The coloured lights in the toolbar indicate the status of each step:

-  Yellow light: Step has not been completed
-  Blue light: Step has been completed
-  Green light: Active step

3. ISIS-21 Road Map: At any point during the inquiry process, students may click on this icon to view a graphic of the entire process and to learn which steps they have completed so far.

The Banner

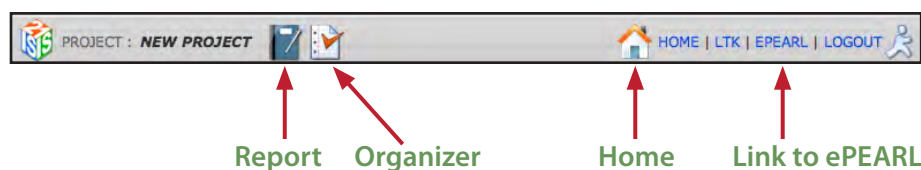


Figure 2: ISIS-21 Banner

The Report: At any point during the inquiry process, students may click on this icon to view all work completed so far. The ePEARL features do not appear in the Report (e.g. Goals, Strategies, Reflections), but can be viewed within ePEARL.

The Report icon is linked to an ePEARL artifact. A teacher or student who wishes to access a Report can also do so at any time by logging into ePEARL, opening the relevant artifact, and clicking on the Report icon below the recorder. Note, the report is only viewed in View mode, not Edit mode.

TIP:

If changes are made to an ISIS-21 work, these will not appear in the Report until the student logs out and logs in again, as this will refresh the screen.



The Organizer: This is a list of sources that a student has marked for inclusion (i.e. a working bibliography). The citation for each source is automatically formatted and the Notes section remains active so the student can add comments. This list should be used during Phase 3, when students are taking notes about their sources.

Home: This will bring students back to their list of projects. From here, they can [add a new project](#), or [view](#), [delete](#), or [edit](#) an existing project.

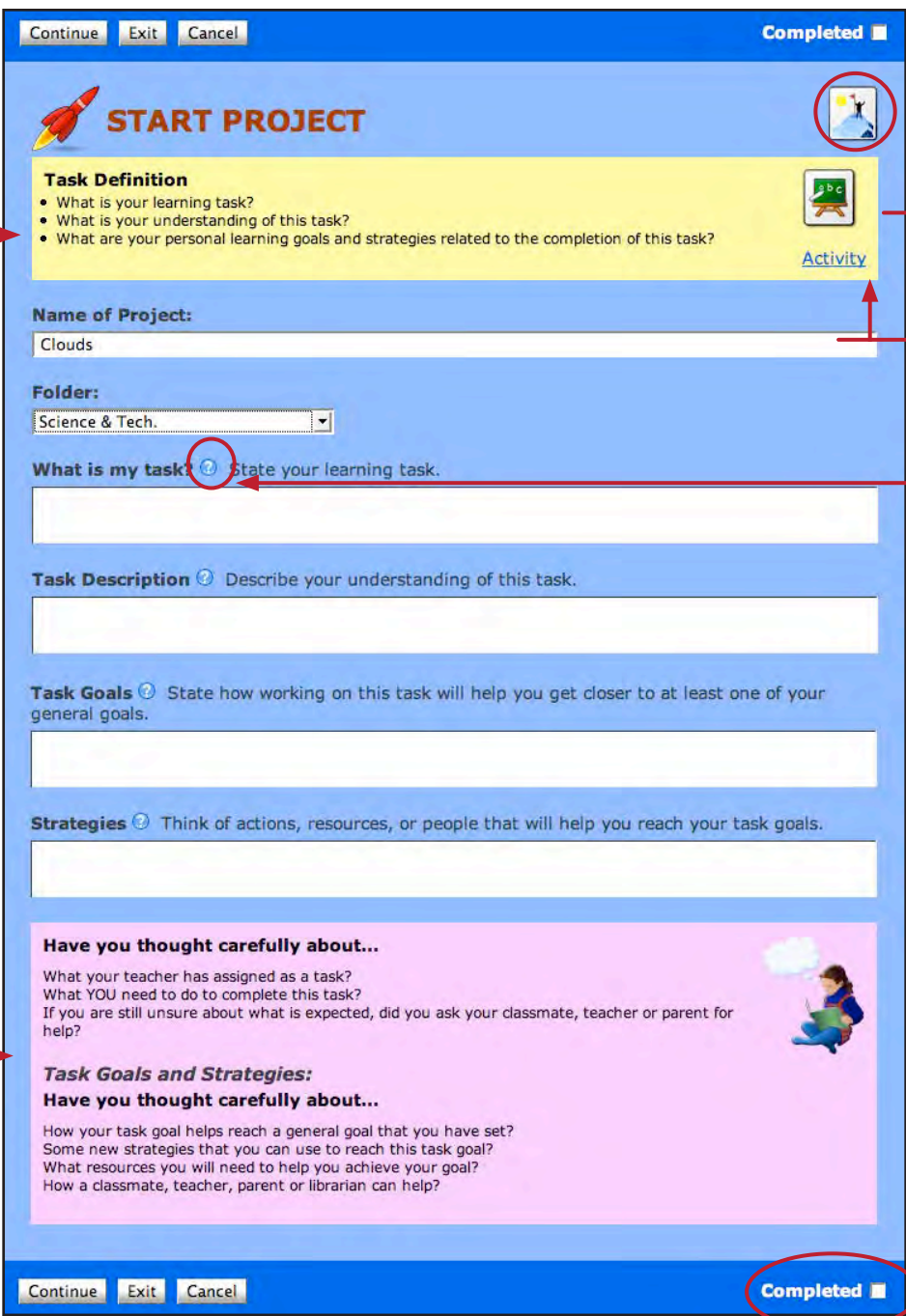
Link to ePEARL: Provides direct access to a student's portfolio so that the student may view his or her ISIS-21 artifact.
See **Figure 2** for ISIS-21 banner details

TIP:

The final list of sources may be saved as a text file by using the browser's *Save Page As...* function. It can then be opened from within Word for further editing (for example, adding other print-based or multimedia sources that were used in the research or deleting notes). Students should be encouraged to include this **List of Sources Used** with their final project.



ISIS-21 Structure



Learn

START PROJECT

Task Definition

- What is your learning task?
- What is your understanding of this task?
- What are your personal learning goals and strategies related to the completion of this task?

General goals (Linked to ePEARL)

Game

Name of Project:

Clouds

Folder:

Science & Tech.

What is my task? State your learning task.

Task Description Describe your understanding of this task.

Task Goals State how working on this task will help you get closer to at least one of your general goals.

Strategies Think of actions, resources, or people that will help you reach your task goals.

Have you thought carefully about...

What your teacher has assigned as a task?
 What YOU need to do to complete this task?
 If you are still unsure about what is expected, did you ask your classmate, teacher or parent for help?

Task Goals and Strategies:

Have you thought carefully about...

How your task goal helps reach a general goal that you have set?
 Some new strategies that you can use to reach this task goal?
 What resources you will need to help you achieve your goal?
 How a classmate, teacher, parent or librarian can help?

Completed

Click when done

Figure 3: The ISIS-21 Environment is divided into three environments: Learn, Apply, and Reflect

Learn: A quick snapshot of the purpose of each step and the actions to be taken. Some tips are also provided. Many of these screens also provide a hyperlink to a web-based activity.





Apply: These windows are where students conduct their research.

Reflect: Embedded prompts encourage students to reflect on the task at hand to ensure they have fully completed the step.

Help: Each feature has in-context help geared to students. Help screens include several sections: Tell Me More (explanation), Example, How Can I Do This? (pedagogical support), and What Do I Do In ISIS? (technical support). Some screens also contain links to web-based resources or activities. The Help content is included in this guide at the end of the explanation of each step.

Self-regulation Components - Links to ePEARL

NOTE:

The Help buttons for these features display the ePEARL Help screens.

(Task Description, General Goals, Task Goals, Strategies, Reflection)

Because creating a new project in ISIS-21 automatically creates a new artifact in ePEARL, students are prompted to select an ePEARL folder in which their new work will be stored. (If the folders are not already set up, the ePEARL default folders will be used.)

On the Start page, students may enter the learning goals and strategies they hope to use in order to complete this project. General Goals may be viewed from this screen.

All subsequent screens (except for Define) include a Reflection box. Text entered into this box is cumulative, so students should write the title of the step they are reflecting on prior to entering a reflection.

Text that is entered into any ePEARL window cannot be viewed using the Report feature; these can be viewed only from within ePEARL.



Teacher Environment

TIP:

Short cuts to the Teacher Resources page for each tool have also been provided on this screen.

Accessing the LTK as a teacher will open up the LTK Lobby page. There are two main options on this page: LTK Management (for the management of classes and students) or accessing any one of the three tools offered within the LTK. Note that depending on the level of ePEARL a teacher is linked to, s/he may or may not see all three tools. For example, a secondary teacher would not see the ABRACADABRA graphic given this is an early literacy tool.

LTK Management

Formerly the ePEARL Manage, this new section allows teachers to easily manage their classes and students in one convenient location for all the LTK tools.

Here, teachers can:

- Edit teacher information such as password, colour codes etc.
- Link themselves to multiple classes
- Link students to their homeroom class
- And more!

Figure 51: The LTK Lobby



TIP:

for ePEARL Users:
In order to provide feedback on an ISIS-21 project, a teacher may access the student's ePEARL by clicking on the portfolio icon.


For more on how to manage your classroom using the LTK Management feature, please see the LTK Management Teacher Guide, available for download on our website.





Figure 52: The LTK Management Homepage

Viewing Your Students' ISIS-21 Projects

Teachers are able to view their students' ISIS-21 projects under My Students. Clicking on this option will display a list of students for the homeroom class. Next click on the ISIS-21 icon  to the left of a student's name. This will show all the projects that the student is currently working on. Clicking on a title will display a "view only" report of the student's work to date.

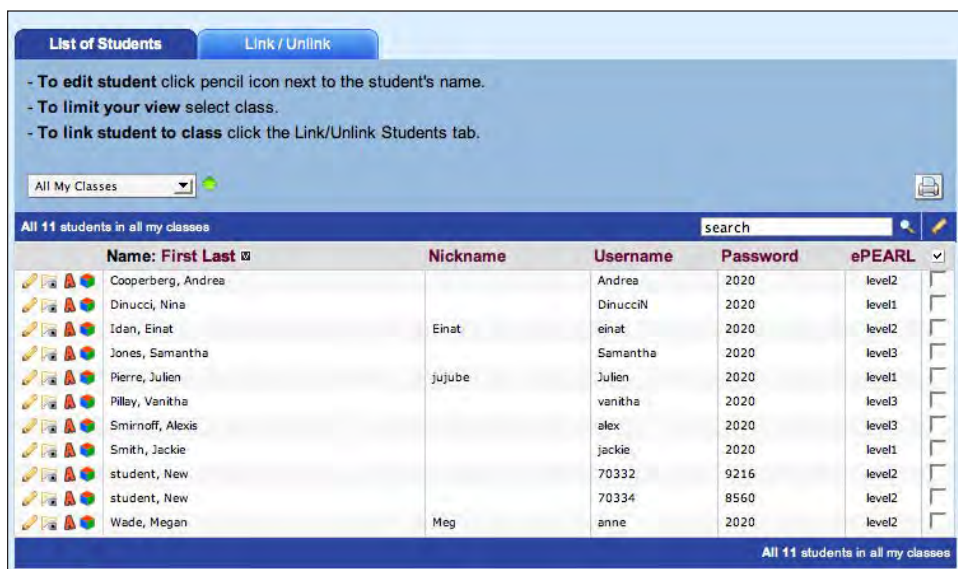



Figure 53: The My Students page

Viewing ISIS-21 works from within ePEARL

Works are referred to as artifacts in ePEARL. ISIS-21 artifacts are listed separately from regular ePEARL artifacts so they are quickly identifiable. As a teacher, you may click on a title to display an ISIS-21 artifact. If a student uses certain ePEARL features (Task description, Task goals, Strategies or Reflections, these will be displayed along with the Report icon .





Clicking on this icon will provide access to a report that documents all of the steps the student has completed within ISIS-21. At any point during this process teachers are able to provide feedback.

Providing Feedback

Active feedback boxes will be available for Goals, Reflections, for the work itself or on the student's entire portfolio. This can be accessed through ePEARL or through the LTK Management area.





The ISIS-21 Process of Inquiry

ISIS-21 has been designed such that information literacy skills are taught within the inquiry (or research) process. This process has been divided into three phases (see below for further explanation). Students are expected to work through each of the steps within a phase in a linear fashion, however they may proceed to the next step without having completed a step. At any time they may re-visit a step to modify work that has been done or to finish completing the step. This iterative, flexible nature of the inquiry process has been emphasized in the Inquiry Process road map that is embedded within the software (see next page).

Phase One: Planning (Blue screens)

Start: Establish task and understanding of task

Step 1 : Define: Determine big question

Step 2 : Brainstorm: Identify what is known, what isn't known (little questions), and what doesn't need to be known

Step 3 : Keywords: Extract key concepts from each question

Step 4 : Combine Keywords: Establish relationships between keywords and related words

Step 5 : Resources: Review what type of information is needed to answer each question

Phase Two: Searching (Orange screens)

Step 6 : Strategize: Investigate and decide on appropriate sources (focus on web only for this prototype)

Step 7 : Select: Conduct searches and mark potentially useful web sites (create working bibliography)

Step 8 : Review: Read sources and evaluate the quality and relevance of each (refine working bibliography)

Phase Three: Using (Organizer)

Step 9 : Note taking (or note making): Process and record information found

Step 10 : Synthesize: Interpret information, organize ideas, form conclusions

Step 11 : Acknowledge: Establish final list of sources (bibliography) to be used

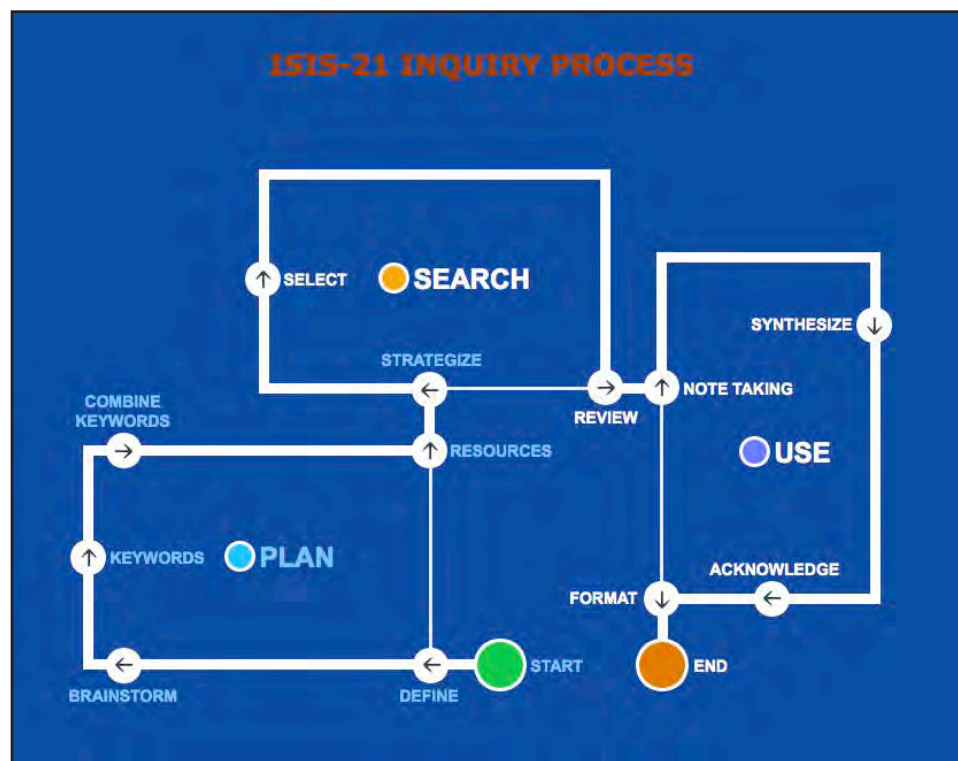
Step 12 : Format: Communicate findings





The Road Map

Figure 4: The Road Map



This road map provides an overview of the entire inquiry process.

