Using bigchalk Resources in the Illinois Standards Led Environment

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Provided by bigchalk

In fulfillment of Illinois State Board of Education Contract 2000 – 2001 school year
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Introduction

bigchalk ([www.bigchalk.com](http://www.bigchalk.com)) is an education destination for the K-12 learning community, with both subscription-based and value-added learning tools for educators, parents, and students. For the third consecutive year, the Illinois State Board of Education has asked bigchalk to participate in the [Internet Online Instructional Resources Program](http://www.bigchalk.com/corp/illinois/school). bigchalk is pleased to provide the following resources for use by Illinois educators for the 2000-2001 school year:

- eLibrary Classic™
- bigchalk ExplorAsource
- HomeworkCentral
- bigchalk Assessment/Test Boosters

These resources assist classroom teachers, administrators, and library media specialists in identifying and supporting state and national academic standards. However, the focus is not only on identifying appropriate resources, but also on learning how and when to use them within a standards-based environment.

These resources can all be access from a site specifically created for schools in Illinois. The new web site is: [http://www.bigchalk.com/corp/illinois/school](http://www.bigchalk.com/corp/illinois/school)

This manual correlates bigchalk resources with the Illinois Standards Aligned Unit/Lesson template. Each resource is presented within the context of lesson plan development, following the model developed by the ISBE/ROE. A separate resource entitled, “Standards Aligned Unit/Lesson Samples” is available from bigchalk. It includes eight lesson plans that follow the ISBE/ROE model and integrate bigchalk resources where appropriate. The lessons cover the core subjects of mathematics, social science, English language arts, and science.

Although this user manual is brief, the products that are described within are very robust. An effort has been made to keep the instruction on each product simple and succinct. Users are encouraged to spend time mastering the basics of navigating each resource and practice applying the content in meaningful ways to support curriculum. Advanced features are available for each application, however the user will be in a better position to appreciate additional functionality having mastered the core components of each resource.

bigchalk is dedicated to providing educators and students with the best user experience possible. Questions and comments on the training resources, products, and content should be directed to bigchalk immediately. Your feedback and comments are important.
Standards Aligned Classroom Project

Over the course of this school year, the Statewide Standards-Aligned Classroom Project will be introduced. The intent of the project is to provide training and support for teachers to align their classroom-level units/lessons and assessments to the Illinois Learning Standards. A group of educators have volunteered to participate in school-based learning teams. During the fall these teams will receive two-days of training on aligning their lessons and assessments. The teams will continue this work throughout the school year, culminating in a series of three events (in Northern, Central and Southern Illinois) during the spring of 2001 at which time the learning teams and coaches will share their aligned lessons, units and assessments created by their school building-level learning teams. Following review, the work product of these groups will be loaded online on the ISBE website, providing educators statewide with an aggregated set of aligned units/lessons and assessments.

The school-based learning teams will use the Standards Aligned Unit/Lesson template as the “de facto” standard in developing aligned lesson plans. bigchalk is using this same template in support of the statewide professional development program. This will provide a context for learning bigchalk products that is consistent for educators. Since the unit/lesson template is new, it may be foreign to many educators being trained on bigchalk resources. Please take a moment to familiarize yourself with the template, which follows on pages 6-7.

Subsequent pages in this manual entitled “Correlation” map the relationship between the components of the Standard Aligned Unit/Lesson template and bigchalk resources. The first view lists the elements of the lesson template, their respective alphanumeric “cells” as marked on the template, and a sampling of appropriate bigchalk resources to use. The second view begins by listing the bigchalk resources and showing their relationship with the lesson components. These views are provided in order to create a framework for understanding the material to be presented. For those learners already familiar with the Standards Aligned Unit/Lesson template, the first view may be most useful. For others, a product-centered approach may make more sense. Regardless, both views demonstrate how each bigchalk resource has multiple applications across the lesson development process.

Following the “Correlation” pages, the manual will review each of the four resources being provided by bigchalk. Once you have achieved a level of mastery with each of the resources, other correlations may become evident. Given the depth and breadth of content available from bigchalk there are many ways in which the resources can support student and professional study. The application of the content is only limited by the users’ imagination.
Standards Aligned Unit/Lesson, p1

Course/Grade Level, Unit

A.

Standard:  B.

Benchmark:  C.

D.

Knowledge:

Reasoning:

Skills:

E.

Performance Task(s)-What do students do to demonstrate knowledge and skills?

F.

Scoring Criteria-On what traits will student responses be evaluated?

G.

Assessments:
## Standards Aligned Unit/Lesson, p2

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<td>Potential Accommodations</td>
<td>J eLibrary Classic, Professional Resources  • Education Magazine  • Journal of Educational Research  • Journal of Special Education  • THE Journal</td>
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<td>Follow-up/Remediation/Extension</td>
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**ExplorAsource™ for Teachers**
*Connecting resources, standards, and learning needs.*

**MAKING THE CONNECTIONS**

**ExplorAsource in the Standards Led Environment**

- Locate resources to support local, state, and national standards.
- Find learning resources that match the topics you are teaching.

