



***21st Century Tools and Electronic Resources for Students, Teachers and Parents***  
**Video Script**  
**2009**

Hello. I'm Teresa Fredericka, Director of INFOhio, the Information Network for Ohio Schools. New national and state educational standards call for students to do more than gather information when they research. They set the expectation that students develop 21<sup>st</sup> century skills that our Ohio business leaders look for in people they hire: critical thinking and problem solving, communication, collaboration, leadership and productivity through information research and media literacy skills. Exploring, understanding and creating new information is what INFOhio is all about. Our goals include

1. Advocate **21<sup>st</sup> century learning skills** to enable all Ohio PreK-20 students to be information and media literate reaching their full potential to learn, work and add to the 21<sup>st</sup> century knowledge base.
2. Help all students and teachers access the right content, in the right format, at the right time to meet their learning needs through **professionally selected resources**.
3. Provide students and educators with **free and equitable access** to an essential academic core collection of online and physical library materials appropriate to PreK-20 research.

Through this video we hope to introduce you to the online resources provided to Ohio students and teachers through INFOhio and acquaint you with the features in those resources that enable you to infuse your assignments with 21<sup>st</sup> century information literacy skills.



As teachers, you are familiar with many of these resources which had their humble beginnings as print reference resources. Of course, the beauty of the transformation from print to online resource is the infusion of interactivity and Web 2.0 tools. And you know that with INFOhio, you are getting valid AND safe resources to use. When using INFOhio resources on a school computer, you will not need to use a password for any resources; but from home you will need to enter a user ID and password. You can get this information from your librarian or contact INFOhio Central for the information. Now let's visit with a school librarian to take a look at some specific resources.

[Librarian speaking]

Over the past decade, the library has transitioned from that building or room you went to for information to a portal that opens to a world of information at your fingertips, in your classroom or home. With information going through a delivery revolution, we teachers have

an opportunity to revolutionize our assignments and lessons. Let's take a look at some of the revolutionary tools we now have available through INFOhio by going to the INFOhio Web page where the online resources can be accessed by grade level or through the *Core Collection* button. We don't have time in this short video to highlight every resource, but we'll do our best to point out the things we think you will really want to know about, regardless of your grade level or subject area.



Let's look at a resource we have subscribed to for many years, **EBSCOhost**. EBSCOhost is a database of full-text articles from over 6,000 magazines and journals that are appropriate for all ages and includes over 500 professional journals related to the field of education. EBSCOhost is something you really need to become familiar with if you are pursuing a degree or certification. The easy-to-use advance search features enable you to find peer-reviewed journals for some of those tough grad school assignments. There are other benefits to you as a teacher, too. If you have an area of particular interest in your field or education in general, you can set up an ALERT, which is a mini-program that will generate an e-mail or RSS feed to you when an article about that topic is indexed in EBSCOhost. That's right...you don't have to take time to check to see if there is something new written about guided reading or string theory or whatever your special interest is. If you set up an ALERT, you'll know as soon as something is indexed. This might be a painless way to get acquainted with the concept of RSS feeds for you or your students.

Another [EBSCOhost] feature, called *Page Composer*, allows you to select articles that you want your students to read and create a webliography for your students to click on the article titles and go immediately to that article. Under your guided direction, your students have no excuses about not being able to find an article on the topic! The really great news is that you don't have to know how to build or store a Web page. EBSCOhost does that all for you.

While journal and magazine articles are the main reason we turn to EBSCOhost, it is also a good place to locate primary sources, TV and Radio scripts, maps and images that can be used legitimately in projects. You'll notice on the first screen that EBSCOhost has a special collection of animal information, images and a graphical interface for the youngest of students.



To help you better understand each resource, you'll see a blue **I** button on the access page. This links you to many *help* resources about how to use the product, including database tours, PDF directions, search tips, etc.



As you are looking for resources that lend themselves to enhancing those communication, collaboration and creativity skills, be sure to explore the **World Book Web**. When an

encyclopedia was in print, it was just a reference book. But in an online environment, a resource like *World Book* takes on many new dimensions.