NOTE:

Currently the Organizer is the only available component for Phase 3.

As students complete each step (having clicked on the Completed button at the bottom of each page), the title will change from white to the colour of the phase (e.g. blue or orange).





ISIS-21 Steps

Phase One: Planning

Start



Figure 5: The ISIS-21 dashboard

Purpose: Students must start the inquiry process with some basic planning. Here they are asked to write out the assigned task and to describe in their own words their understanding of this task.

Additional Resources

Bloom's Taxonomy. An enhancement of Dalton, J. & Smith, D. (1986). Extending children's special abilities: Strategies for primary classrooms (pp. 36-37). Ministry of Education: Victoria, Available at: <http://www.teachers.ash.org.au/researchskills/dalton.htm>

Farmer, L. (2007). What is the question? IFLA Journal, 33(1): 41–49.

Manitoba Education, Citizenship and Youth. (n.d.). Learning experiences. Literacy with ICT Across the Curriculum. Available at: http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le.html

Includes material for ELA, Mathematics, Science and Social Studies in K-8

Learning and Evaluation Situations for a variety of subject areas are also available on the LEARN site, at <http://www.learnquebec.ca/en>

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum. Available at: http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le_teachers.html. See: "Inquiry"

Media Awareness Provincial License (Quebec users). LEARN has purchased a province-wide license for Quebec public sector English schools. Access to these Canadian-based resources: Web Awareness Workshop Series, Passport to the Internet, Reality Check! Evaluating Online Information, Deconstructing Online Hate and Exploring Media & Race is available through your LEARN user name and password.

“ See http://www.learnquebec.ca/en/services/new_prov_license.html

TIP:

Teachers should reflect on the learning outcomes they wish students to achieve prior to assigning the task. Depending on the level of your students, it may be best to start with simple fact-based questions as students are learning how to use ISIS-21, and then work towards more complex questions that require a more thorough investigation and synthesis of the material.





Help

1. What is my task?

State your learning task

Example

“How did the medieval feudal system shape the economy? My presentation should include:

- Dates and a summary of life during the medieval period
- An explanation and diagram of the feudal system
- A description of the different groups of people, including pictures
- An explanation of the economic system

My class presentation will be 10 minutes long. I need to make a poster, too.”

How can I do this?

- Spend a couple of minutes thinking about the learning task at hand.
- Write out the task as it was presented to you. Make sure you include all the information you have.

What do I do in ISIS?

Type your text in the space provided.

2. Task Description

Describe your understanding of this task

Example

“I need to learn a lot of things about the medieval period, such as when it happened, what type of people lived during this period, and what the feudal system was all about. I have to use text, pictures, and diagrams to show what I have learned, so I am going to have to print some things from the internet and maybe find some pictures in books. I really need to understand how the feudal system worked and learn about the medieval economic system because I need to think about how these two things are related.”

How can I do this?

Ask yourself some questions about your task. For example:

- What must I do?
- What problem must I solve?
- What steps must I do to complete this task?
- Do I need to ask my teacher for help or more information?

What do I do in ISIS?

Type your text in the space provided.



Step 1 : Define

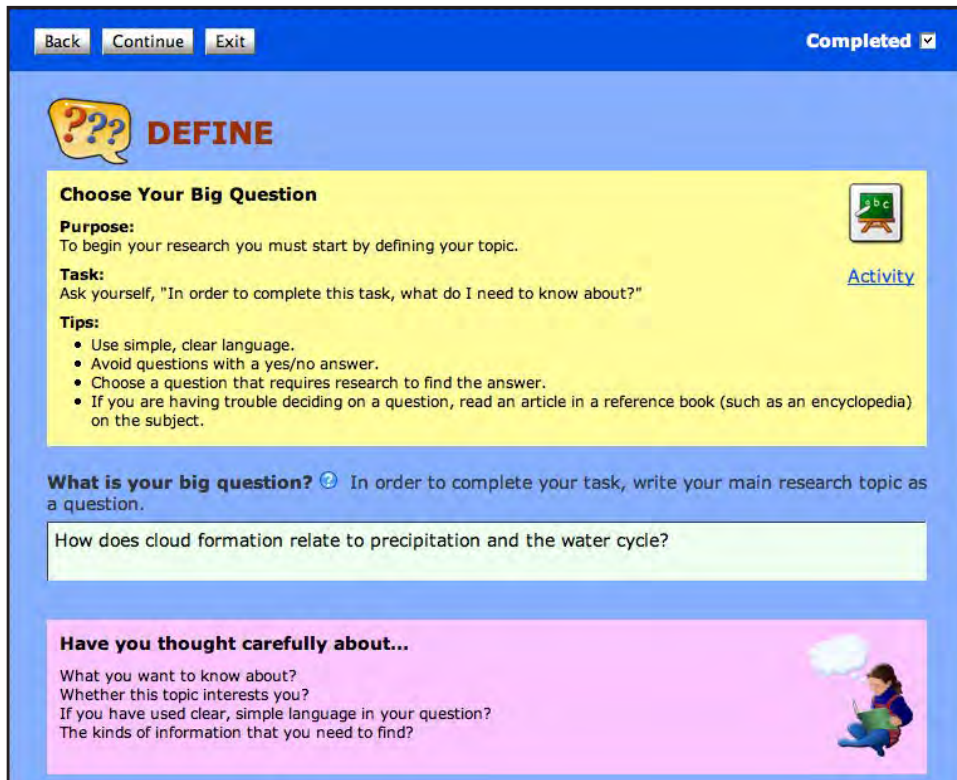


Figure 6: ISIS-21 Dashboard

Purpose: The first step in the inquiry process is defining a topic to be researched (a “big question”).

Establishing a “researchable” question is one of the most important steps in this process. Students must be interested in the question and should feel ownership of it. As students become conversant with the steps in the inquiry process, they should be encouraged to set their own question.

The Activity link on the Learn screen may be used to help students determine their big question and break it down into smaller questions (or sub-topics).



DEFINE

Choose Your Big Question

Purpose:
To begin your research you must start by defining your topic.

Task:
Ask yourself, "In order to complete this task, what do I need to know about?"

Tips:

- Use simple, clear language.
- Avoid questions with a yes/no answer.
- Choose a question that requires research to find the answer.
- If you are having trouble deciding on a question, read an article in a reference book (such as an encyclopedia) on the subject.

What is your big question? In order to complete your task, write your main research topic as a question.

How does cloud formation relate to precipitation and the water cycle?

Have you thought carefully about...

What you want to know about?
Whether this topic interests you?
If you have used clear, simple language in your question?
The kinds of information that you need to find?

Figure 7: Defining a “big question”

Additional Resources

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum. Available at: http://www.edu.gov.mb.ca/k12/tech/lict/let_me_try/le_teachers.html

“ See: “Inquiry”





See a variety of resources under the “Cross curricular competency: Uses Information” web page on the LEARN site:

http://www.learnquebec.ca/en/content/ccc_sec/ccc_1/index.html

**Lesson: Developing Different Types of Questions;
Brainstorming Research Questions; Categorizing Research
Questions**

<http://www.kn.att.com/wired/21stcent/sitemap.html>

Help

1. What is your big question?

Write your main research topic as a question

Example

- How did ancient civilizations develop their number systems?
- How does the human brain work and how is it different from elephants?
- Why are apes endangered, and what would help them not be endangered?

How can I do this?

Ask yourself, “In order to complete this task, what do I need to know about?” Write the answer to this in the form of a question. This is your big question that you will research.

If a big question hasn’t been suggested by your teacher as part of your task, ask a question about a subject that interests you. It is a good idea to choose a subject that you know something about and want to learn more about. For example, maybe you are interested in planets, animals, robots or the environment, but there is more you can find out about a topic:

- What would you need to live on the planet Mars?
- Why do bears hibernate?
- How can robots be used in medicine?
- How do greenhouse gases harm the environment?

If you still can’t decide, use an encyclopedia or other reference material to read up on the general subject to help you find some ideas.

What do I do in ISIS?

Write out your big question. (Don’t forget to put a question mark at the end!)

TIP:

If you are having trouble getting started, try completing the sentence “How are

_____ and _____ alike?” or “What would happen if _____?”



Step 2 : Brainstorm



Figure 8: ISIS-21 Dashboard

Purpose: Brainstorming helps student think about the sub-topics related to their big question. These will help them when it comes time to search for information. Students reflect on their prior knowledge about their topic and make decisions about what they need to know about (sub-topics) and what they don't need to know about.



BRAINSTORM

Choose Your Little Questions

Purpose: Brainstorming helps you think about the sub-topics related to your big question. These will help you search for information.

Task: Look at your big question and ask yourself:

- What do I already know?
- What do I need to know?
- What do I not need to know?

Tips:

- Drawing a diagram or concept map can help.
- You may come up with more questions as you conduct your research. Questions may be added at any time.

My Big Question: *How does cloud formation relate to precipitation and the water cycle?*

What I know List what you already know about this topic.

There are different types of clouds
Some clouds are high in the sky and others are low

What I need to know List what you don't know about this topic.

How are clouds formed?
What are the different stages of the water cycle?
What is the relationship of clouds to rain?
What types of clouds are there?

What I do not need to know List what you don't need to know about this topic.

The amount of rainfall each year
How snow is formed

Have you thought carefully about...

How your big question links to what you already know?
All of the important sub-topics that will help you answer your big question?
How you will find out the answers to your big and little questions?
How the sub-topics relate to each other?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.

Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Combine Keywords: This step was hard for me.

Strategize: I learned alot at this step because I never knew about directories. I tried using the Yahoo directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Figure 9: Brainstorming your topic

TIP:

Students may use graphic organizers or concept maps for help with this stage. See http://www.technology.com/web_tools/graphic_org/concept_web/ for a web-based tool.





Additional Resources

See a variety of resources under the “Cross curricular competency: Uses Information” web page on the LEARN site:

http://www.learnquebec.ca/en/content/ccc_sec/ccc_1/index.html

http://www.edu.gov.mb.ca/k12/tech/lict/let_me_try/le_teachers.html

TIP:

Sometimes the sub-topics are given to you as part of your task.

“ Currently restricted to Quebec users. Non-Quebec users, contact Anne Wade (anne.wade@education.concordia.ca) for a password.

Help

1. *What I know*

List what you already know about this topic.

Example

Big question: How did the medieval feudal system shape the economy?
What do you already know about this? Try answering some of these questions:

- When was the medieval period?
- What was the feudal system?
- How was the feudal system structured?
- Why was the feudal system used?
- Who controlled the economy?
- What kind of economy existed during medieval times?

How can I do this?

Think about what you already know about your big question. Ask yourself, “What have I already learned?” Use sentence starters like *who*, *what*, *when*, *why*, *where*, and *how* to help you think about different aspects of your topic.

What do I do in ISIS?

Enter each idea (or sub-topic) separately.

2. *What I need to know*

List what you don’t know about this topic.

Example

Big question: How did the medieval feudal system shape the economy?
What don’t you know about this question? Try answering some of these questions:



- When was the medieval period?
- What was the feudal system?
- How was the feudal system structured?
- Why was the feudal system used?
- Who controlled the economy?
- What kind of economy existed during medieval times?

How can I do this?

Think about different aspects of your big question. Use sentence starters such as *who*, *what*, *when*, *why*, *where*, and *how* to help get you started. Write down any questions you are unable to answer. You can also add other questions that you will need to research.

These will be called your little questions. It is okay if you do not know the answer to any or all of the little questions because your research will help you learn the answers.

What do I do in ISIS?

Enter each idea (or sub-topic) separately.

3. What I Do Not Need To Know

List what you don't need to know about this topic.

Example

Big question: How did the medieval feudal system shape the economy?

What do you *not* need to know about this question?

- What houses looked like during medieval times
- The types of food people ate
- What wars were fought during this time

How can I do this?

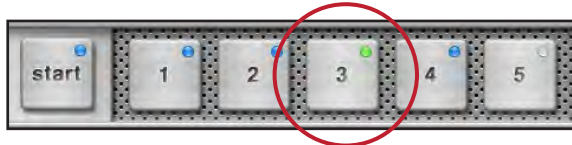
Spend some time thinking about what information you won't need in order to answer your big question. Ask yourself, "What is not important for me to know about?"

What do I do in ISIS?

Enter each idea (or sub-topic) separately.

Step 3 : Keywords

Figure 9: The ISIS-21 Dashboard



Purpose: Students must extract the main concepts (keywords) from each of their questions. These keywords will be used when searching for information and may be revised during the process.

Figure 10: Choosing your keywords

TIP:

Students may use graphic organizers or concept maps for help with this stage. See http://www.teach-nology.com/web_tools/graphic_org/concept_web/ or <http://www.graphic.org> for a web-based tool



KEYWORDS

Create Keywords Describing Your Topic and Sub-topics

Purpose: Keywords are used when searching for information. They are selected for each of your questions.

Task: Determine the main concepts (or ideas) for each of your questions.

Tips:

- Ask yourself "what are the key ideas in each of my questions?"
- Think about how each idea may be represented as a keyword or phrase.
- Think of synonyms, related words and variations in spelling for each keyword.

Enter your keywords and synonyms for each question Write at least two main concepts for each question. Write a synonym or related concept for each keyword.

My Big Question: How does cloud formation relate to precipitation and the water cycle?

Keyword: clouds Synonym: _____

Keyword: precipitation Synonym: rain

Keyword: water cycle Synonym: _____

Question: How are clouds formed?

Keyword: clouds Synonym: _____

Keyword: formed Synonym: formation

Question: What are the different stages of the water cycle?

Keyword: water cycle Synonym: _____

Keyword: stages Synonym: phases

Question: What is the relationship of clouds to rain?

Keyword: clouds Synonym: _____

Keyword: rain Synonym: precipitation

Question: What types of clouds are there?

Keyword: clouds Synonym: _____

Keyword: types Synonym: kinds

Have you thought carefully about...

Your main concepts (or ideas) for each question?
Different ways of stating each concept?
What to do if you don't know any synonyms?
Plural forms or variant spellings for each of your keywords?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.

Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Combine Keywords: This step was hard for me.

Strategize: I learned alot at this step because I never knew about directories. I tried using the Yahoo directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Lesson: Identifying Keywords, Synonyms and Key Phrases

<http://www.kn.att.com/wired/21stcent/lkeyword.html>

Help

Keywords

Keywords are the most important concepts in each of your questions. It is important to identify your keywords so you can use them to search for information.

Keywords can be individual words or a phrase. A phrase is when two or more keywords are written together, side-by-side (e.g. “ancient Egypt,” “human body,” “global warming,” “NASA space shuttle”). Sometimes a phrase can be a person’s name (like “Pablo Picasso” or “Princess Diana”) or an organization’s name (like “World Wildlife Fund” or “National Aeronautics and Space Administration”).

It is important to stay focused when gathering information about big and little questions to avoid getting sidetracked with looking for and reading information that is not useful (which is really easy to get lost in when you are searching on the web!). Using keywords will help you stay on track and get better results.

Example

Keywords (or main concepts) have been identified for each of the following questions:

Big Question: How did the medieval feudal system shape the economy?

- 1st keyword: /feudal system/
- 2nd keyword: /medieval times/
- 3rd keyword: /economy/

Little Questions:

What was the feudal system?

- 1st keyword: /feudal system/
- 2nd keyword: /definition/

How was the feudal system structured?

- 1st keyword: /feudal system/
- 2nd keyword: /structure/

Who controlled the economy?

- 1st keyword: /medieval times/



**TIP:**

When selecting keywords, try not to use homographs (words that are spelled the same but have different meanings, like “close,” “present,” “tear” or “wind”).

- 2nd keyword: /economy/
- 3rd keyword: /control/

How can I do this?

Ask yourself, “What are the important concepts (or ideas) in each of my questions?” Write each concept as a single keyword or a phrase. All questions should have at least two keywords; more complex questions can have three or four keywords.

Keywords are often the nouns in your question. Sometimes you might have to think of a **new** word to describe the important concept in your question.

What do I do in ISIS?

For each of your questions, select at least two keywords that capture the important concepts. Enter each keyword on a separate line. Remember that keywords can sometimes be a phrase.

Try this activity

Internet Search Challenge: http://21cif.imsa.edututorials/challenge/soccerchallenge/Nyms_index.swf. Practice finding good keywords and synonyms to search for.