**Correlation with IL Lesson Template**

- Identify Standard/Benchmark (B,C)
- Follow-up/Remediation/Extension (K)

**USING TECHNOLOGY**

bigchalk has loaded the Illinois Learning Standards for Language Arts, Mathematics, Science, and Social Science into ExplorAsource. The standards have been indexed to make the information more easily retrieved, and added a smart search capability that lets educators search by topic area. National standards are included as well.

Your assignment is to locate a standard/benchmark for middle/junior high school mathematics. The lesson activity will be to teach students how to solve problems graphically using Venn diagrams within the context of Boolean searching using the AND, OR, AND NOT logical operators. Follow the hands-on activity, at right.

Depending on the unit/lesson you design, you may have a need for supplemental materials. ExplorAsource is a great tool for finding correlated learning materials. Some resources even include links to product reviews.

**Hands-on Activity**

2. Click on **ExplorAsource**
3. Select **Grade 8** from the drop-down box
4. Under subject, select **Mathematics** from drop-down box
5. Click Standard Search
6. Next scroll under Topic. Choose **Solving Equations Graphically**
7. Under Document, choose **IL Learning Standards**
8. Click Standards Match
9. You will retrieve 3 matches. Select **8.D.3a “Solve problems using numeric, graphic or symbolic representations of variables, expressions, equations and inequalities ...”**
10. Click on the **Matching Resources** link
11. Scroll down to a resource called **Mathematics Toolbox** by Riverdeep. Click on the link to **Tech. Learning Magazine** to read the product review.
eLibrary Classic

The easiest-to-use web reference tool for learners of all ages.

MAKING THE CONNECTIONS

eLibrary Classic in the Standards Led Environment:

- Millions of online documents and media formats to stimulate critical thinking, develop skills, and assist students in creating tangible products.

- Engaging students in worthwhile research is easy with eLibrary Classic. The intuitive interface makes research easy for the novice searcher.

- Six media formats (reference books, newspapers/newswires, magazines, maps, news transcripts, and pictures) and millions of documents make eLibrary Classic a valuable resource for student and teacher research.

- Professional resources provide educators with current articles and best practices on curriculum development, special education, and technology.

- Database can be used by the educator in identifying suitable extension activities, or by students working on inquiry-based extension or remediation projects.

Correlation with IL Lesson Template

- Performance Tasks (E)
- Instruction (H)
- Resources (I)
- Potential Accommodations (J)
- Follow-up/Remediation/Extension (K)

USING TECHNOLOGY

eLibrary provides the entire K-12 community, from kindergartners through teachers in graduate programs, with content that promotes learning skills and supports the Illinois Learning Standards. A relative reading level is assigned to each document so that users can select documents aligned with their skill levels. Updated daily, eLibrary contains over 6 million documents with full text content from six distinct source types: periodicals/journals, newspapers/news wires, books, pictures, maps and news transcripts.

Review your results set. Notice the range of credible reference sources included in eLibrary. Results for this search come from World Book Encyclopedia,

Hands-on Activity

1. Go to http://www.bigchalk.com/corp/illinois/school
2. Click on Electric Library. You may need the unique user name and password assigned to your school.
3. In the search box, type “what is a Venn diagram” in search box. Select results to come from reference books and pictures.
4. Leave search at default (natural language). Hit Search.
5. Select to sort results by pictures (click the icon for pictures).
6. Select the first picture from the Hutchinson Encyclopedia.
Hutchinson Encyclopedia, Columbia Encyclopedia, just to name a few.

One point of interest to mathematics instructors: The Hutchinson’s Encyclopedia includes many diagrams that can be printed or saved and then converted into overhead or computer displays for class study & discussion.

This search example is meant to show how eLibrary can be used as a resource for professional-level research and study. In this example we are looking for articles about curriculum integration in T H E Journal (Technological Horizons in Education). In this example we will limit our search to this specific publication in order to retrieve a manageable and relevant set of results.


New Search
1. Remain in eLibrary
2. Type “curriculum integration” in the search box
3. Type “T H E Journal” in the Publication box (note: requires a space between each character in THE)
4. Click Search
5. Click on the article title for any of the top three articles to display the full-text
6. Click on the best part button at the top of the article.
bigchalk Assessment/Test Boosters

Online testing, evaluation, and remediation in mathematics and reading.

MAKING THE CONNECTIONS

Test Boosters in the Standards Led Environment

• All exams cover 4-5 primary skill areas that correspond to the broadest possible set of national standards. This approach enables a teacher to preview an exam, identify relevant skills areas and corresponding test items, and assign the problems to a class or individual student.

• After the exam is scored, additional help is available online. Answers and explanations are provided along with links to educator-selected websites for more in-depth study on a topic.