*World Book* comes in many flavors, too. Let's take a look at *World Book Advanced*, described as appropriate for high school and college. The opening screen is divided into three columns and right off the bat you see *Research Tools* listed in the first box of the first column. Most of those links are self explanatory, such as a dictionary and atlas link. But let's take a minute to highlight *Teaching With Documents*. *World Book Advanced's Teaching With Documents* are lesson plans focusing on one or more primary source images. The *Teaching With Documents* pieces feature historical background text, enlargeable images, discussion questions, worksheets and book lists. There is a title list, categorized by topic and new *Teaching With Documents* resources will be added regularly. From *Constitutional Issues*, to *Political Cartoons*, to *World War II*, you'll be amazed not only at how primary sources can bring a lesson to life but also how easily you can put your hands on the primary sources you need!

The second box in the first column is *Create and Save*, and has a link to *My Research*. Think of this as a folder or bookbag for students to keep all their research findings together as they prepare for their report or project. When a student creates a folder to store their research, they also have a limited word processing program available to make notes about what they are saving. With a shared *My Research* space, students can collaborate and do group work.

The next link is for *Pathfinders*. *Pathfinders* are resource guides and include primary documents. They can be especially beneficial for the student who struggles with getting below the surface of a topic. Through the extensive links, a student can really see and understand the scope and depth of a topic, with each aspect just a click away. *Pathfinders* also include information on study skills and suggested books for reading.

*Create and Save* has a citation builder for students to use that prompts them every step of the way to the correct format for either a MLA or APA formatted bibliography.

The final feature in this section is the informative and fun *Timelines* section. A teacher may want to use an existing timeline created by *World Book*, or you might give an assignment where your students have to enhance or build a timeline from their own research. The timelines can be printed as a timeline or as a table and can include pictures as well as text.

The last major section of the first column is *In the News*, which is an actual feed from *Reuters News* that is updated every 15 minutes. How's that for current events?

Jumping to the third column on the home page, you'll find links to the most recently viewed articles and primary source documents.

The middle column on the home page is the main search box, where you can search by keyword, full text, image or with an advanced search. Below the search box is the *E-book Center*. *World Book Advanced* includes thousands of fiction and non-fiction e-books, with selections in seven languages. You'll find the complete works of Shakespeare and Dickens in the collection.

The search results are returned in three hyper-linked columns. The first lists the content type and number of results, such as the number of articles, maps, sounds, videos, etc. The middle column lists the articles on the search topic, ranked by relevance. The third column lists related primary source documents and e-books on the topic, thus providing a big picture look at the topic in general. The results can be saved to the *My Research* section.

When you select an article, you'll find a link to our state standards in the bottom right corner. Each article has a toolbox for printing (all or by section), e-mailing, or saving to *My Research*. A handy feature within the article is the ability to double-click a word and be immediately transported to the dictionary for the definition. To the right of the main article are links to related information and links to related primary source documents on that topic.

At the bottom of the page you will see links to the other *World Book* products available to all students through INFOhio, as well as many other links. Be sure to look at the *Site Contents* link to see another easy way to move about within the *World Book* product. One feature linked on this page that we haven't mentioned, is the *Back in Time* feature. *Back in Time* contains approximately 14,000 historic articles from past *World Book Year Books* that present a you-are-there account of the most significant events of each year. Users can search or browse for topics or find links to *Back in Time* articles in the *Related Information* box within many *World Book* articles, thus making it an incredible resource for any research done by year or decade.

Make sure you spend some time with the links for the tutorials and educator's tools. You'll find lesson plans and professional links related to all curricular areas.

There is also a *Site Contents* link in *World Book Kids* and *World Book Student*. Using the *Site Contents* is probably the easiest way to find a neat feature of *World Book Student*, called *Surf the Ages*, a special feature with imaginary news sites from Ancient Times, The Middle Ages, or Modern Times. Students can link to dozens of e-zines, want ads, bookstores and other types of simulated Web sites, written from the perspective of the time. What a great way to help today's students understand what the past was really like!

*World Book Student* also has a section that is great for all students and teachers, called *How to Do Research*. It not only steps students through the research process, but it also helps teachers who want to infuse Web 2.0 tools into their lessons, develop rubrics or help students understand about plagiarism. There's a section called *21<sup>st</sup> Century Project Case Study Center* to help teachers see how other educators are effectively using 21<sup>st</sup> century technologies in their classrooms. You can learn about setting up an RSS reader, joining a social network, blogging, tweeting or attending a free online conference about technology and education. Don't miss the tips for creating plagiarism-proof assignments!