Synonyms

Synonyms are “two different words that have the same meaning”, like “big” and “large.” When you select your keywords, it is useful to think of synonyms that can be used for the important concepts in your research question.

Sometimes “related words” can also be used. For example, “ape” can be used if you are looking for information about primates.

Using synonyms or related words will turn up more information than using a single keyword and reduce the chance of you missing out on some important sources.

Examples

Wherever possible, synonyms or related terms have been selected for the keywords in each of the questions below:

Big Question: How did the medieval feudal system shape the economy?

- 1st keyword: feudal system **feudalism**
- 2nd keyword: medieval times **middle ages**
- 3rd keyword: economy **economics**





Little Questions:

When were the medieval times?

- 1st keyword: medieval times **middle ages**
- 2nd keyword: origins

What was the feudal system?

- 1st keyword: feudal system **feudalism**
- 2nd keyword: **define**

Who controlled the economy?

- 1st keyword: medieval times **middle ages**
- 2nd keyword: economy **economics**
- 3rd keyword: control **power**

How can I do this?

Review each of your keywords and think about possible synonyms or related terms for each one.

Think about different endings for a word, such as singular and plural forms. Consider variations of a word or idea, like “feudalism” and “feudal system.”

What do I do in ISIS?

Enter one synonym or related term next to each keyword (most keywords will have one, but some do not).

Try this activity

Internet Search Challenge: http://21cif.imsa.edu/tutorials/challenge/soccerchallenge/Nyms_index.swf. Practice finding good keywords and synonyms to search for.

TIP:

When selecting synonyms, try not to use homographs (words that are spelled the same but have different meanings, like “close,” “present,” “tear” or “wind”).



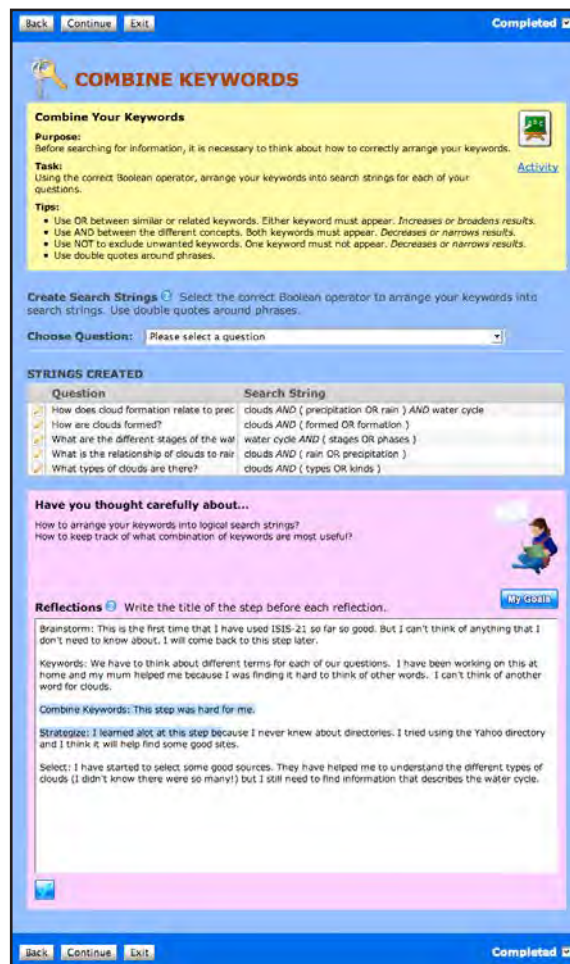
Step 4 : Combine Keywords

Figure 11: The ISIS-21 Dashboard



Purpose: Before searching for information, students must think about how they can appropriately arrange their keywords into logical relationships to create a search string. Boolean operators can be used for this.

Figure 12: Combining keywords



COMBINE KEYWORDS

Purpose: Before searching for information, it is necessary to think about how to correctly arrange your keywords.

Task: Using the correct Boolean operator, arrange your keywords into search strings for each of your questions.

Tips:

- Use OR between similar or related keywords. Either keyword must appear. Increases or broadens results.
- Use AND between the different concepts. Both keywords must appear. Decreases or narrows results.
- Use NOT to exclude unwanted keywords. One keyword must not appear. Decreases or narrows results.
- Use double quotes around phrases.

Create Search Strings Select the correct Boolean operator to arrange your keywords into search strings. Use double quotes around phrases.

Choose Question: Please select a question

| Question | Search String |
|---|--|
| How does cloud formation relate to precipitation? | clouds AND (precipitation OR rain) AND water cycle |
| How are clouds formed? | clouds AND (formed OR formation) |
| What are the different stages of the water cycle? | water cycle AND (stages OR phases) |
| What is the relationship of clouds to rain? | clouds AND (rain OR precipitation) |
| What types of clouds are there? | clouds AND (types OR kinds) |

Have you thought carefully about...

How to arrange your keywords into logical search strings?
How to keep track of what combination of keywords are most useful?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.

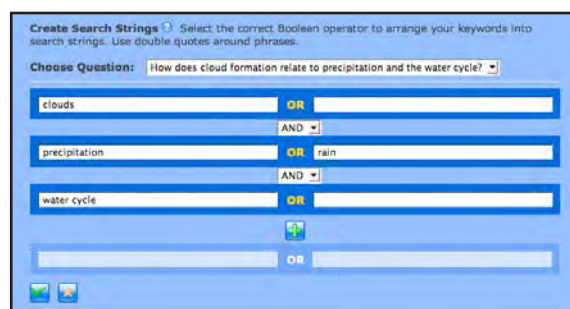
Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Combine Keywords: This step was hard for me.

Strategies: I learned alot at this step because I never knew about directories. I tried using the Yahoo directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Figure 13: Creating search strings



Create Search Strings Select the correct Boolean operator to arrange your keywords into search strings. Use double quotes around phrases.

Choose Question: How does cloud formation relate to precipitation and the water cycle?

clouds OR

precipitation OR rain

water cycle OR

OR



Lesson: Boolean Operators

<http://www.kn.att.com/wired/21stcent/lbool.html>

Help

Create search strings

Once you choose your keywords and synonyms, the next step is to arrange them to make a search string. A search string has keywords with logical operators between them to express exactly what you are looking for.

The three most commonly used logical operators (called Boolean operators) are: AND, OR, and NOT. Here is how you can use them to get better search results:

OR operator

What does it do?

When you put OR between two keywords, your results will include web pages that have either one of these keywords (or both). For example, if you search for “people OR humans” you will turn up pages that have the word “people” and also pages that have the word “humans.”

When do I use it?

You would use OR between keywords that are synonyms or related to each other. This will make the search engine look for pages that have any of the keywords you are interested in finding.

How does it change my search results?

When you use *OR*, you *increase* the number of useful search results because you are looking for more than one relevant term with a single search.

AND operator

What does it do?

When you put AND between two keywords, your results will include only web pages that have both of these keywords. For example, if you search for “medieval times AND economy” your results will include only those pages that have the words “medieval times” and “economy.”

TIP:

Students must first select a question, and then keywords and synonyms that were defined in the previous step will be displayed so students can build search strings. The system automatically places OR between synonyms and related terms and groups these terms in parentheses, but students must decide whether they need to use AND or NOT between different concepts.



***When do I use it?***

You would use AND between keywords that represent different concepts. This will make sure the search engine gives you only results that have both of the keywords you are interested in. Each of your questions should have at least two different concepts that are combined using AND.

How does it change my search results?

Using AND decreases your search results, but that's not always a bad thing! You are getting fewer results because you are being more specific about what you are looking for. This means that the information you do find will likely be more useful to you.

NOT operator***What does it do?***

When you put NOT before a word, any page that has that word will be excluded from your results. For example, if you search for "Saturn NOT car" your search will turn up all pages that have the word "Saturn" but not the word "car."

When do I use it?

You would use NOT when you want to exclude concepts you are not interested in from your search results. This is handy if, for example, you want to know more about the planet Saturn, but you don't want information about the car with the same name.

How does it change my search results?

Using NOT decreases your search results by ignoring pages that are probably not related to what you are looking for. This means that the information you do find will likely be more useful to you.

Stop Words: Stop words are very common words that search engines often ignore, like "and," "the," "because," "or," "most," "sometimes," and "like." These should not be used in search strings. To see a list of common stop words, go to: http://www.dcs.gla.ac.uk/edom/ir_resources/linguistic_utils/stop_words

TIP:

You may use a stop word if it is part of a phrase, but you must enclose the phrase in quotation marks.



Examples

Big Question:

How did the medieval feudal system shape the economy?

- 1st keyword: feudal system OR feudalism
AND
- 2nd keyword: medieval times OR middle ages
AND
- 3rd keyword: economy OR economics

Little Questions:

What was the feudal system?

- 1st keyword: feudal system OR feudalism
AND
- 2nd keyword: definition

How was the feudal system structured?

- 1st keyword: feudal system OR feudalism
AND
- 2nd keyword: structure

Who controlled the economy?

- 1st keyword: medieval times OR middle ages
AND
- 2nd keyword: economic
AND
- 3rd keyword: control OR power

How can I do this?

Before you search for information, you will need to make decisions about the relationship between your main concepts or ideas of interest. To help with these decisions, spend some time thinking about the logical arrangement of your keywords and synonyms using the three main Boolean Operators: OR, AND, and NOT. Remember that OR is used between similar or related concepts, while AND is used between different concepts, and NOT is used for unwanted concepts.

Don't worry if you can't think of some keywords to exclude. As you search, these may become more obvious.

What do I do in ISIS?

Select a question and build a search string using the keywords you chose in the previous step. Note that ISIS will automatically enter the OR operator between your synonyms and will add brackets around keywords with OR between them. Select the correct Boolean operator between your keywords.

TIP:

It is a good idea to use brackets around keywords with OR between them since this groups related concepts. For example: (princess Diana OR lady Diana) AND marriage.

TIP:

Search strings should contain only keywords and Boolean operators. Do not use stop words unless they are part of a phrase.



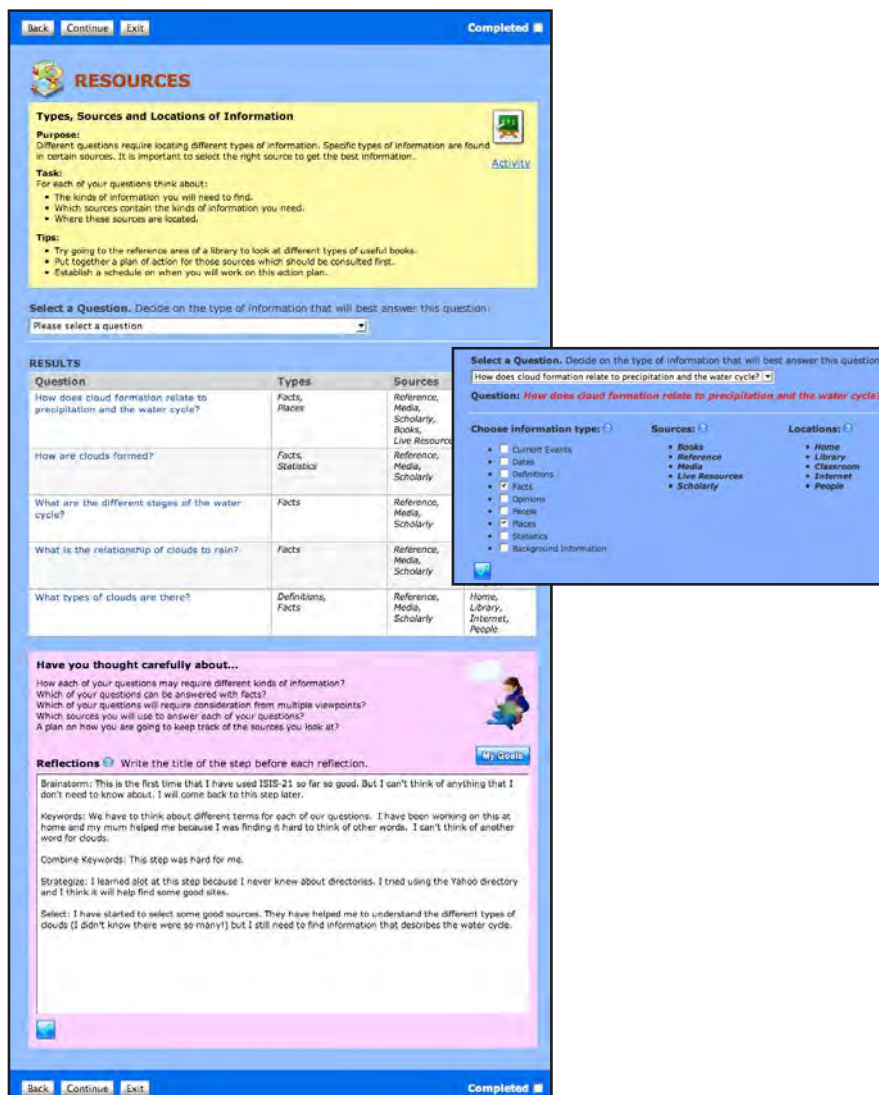
Step 5 : Resources

Figure 14: The ISIS-21 Dashboard



Purpose: Different questions require that students locate different types of information. Specific types of information are found in certain sources. It is important for students to be able to select the right source to get the best information.

Figure 15: Resources



Types, Sources and Locations of Information

Purpose:
Different questions require locating different types of information. Specific types of information are found in certain sources. It is important to select the right source to get the best information.

Task:
For each of your questions think about:
• The kinds of information you will need to find.
• Which sources contain the kinds of information you need.
• Where these sources are located.

Tip:
• Try going to the reference area of a library to look at different types of useful books.
• Put together a plan of action for those sources which should be consulted first.
• Establish a schedule on when you will work on this action plan.

Select a Question. Decide on the type of information that will best answer this question:
Please select a question

| Question | Types | Sources |
|---|--------------------|--|
| How does cloud formation relate to precipitation and the water cycle? | Facts, Places | Reference, Media, Scholarly, Books, Live Resources |
| How are clouds formed? | Facts, Statistics | Reference, Media, Scholarly |
| What are the different stages of the water cycle? | Facts | Reference, Media, Scholarly |
| What is the relationship of clouds to rain? | Facts | Reference, Media, Scholarly |
| What types of clouds are there? | Definitions, Facts | Reference, Media, Scholarly, Home, Library, Internet, People |

Select a Question. Decide on the type of information that will best answer this question.
How does cloud formation relate to precipitation and the water cycle?

Question: How does cloud formation relate to precipitation and the water cycle?

Choose information type:
☐ Current Events
☐ Dates
☐ Definitions
☒ Facts
☐ Opinions
☐ People
☐ Places
☐ Statistics
☐ Background Information

Sources:
☐ Books
☐ Reference
☐ Media
☐ Live Resources
☐ Scholarly

Locations:
☐ Home
☐ Library
☐ Classroom
☐ Internet
☐ People

Have you thought carefully about...
 How each of your questions may require different kinds of information?
 Which of your questions can be answered with facts?
 Which of your questions will require consideration from multiple viewpoints?
 Which sources you will use to answer each of your questions?
 A plan on how you are going to keep track of the sources you look at?

Reflections Write the title of the step before each reflection.
 Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.
 Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.
 Combine Keywords: This step was hard for me.
 Strategize: I learned a lot at this step because I never knew about directories. I tried using the Yahoo directory and I think it will help find some good sites.
 Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Figure 16: Selecting types of information to answer your questions

Lesson: Selecting the Right Source and the Right Tool for Information Needs

<http://www.kn.att.com/wired/21stcent/rightsource.html>



Help

Choose the information type

Answering specific research questions requires locating different kinds of information. You will need to consider all the different kinds of information you can use, the sources where you can find this information, and where you can access these sources. There are many important sources of information in your school library and your local public library, especially in the reference section.

Here are some different types of information you might need to use:

- Background information: Summary information on a topic
- Current events: Topics currently discussed in the media
- Dates: The year (or period) associated with an event or topic
- Definitions: Explanations of a word's meaning
- Facts: Something that can be proven with evidence
- Opinion: A personal view of an event, fact or person
- People: Information about an individual or groups of individuals
- Places: Information about a geographical location
- Statistics: Numbers that can be used to prove a fact

Examples

Big Question: How did the medieval feudal system shape the economy?
(Fact)

Little Questions:


- When were the medieval times? (Date)
- What was the feudal system? (Definition)
- How was the feudal system structured? (Fact)
- Why was the feudal system used? (Fact & Opinion)
- Who controlled the economy? (Fact & People)

How can I do this?

