

Desperately Seeking ERIC

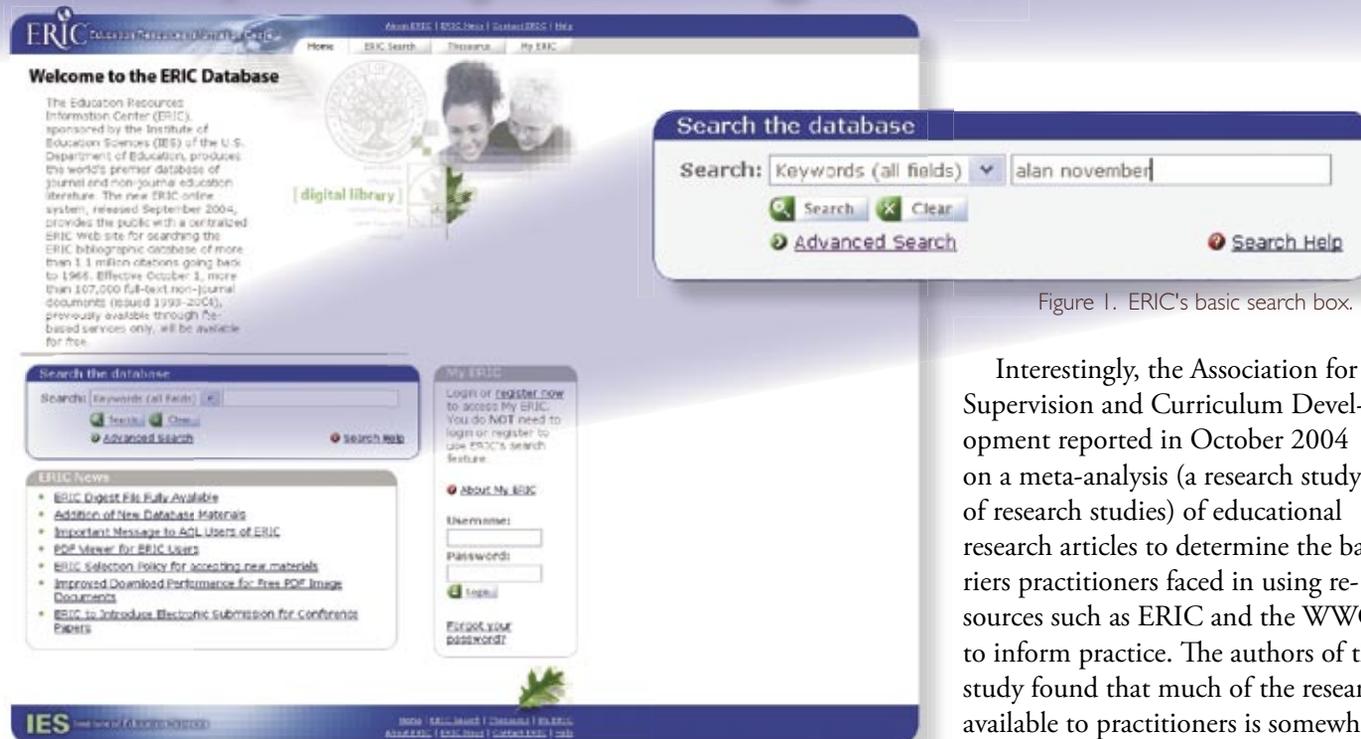


Figure 1. ERIC's basic search box.

You may or may not be aware that ERIC, the Educational Resources Information Center, had a complete makeover during the last year or so. (*Editor's note:* For this and other URLs, see Resources on p. 32.) The old ERIC stood for "Educational Research and Information Clearinghouse," and it was run by a private company that leased its database of information and selected full-text articles to subscribers around the world—usually colleges and universities. But like so many other things educational, NCLB put into motion a plan for ERIC to become part of the U.S. Department of Edu-

By Robert Kadel

Subject: ERIC database

Standards: NETS•T II, V; NETS•A I
(<http://www.iste.org/nets/>)

cation (ED), specifically the newly created Institute of Education Sciences (formerly OERI, the Office of Educational Research and Improvement), the research arm of ED.

The new ERIC digital library came online in September 2004, offering database searches of information from 1966 forward. Many full-text articles are now free of charge, though the selection is somewhat limited at this time.

We are promised more and more full-text articles in the coming months and years, and ERIC will also offer electronic resources such as audio and video. ERIC also links to the growing What Works Clearinghouse (WWC). The goal of the WWC is to act as a resource for locating scientifically based research—a requirement so heavily emphasized in NCLB that the term is used no fewer than 100 times—in guiding school and classroom practices.