That was a lot of information about *World Book Web*, but would you believe it really just scratched the surface? But, we must move on.



Another amazing resource in the *Core Collection* is the **Biography Reference Bank** that covers more than 570,000 individuals from antiquity through today. Most articles are in full text. The information is enhanced by images, photos and links to magazine articles about the subject. While anyone in any field -- dead or alive -- can be included in this database, students might find it most helpful for the links to reviews and criticisms of authors and their works.

Search results are presented with three tabs: *All Results*, *Bios & Obituaries* and *Images*.

Web 2.0 tools are built right into the *Biography Reference Bank*. You can set up RSS feeds and alerts so that you become aware of new information about your subject as soon as it is added to the database. You can also create a persistent link that you could place on a Web site or in an e-mail to direct your students to exactly what you want them to read in the database. How handy is that for anyone teaching an online course or posting class notes online?

Just like the other online resources, *Biography Reference Bank* has many great tools for students to use. There's help with citations, Boolean logic operators, and a nifty feature called *My WilsonWeb*. It is a place in which users can create a *profile* for saved searches, e-mailed alerts, and RSS feeds. Recently added is the ability to save individual records, records per page, language of the interface and sorting options. The database is linked to many journals, including peer-reviewed journals. And like all the resources we are highlighting, there are tutorials to help every user navigate the database.



Let's return to that main *Core Collection* and choose **Science Online**. *Science Online* offers a comprehensive, curriculum-oriented overview of a broad range of scientific disciplines. The site offers more than 6,900 diagrams, illustrations and images; hundreds of videos and flash animations; more than 1,100 science experiments and activities; biographies, timelines, a conversion calculator and more.

Students can delve as deeply as they want into a science or field and when they conduct a search. The tabbed results are ranked by relevancy and sorted by record type.

A really nice feature for teachers and for students with limited visibility or vision problems is that on screen text size and images can be enlarged for easier viewing.

Experiments are indexed by grade range, subject category and time required. (You just know a teacher suggested that information be included!)

The conversion calculator is an amazingly handy built-in tool where students can quickly conduct conversions of angles, temperatures, force, computer storage and a wide range of

other topics. Just like the timelines, it is a real time saver for groups working collaboratively on a topic.

There's also a handy link at the bottom of the page to the National Science Standards.

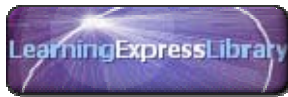


Back in the *Core Collection*, let's take a look at a rather simple database that might just be more than it looks like at first glance. **The Art Collection** provides high-quality, digital images of works of art from museums around the world. Cultures and time periods represented range from contemporary art, Native American and Inuit art, to ancient Greek, Roman and Egyptian works, along with Japanese and Chinese works. The collection contains more than 71,000 digitized images including paintings, photographs and prints. Other types of works include sculpture, textiles and works of decorative art. The works represent many time periods, cultures and media making it a useful tool beyond the study of art, by reaching into social studies, literature and foreign language. It's an excellent resource for visuals that all Ohio students and teachers have the right to use for educational purposes.

The real beauty is the simplicity factor. The user can perform a keyword search for a title or creator. But, you can also browse by the creator, culture or nationality, the object type or by the owner of the work. While information is limited to a typical museum entry for the work, the real payoff in this database is the visual image itself. These images can be displayed in a classroom or used in any educational media that students and teachers produce.



Have you ever had a class that struggled with planning for an assignment that you had given them? We all know that students can have a lot of difficulty in budgeting their time in order to give the assignment all the attention it should receive. The INFOhio site has a tool that many students will benefit from using. It is called the **Research Project Calculator** and can be found as a button link on almost any page, including the *Core Collection* page. Students are required to fill in a brief form about the project or activity, and then the computer displays a research process for the student, complete with timelines. This visual representation of just how long an assignment will take and what steps need to be completed to successfully accomplish the assignment can be a real eye opener for a student and a meaningful tool in training students to research. Be sure to look under the *Support Materials* to find helpful lessons on research strategies. Here's an example of how it works.