Review each of your questions and ask yourself, “What type of information will I need to help me answer this question?” Scanning the list of types of information will help you with this. If you are still having trouble, try asking a peer, parent or teacher for help.

What do I do in ISIS?

Click on a question. Under Choose Information Type, click on the boxes to check off the types of information that can best help you answer the selected question.

When you are finished, click on . ISIS will automatically enter the sources and locations for the types of information you have selected beside the question in the table. (Refer to the Help beside the Sources and Locations column headings for more information.)

Repeat these steps for each of your questions.

Review the completed table and plan your strategy. Where will you start looking for your information?

Sources

Different kinds of information can be found in different types of sources. These sources are found in several different locations. It is important to consider this range of sources when you are planning your research.

Examples

Books: Biographies, autobiographies, non-fiction

- Advantages: Gives in-depth information about a topic; may include charts, maps, photographs, etc.
- Disadvantages: Information may be old and outdated; not the best source for quick facts or summaries of your topic

Reference: Dictionaries, encyclopedias, atlases, almanacs, directories, handbooks

- Advantages: Very good source for quick facts, timelines, maps, photographs, statistics; written by experts; information is usually current if the source was recently published; good source for background information
- Disadvantages: Mostly summary information; information can be outdated if it was not recently published

Media: Newspapers, magazines, videos, broadcasts, speeches

- Advantages: Describes or summarizes current events; gives opinions; uses multimedia
- Disadvantages: Can be biased or contain too little information; often summarizes original sources of information, and may distort the facts

Live Resources: Polls, surveys, blogs, wikis

- Advantages: Provides current opinion
- Disadvantages: Can be one-sided or biased

Scholarly: Journals, dissertations, conference papers, research reports

- Advantages: A good source for academic research; provides most current research findings within a field; analyzes specific topics; usually written by experts
- Disadvantages: Geared to a specific audience, such as researchers; terms may be hard to understand



What do I do in ISIS?

ISIS-21 will automatically enter some good sources to use based on the types of information you have chosen for a question.

Try this activity

Surf's Up!: http://nike.cecs.csulb.edu/%7Esurf/Sources_HTML/Sources_04.htm
Play this game and see if you can pick the best source for different kinds of information.

Locations

Different kinds of information can be found in different types of sources.
These sources are scattered in a number of different locations.

Examples

Home: Reference, books, media, internet

School library or public library: Reference, books, media, internet, periodical databases

Classroom: Reference, books, internet

Internet: Reference, media, interactive resources (e.g. Google), image indexes (e.g. Google Images), newspapers (e.g. newspaper sites, Google News), videos (e.g. Google Video), scholarly info (e.g. Google Scholar)

People: Parents, librarians, teachers, family members and peers can also be excellent sources of information

What do I do in ISIS?

ISIS-21 will automatically link the source(s) depending on the Type(s) of Information that has been selected.

When all steps of the planning phase of the inquiry process are completed, the following message (Figure 17) is displayed.

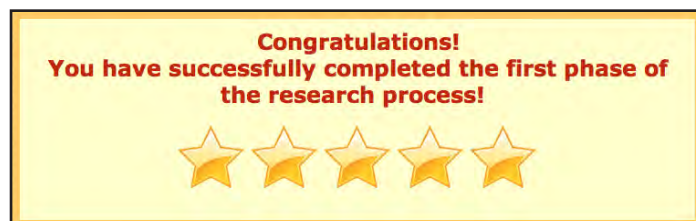
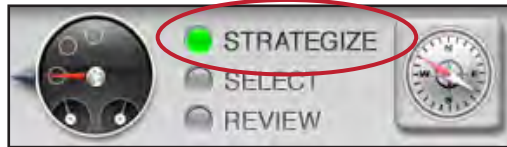


Figure 17:
Completion message for the planning phase

Phase Two: Searching

Strategize

Figure 18: The ISIS-21 Gages



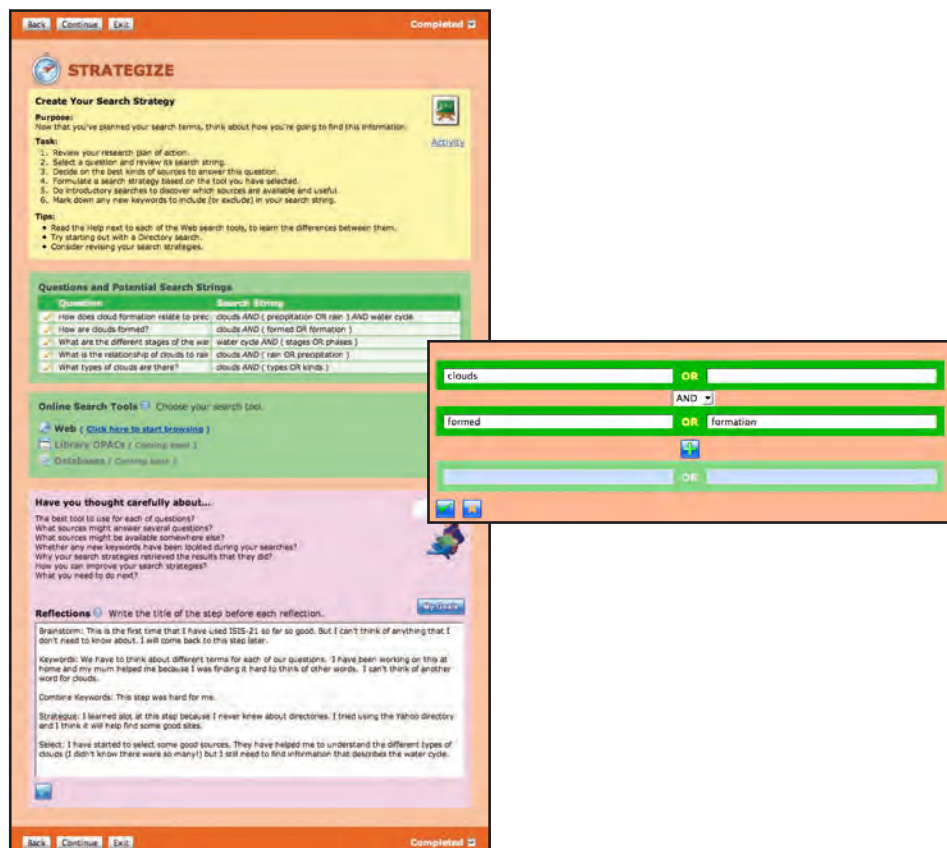
Purpose: Now that students have defined their search terms and thought about the types of information they need to find, they should think about how they will go about finding this information. Because ISIS-21 focuses on web-based sources, students should investigate the differences between directories, search engines and meta search engines.

Figure 19: Strategize

Figure 20: Planning a search strategy

Big and Little question

Online search tools



STRATEGIZE

Create Your Search Strategy

Purpose: Now that you've planned your search terms, think about how you're going to find this information.

Task:

1. Review your research plan of action.
2. Select a question and review its search string.
3. Decide on the best kinds of sources to answer this question.
4. Formulate a search strategy based on the tool you have selected.
5. Do introductory searches to discover which sources are available and useful.
6. Mark down any new keywords to include (or exclude) in your search string.

Tips:

- Read the help next to each of the Web search tools, to learn the differences between them.
- Try starting out with a Directory search.
- Consider revising your search strategies.

| Question | Search String |
|---|--|
| How does cloud formation relate to precipitation? | clouds AND (precipitation OR rain) AND water cycle |
| How are clouds formed? | clouds AND (formed OR formation) |
| What are the different stages of the water cycle? | water cycle AND (stages OR phases) |
| What is the relationship of clouds to rain? | clouds AND (rain OR precipitation) |
| What types of clouds are there? | clouds AND (types OR kinds) |

Online Search Tools Choose your search tool.

Web (Click here to start searching)

Library OPACs (Click here to start searching)

Online Sources (Click here to start searching)

Have you thought carefully about...

The best tool to use for each of questions?
 What sources might answer several questions?
 What sources might be available somewhere else?
 Whether any new keywords have been found during your searches?
 Why your search strategies retrieved the results that they did?
 How you can improve your search strategies?
 What you need to do next?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this later.

Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Combine Keywords: This step was hard for me.

Strategize: I learned a lot at this step because I never knew about directories. I tried using the Yahoo! directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Students should review their search strings for each question. They may also consult the Resources table to remind themselves where they need to go. Once they have done this, they may start browsing the web. When students click on “Click here to start browsing,” a new window opens:

From here, students must decide which type of search tool they wish to investigate and then conduct their search. The Help buttons beside Directory, Search Engine and Meta Search Engine provide information on how to search using these tools.

Students should be encouraged to revise their search strings as necessary. Students may wish to include notes about each tool in their reflections.

Lesson: General Web Search Tools

<http://www.kn.att.com/wired/21stcent/lgensearch.html>

Additional Resources

Answers.com. A Tale of Two Teachers.

Available: http://educator.answers.com/main/flash_demo.jsp#teach and Click on the Teach button.

A two-minute presentation that describes some of the benefits of using the Answers.com site with your students.

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum.

Available at: http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le_teachers.html

See: “Internet Literacy”

Help

The Internet vs The World Wide Web

The internet originated in the 1970s. Although the term “Internet” is often used interchangeably with “the web,” these two terms are not the same. The internet is a worldwide, publicly accessible series of interconnected computer networks made up of millions of smaller networks from businesses, universities, organizations and people’s homes. Services such as electronic mail, online chatting, file transfers, and the World Wide Web are available over the Internet.





The World Wide Web (or “web”) originated in the 1990s. The web is a huge collection of documents, images and other resources that are linked by hyperlinks and URLs. A URL is a string of characters that acts as the address for particular web page. The URLs for all web pages begin with `http://` For example, the URL for the Wikipedia web site is `http://en.wikipedia.org`

You must use a web browser in order to view web pages with text, images, videos, and other multimedia. When you are on the internet, you navigate between these pages using hyperlinks.

Challenges: Because the web is so huge (there are billions of web pages, and more are being added every second) no one search tool can index every web site. For this reason it is a good idea to use more than one search tool when you are doing research online. And because the information on a web site can change daily, it is important to mark down the date you accessed the information on a page. This tells your teacher when you located your information, in case the information has changed by the time your teacher looks at it.

There are three main types of retrieval tools that can help you find information on the v? directories, search engines, and meta search engines. Click on the Help icon, , next to each of these for information about what it is and how to use it.

Examples

- KidsClick `http://www.kidsclick.org/` is an example of a directory.
- Yahoo! `http://search.yahoo.com/` is an example of a search engine.
- Clusty `http://clusty.com/` is an example of a meta search engine.

How can I do this?

Learn about each type of search tool before making a decision about where to start searching.

What do I do in ISIS-21?

Click on the hyperlink that says Click here to start browsing. This will open up a new window called Search Tools.

Before starting a search, click on next to each of the different types of search tools to learn more about each of them.

TIP:

For a glossary of terms related to web searching, see the Web Searching Glossary at `http://www.sdst.org/shs/library/glossary.html`.

TIP:

For help selecting a search tool, see Choose the Best Search for Your Information Needs at `http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html`



Search Tools

Directories

A directory is an organized list of resources. It has a tree-like structure that branches out first by broad subject area and then by sub-categories. These sub-categories are sometimes further subdivided.

The sites that have been stored in the directory database are first reviewed by people and then placed in the appropriate category (or subcategory). Because this is such a big task, directory databases are very small. Entries in the directory database consist of the name of the site, a one-sentence description of it, and its web address (URL).

There are general Internet directories (such as Yahoo!), directories for a particular audience (such as children and teens), and subject-specific directories. Many general directories for kids and teens have a *Reference* category so students can easily find atlases, dictionaries, encyclopedias, almanacs, and other handy sources of information.

- **Advantages:** It is a reviewed resource; you can access reference materials that are useful for background information on your topic; sites are sometimes rated so you can see which are the best; you can locate useful web sites by doing a keyword search or by clicking on a category or subcategory
- **Disadvantages:** Because directories may be small, you might be searching a very small portion of the internet; databases may not be updated often.

Search Strategies: Searching within a directory can be done in two ways:

- You can click on categories, working from general to more specific until you get to the subtopic of interest.
- You can search by keyword. Because only a site's title, description and URL are stored in the database, keyword searches should be simple and should not contain many different concepts.

Search Results: Following a search, the title, a sentence containing the keywords, and the URL for the site is displayed in a list. The most relevant (or useful) results are listed first. The relevancy of the sites decreases as you scroll down the list.





Examples

For this example, we will be using the Yahoo! Kids (<http://kids.yahoo.com>) directory.

Big Question: Why are primates becoming endangered?

1. Browsing through the Yahoo! Directory categories:

- Click on StudyZone
- Click on Science and Nature -> Animals -> Endangered Species (or Science -> Animals -> Mammals -> Primates -> Conservation Organizations)
- Browse the list of websites

2. Using a keyword search in the Yahoo! Directory:

- Enter the search string (primates OR apes) in the search box
- Scan the list of results

TIP:

If you are not getting good results with your keyword search, try searching for the main concept with its synonym(s) only.

How can I do this?

Directories often provide access to reference sources like encyclopedias and dictionaries, so they are a good place to start your search since you can quickly locate facts and background information about a topic.

Scan the table on the Resources page to remind yourself about the types of information you hope to find for each question.

Next, review your search strings on the Strategize page to remind yourself of the concepts you will be looking for.

Go to a directory of your choice. Look for a Help or Search Tips link on the directory home page to learn how to search its database. Remember that every search tool is a little different!

Try browsing through the subject categories, going from general to more specific, or conduct a keyword search using your search strings.

Scan your search results, then click on the title or URL of any website that looks interesting to visit. When you click on a link, you will be leaving the directory and going to the actual website.

Continue to browse through your results, and see what information is available for each of your questions. Look for any new synonyms or related terms for your keywords and mark these down.

Remember to change your strategy depending on the type of information you hope to find for each of your questions. For example, you may also wish to try searching in a search engine for more detailed information.

TIP:

Sometimes you may receive an error message and be unable to access the web site. This is because the web site is no longer available on the web or its address has changed.



What do I do in ISIS?

- Click on to view a list of directories.
- Select a directory and conduct your search.
- Take notes on the strategies that are the most successful.
- When you are done, close this window to get back to the Strategize page.
- Try searching in another directory or using a search engine.

Search Engines

A search engine is a tool that searches a database. Special software (i.e. a robot or spider) used by a search engine scans the Internet, collects all the words found on a website and stores these words in a database. Because this special software cannot locate every web site (because the Internet is so large), no search engine indexes everything. This means that each search engine's database contains different information, and so it is useful to use different engines when looking for information. Also, the information in the database needs to be updated often because information changes so quickly on the web. Some databases are larger and more up-to-date than others.

Information is stored in a search engine's database by keywords. Think of a database like a back of the book index to the contents of the web, where one looks for information by using keywords.

There are general search engines (such as Google) and engines that find specific types of resources such as images, videos, blogs, etc. For example, if you search the Google's images database, you only search through a database of photographs, pictures, charts etc. If you search through Yahoo!'s News database, you will find only newspaper articles.

- **Advantages:** Access to a vast amount of information; can easily locate a specific resource type such as a video or news story; most engines have an advanced search screen that lets you to combine keywords or limit your search by language, date, etc. through the use of menus.
- **Disadvantages:** Anyone can publish information on the Internet. In many cases, the information has not been checked. This is not a protected environment, so search results may contain inappropriate material. Some databases may not be updated often, which will result in dead links.

TIP:

For help selecting a search tool, see:
<http://www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html>

TIP:

Watch this video to learn more about search engines:
<http://www.youtube.com/watch?v=CWHPf00Jkqg&sdig=1>



TIP:

Before entering a search statement, click on the Help or the “Search Tips” link on the search engine home page to learn about that engine’s search software. Remember – every tool is a little different!

TIP:

When you enter your keywords into these windows, you do not have to enter any Boolean operators. The software will enter these for you.

TIP:

Only search using your keywords and Boolean operators. Don’t use stop words.