Correlation with IL Lesson Template

Follow-up/Remediation/Extension (K)

Correlation with IL Lesson Template

Other Assessments (G)

USING TECHNOLOGY

The “Test Boosters” page includes helpful links to information on test anxiety, test preparation and study skills.

There are ten “live” 30-question sample tests for mathematics and reading available on the site, for fourth through eighth grade. The math questions are correlated to the National Council of Teachers of Mathematics (NCTM) standard. The reading tests are correlated to the broadest possible set of national and local standards.

Students may take the tests as many times as they like. Once the test is complete, it is scored and the results are presented on screen. Incorrect items will appear online with the student’s response and the correct response. If the answer remains unclear, additional information is available by clicking on the “Additional help for this problem” link.

bigchalk Assessment is a growing and dynamic area of the bigchalk website. In its final form it will include the functionality to enable parents and teachers to store tracking data to measure the change in a student’s performance over the course of the year.

Hands-on Activity

2. Click on bigchalk Assessment
3. Click on Grade 8 Mathematics Test.
4. Scroll to the bottom of the exam. Click on Score Your Quiz.
5. Scroll to question 11. Click on Additional help.
6. Notice how questions 11, 18, 19, 20, and 24 are grouped together, as they test algebra skills (in using patterns and functions to represent and solve problems).
7. Click on Introduction to Algebra to visit a new website for additional information on this topic. (Note: will open a new browser window)
HomeworkCentral’s Teacher Resource Collection

Hand-picked web links to reliable information and curricular support

**MAKING THE CONNECTIONS**

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<tr>
<td>• An extensive archive of over 14,000 lesson plans is available on the bigchalk website. This offers educators an opportunity to learn from their peers and share best practices.</td>
<td>Achievement Targets (D)</td>
</tr>
<tr>
<td>• HomeworkCentral provides thousands of links to instructional websites, including simulations, online practice tests, and other activities. For the educator looking for computer-based performance tasks, this resource may provide some new, fresh activities.</td>
<td>Performance Tasks (E)</td>
</tr>
<tr>
<td>• Having over 100,000 links covering in excess of 10,000 subjects, HomeworkCentral is a perfect starting point for educators in developing lessons, lectures, or keeping current on a topic. It is an ideal, “best of the web” resource locator for teachers.</td>
<td>Instruction (H)</td>
</tr>
<tr>
<td>• Students and parents will find a wealth of information available through HomeworkCentral by using the “browse” and “search” features. In addition to lesson plans, teachers will find planning calendars, subject resources, technology integration resources, links to professional associations, and much more.</td>
<td>Resources (I)</td>
</tr>
<tr>
<td>• “Learning and Physical Disabilities” is covered in great depth in HomeworkCentral. This topic area will point educators to highly credible websites for further information.</td>
<td>Potential Accommodations (J)</td>
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**USING TECHNOLOGY**

Our first search in the HomeworkCentral Teacher Resource Collection is to find a lesson plan that we might use as a guide in teaching our students how to graphically represent information within a table. Remember, the assignment calls for the students to create a spreadsheet, and offers possible extra credit for converting the spreadsheet into a graph. The

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<th>Hands-on Activity</th>
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<tr>
<td>2. Click on HomeworkCentral.</td>
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<tr>
<td>3. Click on the drop down box on browse.</td>
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<tr>
<td>4. Click on Teacher Resources.</td>
</tr>
<tr>
<td>5. Click on Go to view HomeworkCentral’s Teacher Resource Collection.</td>
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<tr>
<td>6. From the Subject Resources, click Mathematics.</td>
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teacher will need to teach the differences between various tables, graphs, charts, and the value behind representing data graphically.

L
One of the activities required for students to understand the assignment, is for the teacher to provide classroom instruction on Venn diagrams. By searching through HomeworkCentral the teacher is able to locate a couple of web sites that will help students to understand the concept. The Venn Diagram Self Test will appeal to students who enjoy computer-based learning.

The Teacher Resource Collection is a small part of the HomeworkCentral collection. In its entirety HomeworkCentral is a study web site with over 100,000 editor-selected links organized by age group. There are two ways to access the links within the database; by running a search or browsing the topic tree. In the previous section, we ran a search in HomeworkCentral by typing “Venn Diagram” in the search box. This time we are going to browse the topic tree to review any and all subject headings that may be of interest.

7. From the Lesson Plan, select Middle School.
8. Next scroll down and select Graphs and Graphing.

New Search
1. Go to http://www.bigchalk.com/corp/illinois/school
2. Type Venn diagram in the search box. Select High school and beyond from the drop down box and click GO.
3. Scroll down to bottom of the results page to Sites Matching Your Search.
4. Look at several examples – including: Venn Diagram Self Test and Common Day Example of Venn Diagram.

New Search
2. Notice the search/browse area on the main portal screen.
3. In the search box, type Internet Technology, select High School and Beyond, and hit Go.
4. Look for the topic heading, Internet Technology at the bottom of the page. Click on web browsers.