You and I know how valuable this entire process of research through information literacy skills is for a student preparing to enter the workforce of the future. Yet, we often have difficulty giving our students the time they need to be creative, to problem solve, to gather and synthesize information. After all, we need to prepare them for testing! INFOhio believes that all the skills nurtured and mastered through the use of online resources does prepare students for taking tests, especially when the test asks students to read, decode, extrapolate and draw conclusions. But, there is also an online tool to help with the testing process itself. Let's take a look at another *Core Collection* resource, ***LearningExpress Library***.

*LearningExpress Library* operates just a little differently than the other resources we have looked at. For those resources, the user uses a generic login unless they need to create a unique study folder within the resource, at which time they can create a personal ID. For *LearningExpress Library*, every user needs a unique ID. It is free and simple to set one up. The reason each user needs a unique ID is because this database will allow the user to take practice tests and return to the results of that test or return to complete a test at any time. As you enter the home page, you'll see the groupings of the tests down the left column. You can see that the tests range from elementary to college students; from computer skills tests to exams for civil servants, nursing, teaching and the Praxis tests; from U.S. Citizenship tests to tests in Spanish languages.

Once you are in a section, those tabs become available across the top of the page, allowing a user to switch between areas or levels as desired.

As an example, let's go to the high school section. Clicking on the *Math* link and opening it up shows several practice tests a student can take from Algebra to Quantitative Comparison. Each of those categories has a drop down menu of additional choices. This format is true for all subject areas. Students can do the practice exams and get the results. Should they need to quit before completing the test, they can re-enter the test at the same spot at a later time. They can retake a test as many times as they want.

Back on the home page, let's look at the right column. At the top is where *LearningExpress Library* lets you know about changes and additions to the database. In the lower right of the screen is the question *What Do I Do Now?* which contains links to a help center, presents a guided tour to help users get started, links to the *Learning Centers* and links to e-books. An important *Learning Center* is the *Job Search and Workplace Skills Learning Center*, which helps the user with interviewing skills, resume skills and job searching skills. The link to e-books gives the user an entire library of self-help books related to test taking, job searches, self-improvement, etc. It's a fantastic free resource that you can take advantage of without leaving your desk! Take a few minutes to browse the titles: *10 Secrets to Acing any High School Test*; *ACT Essay Practice*; *411 SAT Algebra & Geometry Questions*; *Chemistry Success in 20 Minutes a Day*; *501 Vocabulary Questions*; *501 Writing Prompts*; *Proofreading, Revising & Editing Skills Success*...the list just goes on!



It's hard to imagine any teacher not wanting to make their students aware of this tremendous resource. INFOhio also provides access to **Digital Videos** from the Ohio Area Media centers, foreign language encyclopedias and resources for literature, newspapers and reference materials. Time does not allow us to explore these areas in this presentation, but we hope you and your students will explore these resources, too.

[Back to Executive Director on camera]



As educators we want our students to be the best learners and thinkers they can be. We want to prepare them for college. INFOhio has a new initiative called **Go Further!** – a collection of resources to help students plan their journey from high school to college and beyond! The INFOhio *Go Further!* campaign at <http://www.infohio.org/PreparingOhioLearners/educator.html> will give educators quick information links to resources for helping students with research information and college information all in one portal location. Be sure to take time to read the white paper *Preparing 21<sup>st</sup> Century Ohio Learners for Success: The Role of Information Literacy and Libraries*. This white paper summarizes how Ohio's 21st century students must be equipped with the necessary skills to explore and exploit new information. Students must be able to identify what information they need to be successful in life and work, know how to find information efficiently, evaluate the quality of information, and use information effectively and ethically.

We hope you have enjoyed learning about just a few of the resources available to you and your students through this video. We know it can be overwhelming, but our hope is that with this new awareness, you are able to create meaningful lessons, infused with opportunities for creative thinking, problem solving and Web 2.0 tools. Take a look at the INFOhio resources and 21st century grid to further help you visualize how each of the INFOhio resources encourages 21st century learning for you and your students. Every resource has a help button and the INFOhio site offers many tips sheets and tutorials to help users get the most from these resources. The days of being tied to a particular reference book are gone, and our time is too precious to review thousands of Internet sites for the valid information we need. We need to use our time wisely, and INFOhio resources help us do that as we work with 21st century learners.