Search Strategies

Every search engine uses their own software when searching their database. Most search engines offer the same commands including a Basic Search window for simple searches and an Advanced Search window for more complex searches.

Basic searches: These are performed from the home page of any search engine. Search statements are entered in the Search window. Some tips to keep in mind when entering a statement:

- Quotation marks should be used around phrases.
- Use AND between different concepts. Most search engines will automatically “AND” multiple keywords that are entered.
- The use of “OR” may be used in most search engines to search for synonyms. Use brackets around the keywords that are ORed.
- Unwanted keywords may be excluded by using NOT or by putting a minus sign in front of the word.

Advanced searches: Many search engines also offer an advanced option to search. The use of menus will help you structure your search statement logically without having to use Boolean operators.

- All of the Words a Used for keywords representing different concepts. The system will AND these keywords.
- Any of the words (At least one of the words) a Used for keywords that are synonyms or related. The system will OR these keywords
- Exact phrase a Used for keywords that are to appear adjacent to each other. Used instead of double quotes.
- Exclude these words (None of these words) a Used for keywords that are unwanted terms and are to be excluded from the results.

Limiting commands: All search engines allow you to limit your results by certain criteria. Limiting commands will vary across engines, but most will allow restricting by language, date, or geographic location. Using limits is a good way of narrowing your results. Use the appropriate limiting commands available on the Advanced Search window.

Stop Words: These are words that computers ignore in a search. Examples are: and, the, because, or, most, sometimes, like, etc. To see a list of common stop words, go to: http://www.dcs.gla.ac.uk/edom/ir_resources/linguistic_utils/stop_words



Search Results

Following a search, the title, a sentence containing the keywords, and the URL for the website is displayed in a list. The most relevant (or useful) results are listed first, and this decreases as you scroll down the list.

For a glossary of terms related to web searching see <http://www.sdst.org/shs/library/glossary.html>

Examples

For this example, we will be using the Google search engine – <http://www.google.ca>

Big question: What primates other than monkeys are becoming extinct and why?

Basic search: (endangered OR extinct) AND (primates OR apes) -monkeys

Advanced search:

- All of the words: endangered threats
- Exact phrase:
- At least one of the words: primates apes
- None of these words: monkeys

How can I do this?

Because search engines provide access to a vast quantity of information on the web, they are a good tool to use when looking for very detailed information about your topic. But remember that it is important to make a judgment about the quality and usefulness of information.

Scan the table on the Resources page to remind yourself about the types of information you hope to find for each question.

Next, review your Search Strings listed on the Strategize page to remind yourself about the concepts that you will be looking for.

Go to a search engine of your choice. Click on the Help or the Search Tips link on the search engine home page to learn how to search their database. Remember – every search tool is a little different!

Use all your concepts, including synonyms and related terms, making sure that you have used the correct Boolean operator between your terms. Try using the menus in the Advanced search if this option is available.

Scan your search results, then click on the title or URL (website address) to go to the web site that you think looks interesting. You are leaving the search engine's database, and going to the actual website.

TIP:

Many search engines search across all types of content, so your results may be from multiple content types, including images, news, books, maps and videos. Some of these may be listed first.

TIP:

Most (but not all) search engines will automatically search for both the singular and plural forms of a word. Check the search engine's Help.



**TIP:**

Sometimes you may receive an error message, and you cannot access the web site. This is because the web site is no longer available on the web or it has changed its address (URL).

Continue to browse through your results, investigating the information that is available on each of your questions. Look for synonyms or related terms for your keywords and mark these down.

Remember to change your strategy depending on the type of information you hope to find for each of your questions. For example, you may also wish to try searching in a directory for background or general information on your questions.

What do I do in ISIS?

- Select an engine and conduct your search.
- Take notes on the strategies that are the most successful.
- When you are done, close this window to get back to the Strategize page.
- Try searching in another search engine or in a directory.

Meta Search Engines

A meta search engine does not keep its own database but instead searches selected search engine databases all in one step. The results may be shown in one list or by search engine.

- Advantages: Can read a large amount of information in one step; can see how much information is available on the web on a specific topic; many offer suggestions for narrowing your search statement or organize search results into subject categories.
- Disadvantages: Many meta search engines do not search Google or Yahoo's databases; some can incorrectly read a search strategy; some do not offer an Advanced search screen.

Search Strategies

Every meta search engine uses their own software to search their database so the interface will look differently depending on the search engine that you are using. Most meta search engines offer the same commands with some offering a Basic Search window for simple searches and an Advanced Search window for more complex searches (see under Search Engines for more information). In some cases, the meta search engine may also allow you to limit your search to a specific search engine's database.

Search Results

Following a search, the title, a sentence containing the keywords, and the URL for the website is displayed in a list. The most relevant (or useful) results are listed first, and this decreases as you scroll down the list.



Example

For this example, we will be using the Ithaki for KiDS meta search engine – <http://kids.ithaki.net>

Big question: What primates other than monkeys are becoming extinct and why?

Search statement: (endangered OR extinct) AND (primates OR apes) NOT monkeys

How can I do this?

Because meta search engines search a number of databases in one step, they are a good tool to use when exploring a topic as they can quickly provide an indication of how much information is available on the web.

Scan the table on the Resources page to remind yourself about the types of information you hope to find for each question.

Next, review your Search Strings listed on the Strategize page to remind yourself about the concepts that you will be looking for.

Go to a meta search engine of your choice. Click on the Help or the Search Tips link on the search engine home page to learn how to search their database. Remember – every search tool is a little different! Try conducting an Advanced search if this option is available.

Use all your concepts, including synonyms and related terms, making sure that you have arranged them in the correct order.

Scan your search results, then click on the title or URL (web site address) to go to the web site that you think looks interesting. You are leaving the search engine's database, and going to the actual web site.

Continue to browse through your results, investigating the information that is available on each of your questions. Look for synonyms or related terms for your keywords and mark these down.

Remember to change your strategy depending on the type of information you hope to find for each of your questions. For example, you may also wish to try searching in a directory or a search engine.

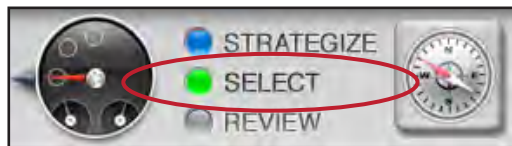
What do I do in ISIS?

- Select a meta search engine and conduct your search.
- Take notes on the strategies that are the most successful.
- When you are done, close this window to get back to the Strategize page.
- Try searching in another meta search engine or use another tool.



Select

Figure 21: The ISIS-21 Gages



Purpose: Once students have completed their preliminary investigation, they should conduct their final online searches using the tools that provided the most useful information. They then select (or Mark) some promising sources. This requires that they copy and paste or type in bibliographic information for each source. ISIS-21 uses these entries to generate a list of these sources (a working bibliography).

Figure 22: Select



Select Potentially Useful Sources

Purpose: Now that you have completed some preliminary research, redo your online searches using the tools that will provide the most useful information and select some promising sources.

Task:

1. Select a question and implement your search using the strategy that worked best in the previous step.
2. Scan your search results and investigate specific web sites of interest.
3. Learn how to read the information on a web page.
4. Save potentially useful sites to be reviewed in more detail.
5. Jot down some reasons why you feel each site looks useful.

Tips:

- Try to locate sites that have an author and a date.
- Use multiple search tools.
- Revise those search strategies that were not successful.

Questions and Potential Search Strings

| Question | Search String |
|--|--|
| <input type="checkbox"/> How does cloud formation relate to precipitation? | clouds AND (precipitation OR rain) AND water cycle |
| <input type="checkbox"/> How are clouds formed? | clouds AND (formed OR formation) |
| <input type="checkbox"/> What are the different stages of the water cycle? | water cycle AND (stages OR phases) |
| <input type="checkbox"/> What is the relationship of clouds to rain? | clouds AND (rain OR precipitation) |
| <input type="checkbox"/> What types of clouds are there? | clouds AND (types OR kinds) |

Online Search Tools Choose your search tool.

☐ Web (Click here to Mark a New Site)

Mark a New Site Flag sources that contain potentially useful information.

| Title | URL |
|--------------------------------|--|
| The Water Cycle: Precipitation | http://ga.water.usgs.gov/edu/watercycle/precipitation.html |
| Clouds | http://www.weatherolddp.com/cloud.htm |

Have you thought carefully about...

The type of info that you have found?
How the information found within the source answers the question?
Whether you have located a variety of sources to answer each question?
Whether you understand the information from each source?
What additional sources should be consulted?
If what you have learned fits with what you previously knew about your big question?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.

Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Combine Keywords: This step was hard for me.

Strategies: I learned a lot at this step because I never knew about directories. I tried using the Yahoo! directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.

Figure 23: Marking a new site



Mark a New Site Flag sources that contain potentially useful information.

Source Write down the bibliographic information for each source.

Question: How does cloud formation relate to precipitation and the water cycle?

Author: U.S. Geological Survey

Title: The Water Cycle: Precipitation

Date: 13-Aug-2008

URL: http://ga.water.usgs.gov/edu/watercycle/precipitation.html

Date Accessed: 2008, Oct. 5

Search Strings: clouds and (precipitation or rain) and "water cycle"

Notes:

Defines precipitation as "water released from clouds in the form of rain, freezing rain, sleet, snow, or hail" and that most precipitation is rain which I didn't know. Precipitation is very important in the water cycle because it is the main delivery source of water to the earth.

This source also discusses how rain drops form. There is a lot of information about the different size of rain drops and what rain drops look like which isn't really useful. But there was a neat table that lists all the different types of precipitation and the speed/size of rain drops that make up each.

There was some information that I didn't understand.



Additional Resources

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum. Available at:
http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le_teachers.html

See: “Internet Literacy 1: Searching the Web”

Help

Mark a New Site

Because your searches will most likely result in many results, you will need to make quick judgments on which web sites contain potentially useful information for each of your questions. Marking these web sites will allow you to compile a list of potentially useful sources for further review this is called a Working Bibliography. This command will require that you cut and paste (or type in) important information about the web site such as its author, title, date and web site address.

Following a search, the title, a sentence containing your keywords, and the URL for the site is displayed in a list. The most relevant (or useful) results are listed first, and this decreases as you scroll down the list.

Learning about Uniform Resource Locators (URL)

Web site addresses (or URLs) can provide important information about the organization that is responsible for posting the information on the web. In most cases, there are different endings at the end of a URL that are used to represent different types of organizations. Keep in mind that anyone can use these letters in their URL. Here are some examples:

- com and biz - Commercial business
- edu - US postsecondary educational institutions
- gov - US government agencies or Canadian provincial agencies
- gc - Canadian federal depts.
- net - Network organizations
- org - Non-profit organizations

Geographic extensions: Most non-US websites have a country code listed at the end. If a URL has a country code then this indicates that the information found on the site originated from that country, otherwise you can assume that the information is from the United States.

Here are some examples:

- ca - Canada
- au - Australia
- uk - United Kingdom

TIP:

Students will have to toggle back and forth between their search window and their ISIS-21 window if they wish to copy and paste information into the Source fields.

TIP:

Information found on sites that end in .com may not be useful for research as these sites are usually trying to sell a product and they may give information that is one-sided. Information from government sites is credible, while information from non-profit organizations MAY be one sided.





Titles: Sometimes the title will provide the name of the organization that posted the site. For those that do include an organization's name, think about whether they would provide age appropriate information. For example, information posted on a university's website may not be useful to you. (Scanning the URL will also help).

Description: Look to see if all your keywords are displayed in the one sentence description. Ask yourself whether this website looks like it would contain useful information for your question.

Examples

For this example, we will be using the Google search engine - <http://www.google.ca>

Basic search: ("feudal system" or feudalism) AND structure

Results:

Figure 24: Google search results



Scanning these results, one makes the following judgments:

- The first entry is from the Wikipedia, an online encyclopedia and contains both of the concepts searched. It will probably contain background and factual information on the topic and would be useful to check out.
- The second entry is from a commercial web site and has what looks like an individual's name in the URL. It is probably not useful.
- The third entry looks like it is from the University of Calgary and would not be age appropriate.



- The fourth entry is from a network organization about history and contains both concepts. It would be useful to check out further but we need to find out who this organization is.

How can I do this?

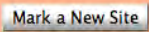
Before clicking on any entries, form an initial impression about the results that you have obtained. Because sites are listed by their relevancy (or usefulness), it is often not necessary to scan all of your results, but only the first couple of pages.

Scan the list of websites that have been retrieved. For each entry, read the title, URL and description of the web site and form an initial impression about the source.

If a result looks interesting, click on the title or the URL and scan the information quickly to see if it looks useful. Sometimes you will arrive at the Home (or the main) page of a website. Look for links that may take you to the web page that contains important information for your question.

When you have made a decision to include a source in your Working Bibliography, you should mark it, and save its bibliographic information. Later you will review the contents of the website in more detail to make sure it passes your evaluation.

What do I do in ISIS?

When you are ready to mark a web site that looks potentially useful, click on the button . A table will appear entitled Source. Select a question and fill in each of the windows. (See Help under Source for further information.)

Review your list of marked websites. If you want to change the bibliographic information for a website, click on the arrow next to the title of the website. Don't forget to save your changes!

Source

It is important to keep track of all your potentially useful sources in a Working Bibliography. This list will be used during the next step when you evaluate the quality and usefulness of the information found. Eventually you will prepare a final list of these sources and include this with the final project.





For each source, important information--known as bibliographic information should be documented.

Examples

Author: Historyworld

Title: History of Feudalism

Date: no date

URL: *www.historyworld.net*

Date accessed: September 16, 2008

Search String: ("feudal system" or feudalism) AND structure

Notes: I can't find a date on this web page. I also need to find out about this organization.

How can I do this?

Author: Write down the person(s) or organization who is responsible for writing the information. Usually this is written at the top or bottom of a web page. Sometimes the author's name may not be listed. If this is the case, look for links to other pages on this web site, such as About Us, Who We Are or About this Site to see if an individual or organization is listed there. If you still can't find an author, leave this window blank. Do not write in "anonymous".

Title: Write down the title of the web page where you found the information. Usually the title is listed at the top of the page.

Date: Web sites may provide different dates; the date that the information was originally written and the date the information was modified (or revised). If this is the case, all dates should be marked down. Sometimes a date is only located on the home (main) page and not on the actual page that you found the information. If this is the case, use this date.

If a web site or document does not have a date, write down "No date" so that your teacher knows you were unable to find a date.

URL: Copy and paste the exact URL for the web page where you found your information.

Date accessed: Write down the date that you accessed the information on this site.

Search string: Copy and paste or write in the search string that retrieved this site.





Notes: Jot down some observations you have made about the information found on this site. You can copy and paste some direct quotations from the site. If you do this, make sure to put in quotation marks at the beginning and the end of the text so that you know these are the exact words from the original source.

What do I do in ISIS?

Select a question.

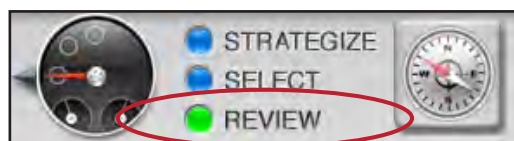
Copy and paste or type in the information into each window.

Continue to mark potentially useful web sites.



Review

Figure 25: The ISIS-21 Gages



Purpose: Student must review their list of potentially useful sources, evaluate each one and then select those that best meet their evaluation criteria.

Figure 26: Review

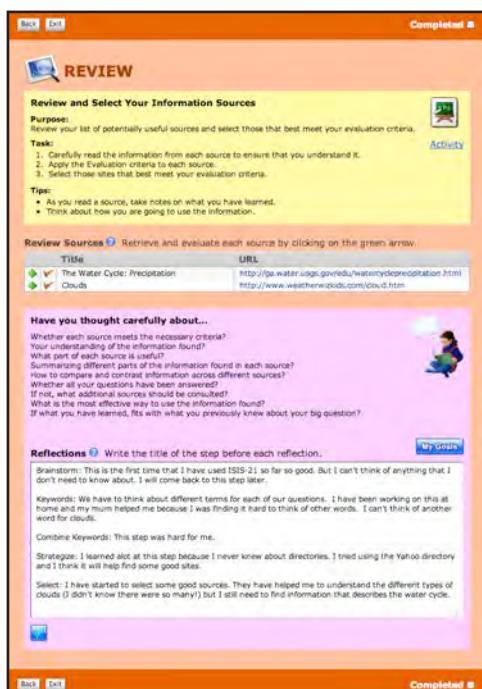
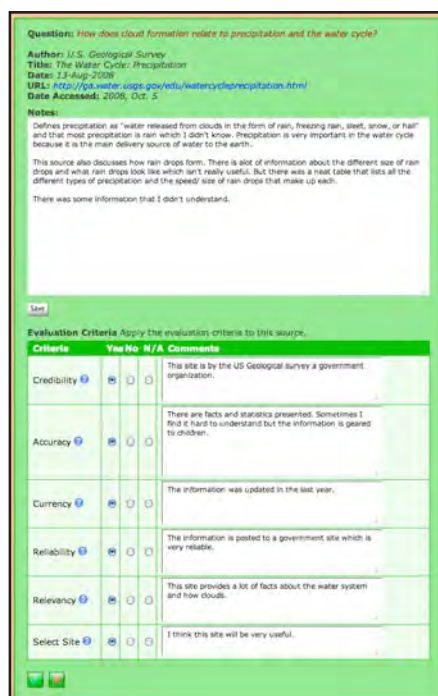


Figure 27: Reviewing sources



| Criteria | Yes | No | Comments |
|-------------|-----------------------|-----------------------|---|
| Credibility | <input type="radio"/> | <input type="radio"/> | This site is by the US Geological survey a government organization. |
| Accuracy | <input type="radio"/> | <input type="radio"/> | There are facts and statistics presented. Sometimes I find it hard to understand but the information is geared to children. |
| Currency | <input type="radio"/> | <input type="radio"/> | The information was updated in the last year. |
| Reliability | <input type="radio"/> | <input type="radio"/> | The information is posted to a government site which is very reliable. |
| Relevancy | <input type="radio"/> | <input type="radio"/> | This site provides a lot of facts about the water system and how clouds. |
| Select Site | <input type="radio"/> | <input type="radio"/> | I think this site will be very useful. |

Evaluation
Criteria

TIP:

Students should be encouraged to review each source's bibliographic information to help with their evaluation.

Additional Resources

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum. Available at: http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le_teachers.html

“ See: “Internet Literacy 2: Evaluating Web Content”





See a variety of resources under the “Cross curricular competency: Uses Information” web page on the LEARN site: http://www.learnquebec.ca/en/content/ccc_sec/ccc_1/index.html (currently restricted to Quebec users. Non-Quebec users, contact Anne Wade for a password).

Help

Review Source

Information found on the web is different from that found in a library. Items found in a library have been reviewed before being published and selected for the library. Information that has been posted to the web has not been reviewed by anyone. And because anyone can post information, it is important to learn about the author’s qualifications and to carefully read the information to ensure there are no inaccuracies or mistruths. Using specific criteria will help you form judgments about the quality and usefulness of the information found.

See http://www.mediaawareness.ca/english/resources/educational/handouts/internet/5ws_cyberspace.cfm and http://www.mediaawareness.ca/english/resources/educational/teaching_backgrounders/internet/decon_web_pages.cfm for more information on how to evaluate information.

Examples

Compare these three different web sites about the US White House:

- <http://whitehouse.org> - Do you think the headlines on this site are real? Do you think the links along the left hand side are appropriate? What do you think about the ads that are used on this site? Can you figure out who is responsible for this site?
- <http://www.whitehouse.net> - Does the information on the home page seem appropriate? Follow the link to Public Comments are these real? What does the Privacy Policy state? Who is responsible for posting this site?
- <http://www.whitehouse.gov/> - Ask yourself the same questions about this site. Does the information seem true? Who is responsible for this web site? Do the links bring you to pages that contain useful information? Are there ads on this site?

Which do you think is the REAL White House web site? The URLs should have provided the first hint at which one is legitimate.

How can I do this?

Scan your list of potentially useful sites.

Begin with the first source - scan the look of the site and carefully read the

TIP:

Useful information can be found either on a web page or in a document that has been posted to a web site. Documents can be especially useful as they provide in-depth information on a topic.



**TIP:**

Set aside an appropriate amount of time to review each of your sources.

information making sure that you understand the author's ideas.

Read the information with a critical eye and learn to question what you are reading. Does this information seem truthful? Does this author have the expertise to be writing about this topic?

Follow links that may lead you to pages from this web site which contain additional information.

These steps should be repeated for each of your sources.

What do I do in ISIS?

Select a source to evaluate by clicking on the  next to its title.

Click on the URL for this web site (the web site will appear either in a new tab or a new window depending on how your browser has been set up.)

Read the information on the web site carefully.

Apply each of the criteria (see Help under each criteria for more information) and make a decision - Yes this criteria has been met, No this criteria has not been met or N/A when this criteria does not apply.

Write in any comments that would explain your decisions.

Continue to mark potentially useful web sites.

Evaluation of Sources**Accuracy*****How can I do this?***

Reread the information on the site. What type of information has been presented? (e.g. Facts? Opinions? Statistics?) Does it seem complete? Is it unbiased? Can you understand the information? Are different points of view expressed? Have you read similar conclusions in other sources? Are a list of sources included at the end of the site?

What do I do in ISIS?

Rank whether you feel the information is from a trusted source and state why.

Credibility***How can I do this?***

Review the author(s) of this information. Look to see if there is information about this person's (or organization's) expertise. Where do they work? What position do they hold? Is contact information provided for the author? Are

TIP:

Sites that present biased information are designed to persuade or sway you to believe in a certain way. For example, People for the Ethical Treatment of Animals (PETA) will present a one sided view of information about abuses to animals on their web site <http://www.peta.org/>



they an expert on this topic? An expert is someone who is proficient in an area. S/he provides facts or opinions that we can trust. They are a source of correct (or accurate) information.

If the author is an organization, find out about the purpose of the organization. Look for links to other pages on this web site, such as About Us, Who We Are or About this Site to learn about the organization.

What do I do in ISIS?

Rank whether you feel the information is from a trusted source and state why.

Currency

How can I do this?

Review the date for this source. When was this information created? Has it been modified? How current is the information? Do all the links work on the web site? Ask yourself whether the information is still of value given its date.

What do I do in ISIS?

Rank whether you feel the information is current and whether this is important given your question.

Relevancy

How can I do this?

Review your question and reread the information on the website. Why did you go to this site? Is the information relevant to your question? What information in this source helps answer your question?

What do I do in ISIS?

Rank the relevancy (or usefulness) of the information found and state why.

Reliability

How can I do this?

Look to see who is responsible for posting the web page or document. Who hosts this website?

If you are having trouble finding this information on the website, scan the URL to see what type of organization posted it.

TIP:

In order to learn more about an author, perform a phrase search on the person's name in a search engine.

TIP:

If your question is about a topic that is very timely (for example, What are some problems with using cell phones in schools?), then using information from a source that was written over 5 years ago, may make the information inaccurate today.



**TIP:**

It is useful to learn how to read a URL. Take this example: <http://www.nasa.gov/audience/forstudents/index.html>

http://: This is in Internet protocol being used and means you are accessing a web page

www.nasa.gov: This is the domain name for the person or organization hosting the web page

audience/forstudents/index.html The last section of a URL contains the subdirectories and filename leading to the page you are on.

By truncating the URL you can learn about who hosted the web page that you are using. This means deleting the last portion of the address all the way up to the domain name. For example: <http://www.nasa.gov/audience/forstudents/index.html>. By deleting the last part of the URL ([audience/forstudents/index.html](http://www.nasa.gov/audience/forstudents/index.html)) from this URL all the way to www.nasa.gov one learns that the US National Aeronautics and Space Administration, a government organization is hosting this web page. A government is a trusted source.

What do I do in ISIS?

Rank whether you feel the information has been posted by a trusted source and state why.

Select Site***How can I do this?***

Review your evaluation. Decide whether this site passes and will be used in your project.

What do I do in ISIS?

Try to summarize in a couple of sentences what you have learned from this source.

Lesson: Determining Relevancy; Determining Authority and Accuracy; Determining Currency

<http://www.kn.att.com/wired/21stcent/sitemap.html>

Completion of Phase 2

When all steps of the search phase of the inquiry process are completed, the following message (Figure 28) is displayed.

Figure 28: Completion message for the search phase





Phase Three: Using Information

This phase of the inquiry process is not currently supported in the ISIS-21 prototype; however, the Organizer may be used for some aspects of this phase, such as note-taking and Acknowledgment of Sources.

Organizer



Figure 29: The ISIS-21 Banner

Purpose: Students will compile a final list of sources that were used during the inquiry process.

Figure 30: Organizer

Student: **Megan Wade**

ORGANIZER

Project: **Clouds**

Reflect on the sources that you have reviewed and chosen:

- Have you found enough information to be able to answer each of your questions?
- Have you considered all aspects of each question?
- What is the best way to use the information found?
- How are you going to summarize different parts of the information found from each source?
- How will you compare and contrast information across different sources?
- How has what you learned fit with what you previously knew about your big question?
- What format the information should be presented in (e.g. text, pictures, sound)?

Question: How does cloud formation relate to precipitation and the water cycle?

U.S. Geological Survey. *The Water Cycle: Precipitation*. 13-Aug-2008. Date Accessed: 2008, Oct. 5. <<http://ga.water.usgs.gov/edu/watercycleprecipitation.html>>.

Notes:

Defines precipitation as "water released from clouds in the form of rain, freezing rain, sleet, snow, or hail" and that most precipitation is rain which I didn't know. Precipitation is very important in the water cycle because it is the main delivery source of water to the earth.

This source also discusses how rain drops form. There is a lot of information about the different size of rain drops and what rain drops look like which isn't really useful. But there was a neat table that sets all the different types of precipitation and the speed/size of rain drops that make up each.

There was some information that I didn't understand.

Sent

Question: How are clouds formed?

Wicker, Crystal. *Clouds*. no date. Date Accessed: 2009, Jan. 9. <<http://www.weatherwizards.com/cloud.htm>>.

Notes:

This site has a lot of easy to understand explanations about how clouds are formed, why they change colour, how they move, and why they float.

I learned that different clouds (like Cirrus, and Stratus) are at different heights in the sky. I also learned that fog is considered a special cloud.

I am going to use the descriptions of the different clouds to help me explain the different clouds in my chart.

Sent

Have you thought carefully about...

A logical way of putting your findings together?
The most effective way to share your findings?
How you can document your findings?

Reflections Write the title of the step before each reflection.

Brainstorm: This is the first time that I have used ISIS-21 so far so good. But I can't think of anything that I don't need to know about. I will come back to this step later.

Keywords: We have to think about different terms for each of our questions. I have been working on this at home and my mum helped me because I was finding it hard to think of other words. I can't think of another word for clouds.

Choose Keywords: This step was hard for me.

Strategies: I learned a lot at this step because I never knew about dictionaries. I tried using the Yahoo directory and I think it will help find some good sites.

Select: I have started to select some good sources. They have helped me to understand the different types of clouds (I didn't know there were so many!) but I still need to find information that describes the water cycle.





Teacher Tips

Students may save the final list as a text file using the browser's Save Page As... function. It can then be opened from within Word for further editing (for example, adding other print-based or multimedia sources that were used in the research or deleting notes). This List of Sources Used may be included with the final project.

Additional Resources

Manitoba Education, Citizenship and Youth. (n.d.). Professional learning for teachers. Learning with ICT Across the Curriculum. Available at:
http://www.edu.gov.mb.ca/k12/tech/licit/let_me_try/le_teachers.html

See: “Notemaking”; “Plagiarism”; “Questioning”

See a variety of resources under the “Cross curricular competency: Uses Information” web page on the LEARN site: http://www.learnquebec.ca/en/content/ccc_sec/ccc_1/index.html

Currently restricted to Quebec users. Non-Quebec users, contact Anne Wade for a password.

Lesson: See under Core Concepts IV-VII

<http://www.kn.att.com/wired/21stcent/sitemap.html>





The Final Report

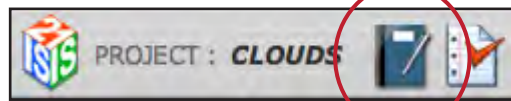


Figure 31: The ISIS-21 Banner

The final report provides a complete documentation of all the steps a student has completed as the inquiry process unfolded. This report may be viewed at any time from within the software by clicking on the Report icon. A report is also automatically linked to the student's ePEARL artifact. The Report icon appears within the Content section and may be viewed at any time.

Student: Megan Wade close window

REPORT

Project: Clouds

Folder: Science & Tech

What is my task? Research print and electronic sources to identify how clouds are formed, what are the three common cloud types (i.e., cirrus, cumulus, stratus) and to relate cloud formation to precipitation and the water cycle. Create labeled diagrams, animations, and illustrated stories describing cloud formation and its relationship to the water cycle.

Task Description: First I need to learn about the different types of clouds. Then I need to see how they relate to rain. I will have to find information from the library and from the Internet. Then once I have finished the research I will have to summarize what I have learned through diagrams and stories.

DEFINE

My Big Question: How does cloud formation relate to precipitation and the water cycle?

BRAINSTORM

What I Know:

- There are different types of clouds.
- Some clouds are high in the sky and others are low.

What I Need to Know:

- How are clouds formed?
- What are the different stages of the water cycle?
- What is the relationship of clouds to rain?
- What types of clouds are there?

What I Do Not Need to Know:

- The amount of rainfall each year.
- How snow is formed.

KEYWORDS

Question: How does cloud formation relate to precipitation and the water cycle?
Keyword: clouds
Keyword: precipitation
Synonym: rain
Keyword: water cycle

Question: How are clouds formed?
Keyword: clouds Keyword: formed
Synonym: formation

Question: What are the different stages of the water cycle?
Keyword: water cycle Keyword: stages
Synonym: phases

Question: What is the relationship of clouds to rain?
Keyword: clouds Keyword: rain
Synonym: precipitation

Question: What types of clouds are there?
Keyword: clouds Keyword: types
Synonym: kinds

SEARCH STRINGS

How does cloud formation relate to precipitation and the water cycle?
clouds AND (precipitation OR rain) AND water cycle

How are clouds formed?
clouds AND (formed OR formation)

What are the different stages of the water cycle?
water cycle AND (stages OR phases)

What is the relationship of clouds to rain?
clouds AND (rain OR precipitation)

What types of clouds are there?
clouds AND (types OR kinds)

Figure 32: Final Report

RESOURCES

Question: How does cloud formation relate to precipitation and the water cycle?
Info Types: Facts, Phases
Sources: Reference, Media, Scholarly, Books, Live Resources
Locations: Home, Library, Internet, People, Classroom

Question: How are clouds formed?
Info Types: Facts, Statistics
Sources: Reference, Media, Scholarly
Locations: Home, Library, Internet, People

Question: What are the different stages of the water cycle?
Info Types: Facts
Sources: Reference, Media, Scholarly
Locations: Home, Library, Internet, People

Question: What is the relationship of clouds to rain?
Info Types: Facts
Sources: Reference, Media, Scholarly
Locations: Home, Library, Internet, People

Question: What types of clouds are there?
Info Types: Definitions, Facts
Sources: Reference, Media, Scholarly
Locations: Home, Library, Internet, People

SELECT REVIEW

Question: How does cloud formation relate to precipitation and the water cycle?
Author: U.S. Geological Survey
Title: The Water Cycle: Precipitation
Date: 13-Aug-2008
URL: <http://ga.water.usgs.gov/edu/watercycle/precipitation.html>
Date Accessed: 2008, Oct. 5
Search String: clouds and (precipitation or rain) and "water cycle"
Notes: Defines precipitation as "water released from clouds in the form of rain, freezing rain, sleet, snow, or hail" and that most precipitation is rain which I didn't know. Precipitation is very important in the water cycle because it is the main delivery source of water to the earth. This source also discusses how rain drops form. There is a lot of information about the different size of rain drops and what rain drops look like which isn't really useful. But there was a neat table that lists all the different types of precipitation and the speed/size of rain drops that make up each. There was some information that I didn't understand.
Site Evaluation:
- Credibility: Yes
Comments: This site is by the US Geological survey a government organization.
- Accuracy: Yes
Comments: There are facts and statistics presented. Sometimes I find it hard to understand but the information is geared to children.
- Currency: Yes
Comments: The information was updated in the last year.
- Reliability: Yes
Comments: This information is posted to a government site which is very reliable.
- Relevancy: Yes
Comments: This site provides a lot of facts about the water system and how clouds.
- Select Site: Yes
Comments: I think this site will be very useful.

Question: How are clouds formed?
Author: Wicker, Crystal
Title: Clouds
Date: no date
URL: <http://www.weatherwizkids.com/cloud.htm>
Date Accessed: 2009, Jan. 9
Search String: clouds AND (formed or formation)
Notes: This site has a lot of easy to understand explanations about how clouds are formed, why they change colour, how they move, and why they float. I learned that different clouds (like Cirrus, and Stratus) are at different heights in the sky. I also learned that fog is considered a special cloud. I am going to use the descriptions of the different clouds to help me explain the different clouds in my chart.
Site Evaluation:
- Credibility: Yes
Comments: Mrs Wicker is a television meteorologist for ABC.
- Accuracy: Yes
Comments: This information is very easy to understand because it is for children. She presents a lot of facts about clouds.
- Currency: N/A
Comments: There is no date but I think that the information is still true.
- Reliability: Yes
Comments: This information is posted to the WeatherWiz site which is by the author.
- Relevancy: Yes
Comments: The information is very relevant and answered my question about how clouds are formed.
- Select Site: Yes
Comments: I am going to use this site to learn about the types of clouds as well.





ISIS-21 Game

TIP:

Students should be introduced to each of the concepts presented within ISIS-21 prior to using the software. It is highly recommended that a class activity, along with time set aside for individual use of the ISIS-21 game, be conducted for each step as many of these concepts will be new for the students. Students should also be encouraged to consult the Help as required.

Accessing the LTK as a teacher will open up the LTK Lobby All the ISIS-21 steps provide access to the ISIS-21 game through the Activity icon located at the top of each screen. Clicking on this icon will bring the user to a web-based interactive game that provides instruction, along with an activity, for each step of the process. Because the steps are linked, students must progress through the game sequentially, starting with the selection of a pharaoh. Users are brought to the last step of the game that has been completed, no matter what step of the inquiry process that they access the game.

Throughout this Guide, following the explanation of each step of the inquiry process, a screen capture from the ISIS-21 game is provided.

Mission & Pharaoh Selection



Figure 33: ISIS-21 game mission





Figure 34: Pharaoh selection

Define - Big Question



Figure 35: Define - big question

Answer: What are the burial traditions of pharaohs in the New Kingdom period in ancient Egypt?





Brainstorm - Little Questions

Figure 36: Brainstorm:
little questions



Answers:

- How was mummification done during the new kingdom period in Egypt?
- Who was in the (new kingdom period) pharaoh's funeral procession and when did the funeral procession happen?
- What treasures were placed inside a pharaoh's burial chamber during the new kingdom period?
- Why were symbols used in the decoration of a pharaoh's coffin during the new kingdom period?
- Where are pharaohs from the new kingdom period buried?





Keywords



Figure 37: Keywords

Answers:

1. How was mummification done during the new kingdom period in Egypt?

mummification “new kingdom”

2. Where are pharaohs from the new kingdom period buried?

pharaohs “new kingdom” buried

3. Who was in the (new kingdom period) pharaoh’s funeral procession and when did the funeral procession happen?

pharaohs “new kingdom” “funeral procession”

4. Why were symbols used in the decoration of a pharaoh’s coffin during the new kingdom period?

pharaohs decoration coffin “new kingdom”

5. What treasures were placed inside a pharaoh’s burial chamber during the new kingdom period?

pharaohs burial chamber treasures “new kingdom”





Figure 38: Synonyms



Answers:

pharaohs - kings

buried - burial

decoration – symbols

coffin - sarcophagus

burial chamber - tomb

mummification - mummies





Combine Keywords

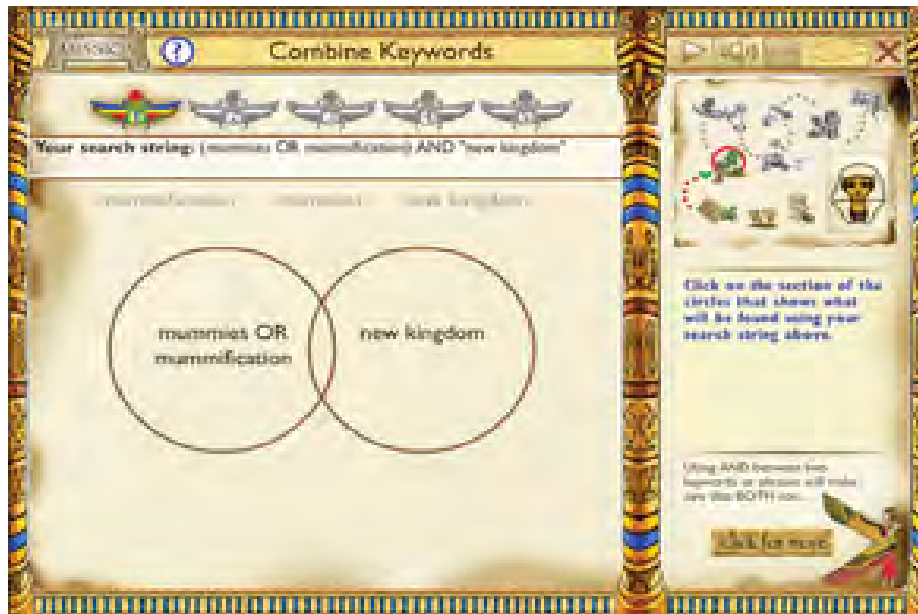


Figure 39: Combine keywords

Answers:

1. How was mummification done during the new kingdom period in Egypt?

(mummification OR mummies) AND "new kingdom"

2. Where were pharaohs from the new kingdom period buried?

(pharaohs OR kings) AND (buried OR burial) AND "new kingdom"

3. Who was in the (new kingdom period) pharaoh's funeral procession and when does the funeral procession happen?

(pharaohs OR kings) AND "new kingdom" AND "funeral procession"

4. Why were symbols used in the decoration of a pharaoh's coffin during the new kingdom period in Egypt?

(pharaohs OR kings) AND (decoration OR symbols) AND (coffin OR sarcophagus) AND "new kingdom"

5. What treasures were placed inside a pharaoh's burial chamber during the new kingdom period in Egypt?

(pharaohs OR kings) AND (burial chamber OR tomb) AND treasures AND "new kingdom"





Resources

Figure 40: Resources



Answers:

Types of Sources:

- Books: Background, Facts, Opinions, People, Places
- Experts: Current events, Facts, Opinions, People, Places
- Mass Media: Current events, Dates, Facts, Opinions, People, Places
- Reference: Background, Dates, Definitions, Facts, People, Places, Statistics
- Scholarly: Facts, Statistics
- Websites: Dates, Facts, Opinions, People, Places, Statistics

Where Sources are Located:

- Classroom: Books, Reference books
- Home: Books, Mass Media, Reference
- Internet: Books, Experts, Mass Media, Reference, Scholarly, Websites
- Library: Books, Mass Media, Reference, Scholarly
- Organizations: Experts, Scholarly



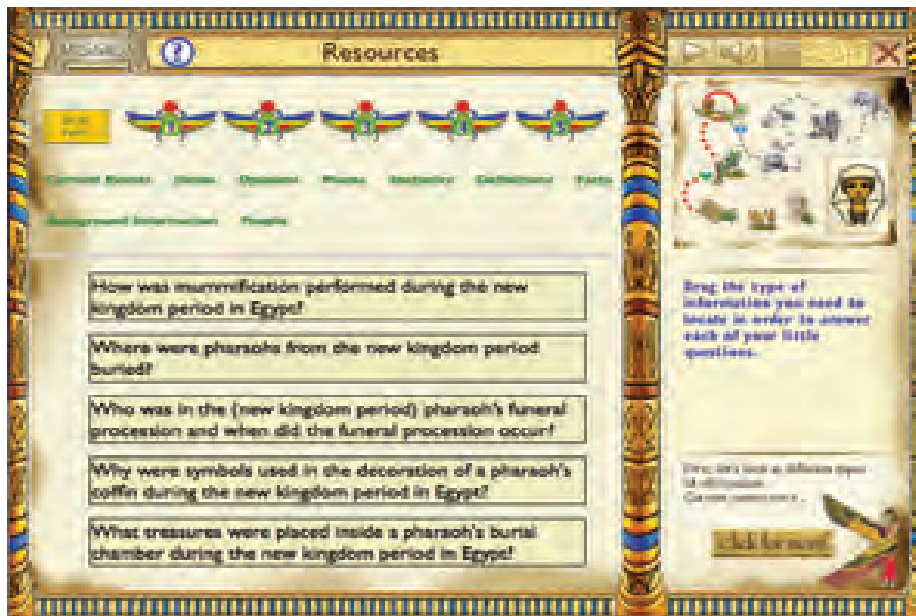


Figure 41: Resources

Answers:

1. How was mummification done during the new kingdom period in Egypt? Facts
2. Where were pharaohs from the new kingdom period buried? Places
3. Who was in the (new kingdom period) pharaoh's funeral procession and when does the funeral procession happen? Facts
4. Why were symbols used in the decoration of a pharaoh's coffin during the new kingdom period in Egypt? Facts
5. What treasures were placed inside a pharaoh's burial chamber during the new kingdom period in Egypt? Facts





Strategize

Figure 42: Strategize
- Directories



Figure 43: Strategize -
Search engine





Answers:

Note that this step is designed to teach students about each of the different Internet search tools and it is exploratory. Search results are scanned only, and no sites are selected and saved.

1. Where are the pharaohs from the new kingdom period buried?

Fourth site by – General site on ancient Egypt – reading level good – worth taking a look

2. Who was in the (new kingdom period) pharaoh's funeral procession and when does the funeral procession happen?

Fifth site is about death rituals and has some relevant facts on the funeral procession.

3. How was mummification done during the new kingdom period in ancient Egypt?

Fifth site – Encyclopedia Smithsonian has some general information on the mummification process.

Any one of these search tools could be used to help answer the various little questions.



Figure 44: Strategize - Meta search engines





Select

Figure 45: Select



Answers:

1. How was mummification done during the new kingdom period in Egypt?

Egyptian Mummymaking Methods

4 Jan 2010 ... During this time period, many different methods of mummification were ... Other non-royal mummies made during the New Kingdom show that, ...

www.mummytombs.com/egypt/methods.htm

Potential: Although it is a .com, the URL has the word “mummy” in it which leads us to think this whole site is about mummies so it should have lots of useful information. The filename “methods.htm” is another good sign because we want to learn how mummies were made. Finally the date tells us it is current information.

CULTUREFOCUS: Ancient Egypt. Valley of the Kings, pictures and ...

For a New Kingdom pharaoh, the mummification process is thought to have taken seventy days. The brain was usually extracted through the nose and discarded. ...

www.culturefocus.com/egypt_valley-of-kings.htm

Potential: We are unsure of who the organization, Culture Focus is and the fact it is a .com is not good, but the description leads us to think this could be an informative site and so it is worth looking at further.





The Mummification Process (Getty Museum)

Follow the steps of the mummification process in this short animation about the Getty Museum's Romano-Egyptian mummy Herakleides

www.getty.edu/art/gettyguide/videoDetails?cat=9&segid=4387

Potential source: Although this video shows the mummification of Herakleides it may provide a good illustration of the process.

2. Where were pharaohs from the new kingdom period buried?

Historical Development of the Valley of the Kings in the New ...

18 Dec 2002 ... The founders of Dynasty 18 apparently continued the burial ...
The reasons New Kingdom kings chose the East Valley of the Kings for their ...

www.thebanmappingproject.com/articles/article_2.3.html

Potential source: The title of tells us this source will have a lot of information on the Valley of the Kings, which we assume is where the pharaohs were buried. The word “project” in the URL also tells us this whole site is about some sort of project, hopefully related to Ancient Egypt. The domain name .com is some cause for concern.

Valley of the Kings, Luxor, Egypt - Travel Photos by Galen R ...

The Valley of the Kings, in Thebes, is the burial place of the pharaohs of the New Kingdom, 18th, 19th, and 20th Dynasties. ... V (1147—1143 BC) and continued] by Ramses VI (1143—1136 BC), with both pharaohs apparently buried here. ...

www.galenfrysinger.com/egypt_valley_of_the_kings.htm

Potential source: Although the subtitle “Travel photos” is worrisome, the description looks like it is right on our topic as does the filename. The domain name .com is some cause for concern.

Valley of the Kings - Wikipedia, the free encyclopedia

At the start of the Eighteenth Dynasty, only the kings were buried within the Royal Wadi and tombs – Burial place of Akhenaten and his royal family.
... a b c d e “Historical Development of the Valley of the Kings in the New Kingdom”. ... Valley of the Sun Kings: New Explorations in the Tombs of the Pharaohs. ...

en.wikipedia.org/wiki/Valley_of_the_Kings





Potential source: This is an encyclopedia article and so it will have some summary information about the Valley of the Kings. However given the popularity of this subject, there are probably other sources that have more detailed information about the topic.

3. Who was in the (new kingdom period) pharaoh's funeral procession and when does the funeral procession happen?

Life in Ancient Egypt: Life in Ancient Egypt

2750-2250 B.C.), when it was available only to kings, to the New Kingdom (ca. ... Pharaohs built the finest tombs, collected the most elaborate funerary equipment, ... that were probably used in his funeral procession. ...

www.carnegiemnh.org/exhibitions/egypt/guide.htm

Potential source: The title and description lead us to think that this source might have some useful information. The URL is for an organization which is also a good sign. We will need to learn who this organization is.

Death Rituals - the Funeral Procession Egypt

Death Rituals - the Funeral Procession The Funeral procession was an element of ... In the New Kingdom, the tekenu is shown as an entirely wrapped bundle ... a few subsequent pharaohs had them carved on the walls of their pyramids. ... The sarcophagus of Meremtah & Siptah at his tombs in the Valley of the Kings ...

egyptopia.com/Death+Rituals+-+the+Funeral+Procession_30_100_3_15_2545_en.html

Potential source: the title and description lead us to think this source will contain lots of information on our topic. Also the URL tells us this is from a site that is entirely about Egypt. The domain name .com is some cause for concern.

4. Why were symbols used in the decoration of a pharaoh's coffin during the new kingdom period in Egypt?

Egyptian Afterlife Ceremonies, Sarcophagi, Burial Masks - Crystalinks

By the New Kingdom, the ancient Egyptians had perfected the art of ... He holds the symbols of Egyptian kingship in his hands: the shepherd's crook to ... text was initially carved on the exterior of the deceased person's sarcophagus, The elaborate decoration on Nes-mut-aat-neru's coffin fits her status as a ...

www.crystalinks.com/egyptafterlife.html

Potential source: The title and description leads us to think this source will help answer our question. Cystalinks is the name of a company that seems a little strange so we'll need to find out more about this company.





The Coffins of Ancient Egypt | featurestories

A sarcophagus was also usually provided to hold the coffin in the tomb. During the New Kingdom, most of the wealthy acquired multiple coffins for ... The multi-colored, varnished decoration on a white or yellow background ... Complete Valley of the Kings, The (Tombs and Treasures of Egypt's Greatest Pharaohs) ...

www.touregypt.net/featurestories/coffins.htm

Potential source: The title and description tell us that this source looks like it is right on our topic. The URL leads us to think this might be a travel site because of the word "Touregypt" so we are unsure about whether this will be a trusted source. The "featurestory" directory points to the fact that this should have detailed information about the topic. Also the sentence "A sarcophagus was also usually provided to hold the coffin in the tomb" tells us there is a difference between a coffin and a sarcophagus. So we need to read more about this.

Life in Ancient Egypt: Life in Ancient Egypt

Gods and Symbols of Ancient Egypt: An Illustrated Dictionary. After the mummy was put in a coffin and then in a sarcophagus, it was placed in the burial chamber. ... and, for many kings up to the time of the New Kingdom, pyramids. ... Pharaohs built the finest tombs, collected the most elaborate funerary ...

www.carnegiemnh.org/exhibitions/egypt/guide.htm

Potential source: We have already marked this site as being potentially useful so we should make sure to read the paragraph that talks about "symbols".

5. What treasures were placed inside a pharaoh's burial chamber during the new kingdom period in Egypt?

Middle East on the Matrix: Egypt, The New Kingdom

During New Kingdom (c. 1550-1069 BCE), the pharaohs began having their mummies buried in what they ... be secure underground vaults in the Valley of the Kings on the west bank of the Nile River at Thebes. ... His tomb yielded vast treasures and artifacts, the most famous of which is his solid gold burial mask. ...

www.on-the-matrix.com/mideast/NewKingdom.asp

Potential source: Although the title is not very informative, this site's description looks good. It also looks to be written in clear language for a younger audience. The URL is a .com and the company name is on-the-matrix which we will have to learn more about.





List of burials in the Valley of the Kings - Wikipedia, the free ...

WV25 – This tomb may have been started as the Theban burial of Akhenaten, ...

WVA – This was a storage chamber for Amenhotep III's tomb which was located ...

en.wikipedia.org/wiki/List_of_burials_in_the_Valley_of_the_Kings

Potential source: The title of this Wikipedia article suggests that we may be able to get information on each of the pharaohs' tombs within the Valley of the Kings.

CULTUREFOCUS: Ancient Egypt. Valley of the Kings, pictures and ...

Pictures of spectacular tombs built for New Kingdom pharaohs ... Beautiful images of Egyptian gods and goddesses adorn tomb walls in the Valley of ... of the soul of the great sun god Re, in the burial chamber of Queen Twosret. ... Unimaginable treasures were entombed with the pharaohs in the Valley of the Kings. ...

www.culturefocus.com/egypt_valley-of-kings.htm

Potential source: We have already marked this site. We should make sure to read about the treasures that were buried in the tombs.

VIDEO: King Tut's Treasure | drhawass.com - Zahi Hawass

VIDEO: King Tut's Treasure. There are many beautiful objects in the Cairo Museum, and some of my favorites are in the collection of King Tutankhamun. ... Howard Carter found 7 coffins in the tomb, and he brought 6 of them to the museum in Cairo and left the innermost coffin in the tomb with the mummy.

www.drhawass.com/blog/video-king-tut's-treasure

Potential source: The description of this video on King Tut's treasures will be of use if you are researching King Tutankhamun. The URL tells us that this video is stored on Dr. Hawass' website so we will have to learn more about this person to see if they are a trusted source.



Review

Figure 46: Review
- matching

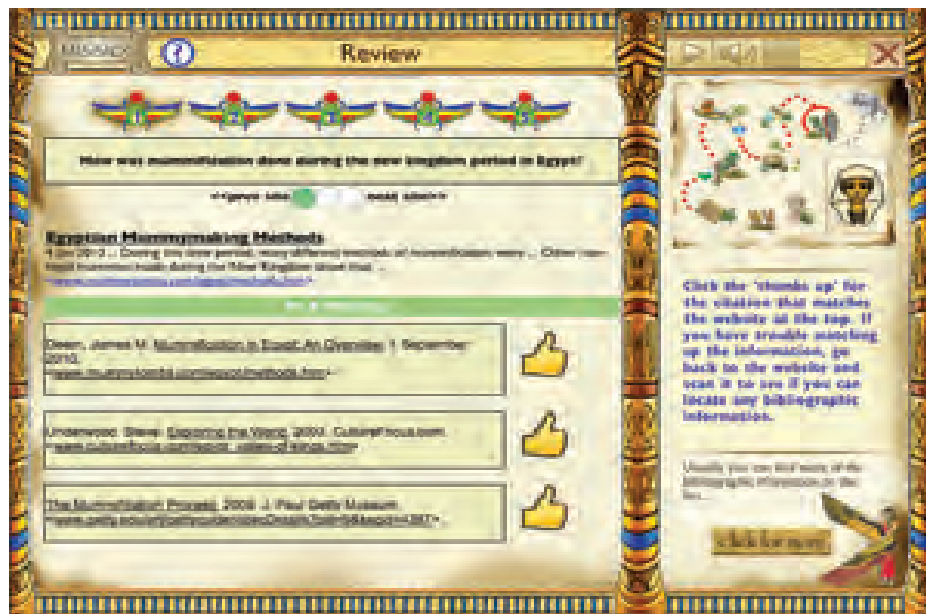
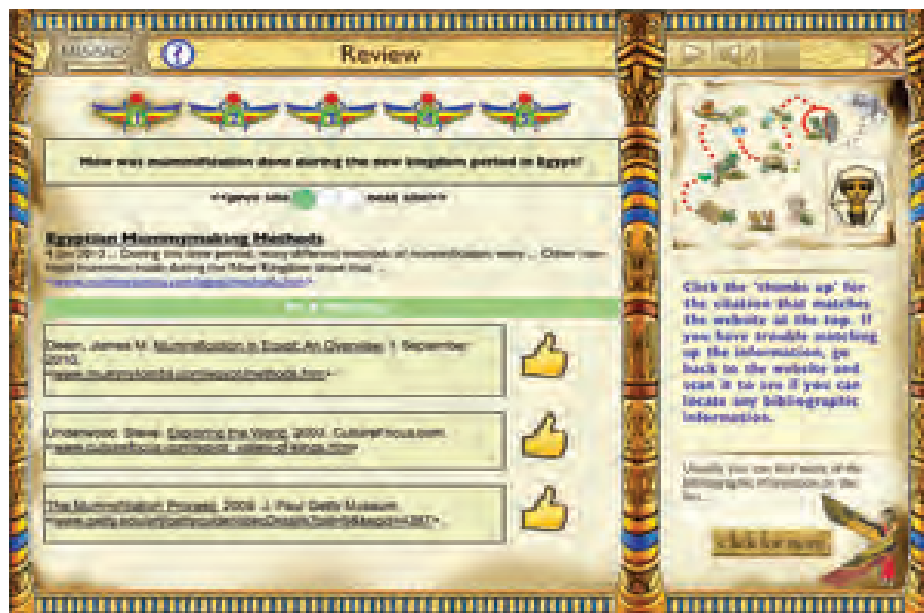


Figure 47: Review
- evaluate



Answers:

Note that there are no incorrect answers in Part 2 of this exercise. Users should be able to justify why they made their selections of sources.

1. How was mummification done during the new kingdom period in Egypt?



Deem, James M. Mummification in Egypt: An Overview. 1 September 2010. 8 October 2010. < <http://www.mummytombs.com/egypt/methods.htm> >

Underwood, Steve. Exploring the World. 2009. CultureFocus.com. 8 October 2010. < http://www.culturefocus.com/egypt_valley-of-kings.htm >

The Mummification Process. 2009. J. Paul Getty Museum. 8 October 2010. < <http://www.getty.edu/art/gettyguide/videoDetails?cat=9&segid=4387> >

2. Where were pharaohs from the new kingdom period buried?

Historical Development of the Valley of the Kings in the New Kingdom. 2008. last modified on: December 18, 2002. Theban Mapping Project. 8 October 2010. < http://www.thebanmappingproject.com/articles/article_2.3.html >

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Using the Information



Figure 48: Using the Information



Figure 49: Using the Information





Figure 50: Using the Information



TIP:

While the game ends here, teachers are encouraged to wrap up the game with one of the recommended extension activities.





Using ISIS-21

Teachers are now able to create, edit, and delete their own ISIS-21 projects by clicking on the ISIS-21 graphic on the Lobby page. All of the commands that are available within the student environment are available in the teacher environment.

TIP:

What a great way to model each of the ISIS-21 steps for your students by going through the inquiry process yourself!

Figure 54: The LTK Lobby



Teacher Resources

A number of resources have been made available to help teachers implement ISIS-21 in their classrooms. These resources are being added to on a continuous basis so it is a good idea to pop in to this page every so often.

TIP:

Don't forget there are many useful resources also available on the LTK wiki. Go to <https://cslp-epearl.wikispaces.com/> to set up an account.





LTK Research

Chapter 8



Summary of Research

ABRACADABRA is based on the best available research on how children learn to read and the best available research on using technology for learning. Research is the bedrock on which ABRA, and our other tools, were designed and developed. ABRA has also been the subject of extensive efforts at validation over the years. Consequently, it is fair to claim that ABRA is both evidence-based and evidence-proven.

There are more than a dozen studies exploring the impacts of ABRA on various facets of children's reading skills. Some of these are modest studies while others are ambitious large-scale and longitudinal investigations complete with random assignment of classes to experimental and control conditions.

We thought it would be useful to take the best of these studies, either quasi-experiments or true experiments, and summarize the findings. As you can see from the table below, the positive effects of ABRA hold for all types of reading skills and measures even under stringent conditions of experimentation compared to other forms of reading instruction. Furthermore, the effects of ABRA are not trivial in size; ABRA produced noticeable gains in learning to read compared to traditional means of reading instruction.

The results of the two large experiments, one in Canada and one in Australia are being now reviewed for publication. Among other things, these studies discuss the length of student exposure to ABRA and quality of ABRA implementation. Specifically they suggest that if teachers are supported to skillfully embed technology into literacy instruction, then even greater effects of using ABRA may be expected.

| Reading Skill | k (# of comparisons) | Average Effect Size | Percentile Advantage |
|----------------------|----------------------|---------------------|----------------------|
| <i>Alphabetics</i> | 21 | +0.396 | 15.39 |
| <i>Fluency</i> | 19 | +0.187 | 7.42 |
| <i>Comprehension</i> | 11 | +0.340 | 13.31 |
| <i>Overall</i> | 51 | +0.306 | 12.02 |

Table 1: Summary of Research on ABRACADABRA: Effects on Reading Skills

The combined use of ABRA and ePEARL (a self-regulation electronic portfolio) was in the focus of the two-year study investigating their effect on the comprehension skills of cycle-one students. The data are still being carefully analyzed.



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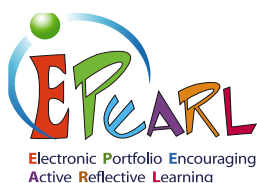
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Summary of Research

Up-to-date, two major studies of ePEARL effectiveness for language instruction in elementary classrooms (grades 4-6) were conducted between 2007 and 2009 in three Canadian provinces. The first study took place in 2007-2008 and involved 14 teachers and 296 students. Participants in the second study (2008-2009) were 21 teachers and 322 students. In experimental classrooms, teachers were using ePEARL while, in control classes, teachers used no portfolio tool.

The findings of these studies show that elementary students in classrooms where the teacher provided regular and appropriate use of the electronic portfolio tool ePEARL showed significant learning gains as compared to control students, who did not use ePEARL. Specifically, both studies consistently report significant improvements in their writing skills on a standardized literacy measure (i.e., the constructed response subtest of the Canadian Achievement Test-4th ed.) and certain metacognitive skills measured via student self-report. The table below represents the magnitude of differences between the two groups as gains in percentile points.

| | ePEARL (pre- & post-) means/SD | | Control (pre- & post-) means/SD | | Effect size | Percentile advantage |
|--|-----------------------------------|------------|------------------------------------|------------|----------------|-------------------------|
| Study 1, grades 4-6 (n=296) | | | | | | |
| <i>Writing skills (CAT-4)</i> | | | | | | |
| Writing: Content | 2.10/0.65 | 2.30/0.63 | 2.11/0.66 | 2.23/0.63 | +0.13 | 5 |
| Writing: Content Management | 1.78/0.75 | 2.11/0.67 | 1.95/0.71 | 2.05/0.72 | +0.33 | 13 |
| <i>Self-regulation skills (self-reports)</i> | | | | | | |
| Setting goals | 3.45/0.91 | 3.71/0.89 | 3.63/0.93 | 3.50/0.96 | +0.42 | 16 |
| Identifying strategies | 3.08/1.13 | 3.36/0.96 | 3.31/1.06 | 3.13/1.14 | +0.43 | 17 |
| Using feedback | 3.96/0.90 | 4.42/0.83 | 4.21/0.91 | 4.06/0.96 | +0.47 | 18 |
| Study 2, grades 4-6 (n=322) | | | | | | |
| <i>Writing skills (CAT-4)</i> | | | | | | |
| Writing: Content | 1.73/0.66 | 2.13/0.70 | 1.78/0.63 | 2.05/0.63 | +0.20 | 8 |
| Writing: Content Management | 1.64/0.68 | 1.95/0.69 | 1.63/0.58 | 1.85/0.64 | + 0.14 | 6 |
| <i>Self-regulation skills (self-reports)</i> | | | | | | |
| Setting goals | 7.05/1.64 | 7.58/1.51 | 6.78/1.76 | 6.84/1.75 | +0.28 | 11 |
| Identifying strategies | 7.95/1.69 | 8.06/1.41 | 8.08/1.35 | 7.78/1.35 | +0.28 | 11 |
| Self-observation | 14.78/2.53 | 14.96/2.50 | 14.92/2.57 | 14.49/2.80 | +0.23 | 9 |

Table 2: Results of two major Pan-Canadian Studies using ePEARL

Specifically, experimental students in both studies showed larger improvements compared to controls in content presented in their writing assignment and content management referring to word choice, sentence structure and conventions of print. Students' data on self-regulation skills show that students who used ePEARL consistently reported higher levels of specific self-regulation processes including setting process goals and listing strategies. In study one, students described higher uses of feedback from their teachers to improve on work whereas in the second study, the process of observing one-self was given more importance by the respondents.

The results also indicate that teaching with ePEARL has positive impacts on students' literacy and self-regulated learning skills when the tool is used regularly and integrated into classroom instruction appropriately. Electronic portfolios are promoted as knowledge tools that are designed to facilitate the integration of technology in classrooms by being fully embedded into classroom life rather than merely added to it. Teachers in these classrooms also reported that the use of ePEARL had a positive impact on their SRL teaching strategies. Data were also collected to understand how teachers used electronic portfolios in their classrooms, to what extent they integrated electronic portfolios into their practice, and the factors influencing their use. The high implementers reported feeling supported by their administration as well as experiencing growth in their understanding and application of self-regulation pedagogies as a result of the scaffolding and support provided by the software.

ePEARL SCHOLARLY WORKS

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Summary of Research

The design and development of ISIS-21 has been the subject of wide validation efforts over the recent years. Three pilot studies with overall sample of 293 late elementary/early secondary students were conducted to evaluate the environment and improve its potential for use and learning.

The data collected during ISIS-21 field-testing show that the time that students spent using ISIS-21 is positively associated with learning information literacy skills ($r = 0.5$, $p < .00$). As measured on TRAILS scale (Tool for Real-time Assessment of Information Literacy Skills), students demonstrated skills pertaining to the three phases of the research process: planning research, searching and using information. Specifically, in regard to planning the research process, 78.6% of students were able to determine an area of inquiry that requires research whereas 90.5% were able to formulate questions based on the information needed. In respect to searching information, students scored the highest on a number of skills. These included combining key words to build questions related to the problem (71.4%), identifying reliable sources of information (73.8%); and collecting and organizing information relevant to the context (88.1%). As for using information, summarizing the main idea to be extracted from the information, note taking and respecting the etiquette related to the use of information were the skills in which 73.8%, 85.7% and 78.6% of students, respectively, scored the highest.

Students also reported positive experience with the tool:

- 84.2% of students found that ISIS-21 is easy to use;
- 71% of them liked using ISIS-21;
- 76.3% understood what they were supposed to do at each step when using ISIS-21;
- 63.1% learned how to do research; and
- 65.8% would like to use it again.

In addition, students' self-reports showed that their use of ISIS-21 encouraged certain self-regulation processes. For instance, 65.8% of students were engaged in setting learning goals and choosing strategies before using ISIS-21 whereas 81.6% reflected at the end of each step to a various extent.

Teachers' feedback revealed that teachers generally liked the tool and valued the importance of teaching information literacy skills. Teachers also expressed their need for scaffolding and support to effectively integrate ISIS-21 into teaching their discipline.

The results of field-testing were also helpful in gaining a better understanding of the current weak areas in ISIS-21. It has become clear that the features of the student environment of ISIS-21 need to be redesigned. For example, the linkages between ISIS-21 steps and the navigation of the tool need to be improved. Also consistency between ISIS-21 and ePEARL will be enhanced to involve students in self-regulation processes of setting goals and selecting strategies before using ISIS-21.



ISIS-21 SCHOLARLY WORKS

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