Interestingly, the Association for Supervision and Curriculum Development reported in October 2004 on a meta-analysis (a research study of research studies) of educational research articles to determine the barriers practitioners faced in using resources such as ERIC and the WWC to inform practice. The authors of the study found that much of the research available to practitioners is somewhat ambiguous and often lacked specific relevance to their own work. An overabundance of technical jargon was also found to be a problem. But what struck me the most was the statement that there was actually *too much* research available on most topics for practitioners to make sense of it and then apply it in their districts, schools, or classrooms.

I ran into the same problem when researching topics for this month's column—lots of information on interesting topics and not much help in narrowing it down. And I do this for a living!

ERIC is a valuable resource, but it's huge and will be getting even bigger. If I'm having trouble finding the information I need, then practitioners, who have considerably less time than I do to browse ERIC listings, could be swamped, overwhelmed to the point of giving up before finding anything useful.

So, I'd like to familiarize you with ERIC and how its data searches work. Go to the site; your attention will probably be drawn to the box shown in Figure 1.

This box won't be of much help searching for a general term such as "e-learning"—you'll get more than 20,000 hits. Now, it can be helpful for author searches if the author has a fairly unique name or you're searching for a specific phrase. For example, click the drop-down box that says "Keywords (all fields)" and instead select "Author Only." Then type in "alan november" (without the quotation marks; ERIC searches are not case sensitive, so you can use all lowercase letters), click Search, and you'll get a list of seven citations where Alan November's name is listed as an author. If you're looking for a specific resource that someone mentioned to you, let's say Alan November's 2001 book *Empowering Students with Technology*, change the drop down menu to "Title Only" and type "empowering students with technology" with the quotation marks, then click on Search. Up pops a summary abstract of Alan November's book. If you don't put the quotation marks around the title, ERIC will find all resources that have the words *empowering*, *students*, *with*, and *technology* in their title. Searching for a book titled "evaluating professional development" without the quotation marks delivers 154 citations. Information overload!

That's the basic search box in a nutshell. Let's go to the advanced search. From the same ERIC page, click on "Advanced Search" and you'll see a window similar to Figure 2.

This page operates on Boolean search terms, using *and*, *or*, or *not*, as you can see in the drop down boxes in the upper-left of the search window. If you're not familiar with Boolean searches, you can find many resources on the Internet, but the basic thing to keep in mind is that when you link two search terms with *or*, you're going to get information on both terms even if they aren't mentioned together. If you link two search terms with *and*, you're going to get information only where both terms appear at the same time. If you use *not* in front of a search term, you're telling ERIC you want everything except that term.

You can narrow your search from the get-go. Suppose you want to find articles concerning student attitudes toward technology. Type *technology* in the first box, and leave the drop down menu on Keywords. In the second box, just below where you typed technology, type *student*. Again, leave the drop down menu on Keywords. In the next box down, type *attitude*.

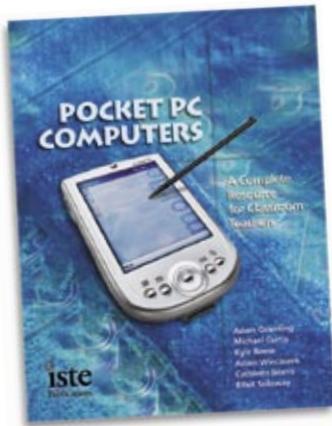
(If you happen to be doing a search that requires more rows for additional search terms, click on the text that says "Add Another Row.")

Leave everything else the way it is on the page, and click Search. You get 4,910 citations (as of February 2005). I expect you don't have time to wade through that many listings. You have two ways to narrow your search. The first is to click the link that says "Back to Search." You'll see your search page, exactly as you left it, and you can change things here. For example, suppose you want to find articles where the terms *student* and *attitude* are in the title, instead of just keywords that could be found anywhere in the listing. (This assumes that if student attitudes are important enough to the article, the term will be in the title.) Change the drop down menu next to student from "Keywords" to "Title" and do the same for the search term "attitude." Now you get only 137 citations—certainly more manageable than the original 4,910.

Figure 2. ERIC's advanced search window.

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The other way to narrow your search is to click the “Narrow My Results” button on your search results page. If you re-enter the search for *technology*, *student*, and *attitude* all as keywords (producing 4,910 results), you can narrow these results in a number of ways. First, you can narrow the publication dates of the listed articles. Change the “From” year from Pre-1966 to something more recent, say 2003, and click the “Narrow My Results” button. Then you get only those citations published from 2003 forward, and your results focus on about 150 hits.

ERIC also gives you a list of publication types, ranging from Book/Product Reviews to Translations. However, when you’re using the “Narrow My Results” option, the list of available publication types will show only those types of publications that are included among your results. In this case, you’ll see a list of six publication types ranging from “Journal Articles” to “Tests/Questionnaires.” Suppose you only want to find those research articles that have been published on the topic. Under Publication Type(s), select “Reports—Research” and again click “Narrow My Results.” Now you’ll get 67 citations of research reports published between 2003 and the present that deal with technology and student attitudes.

Not specific enough? No problem. ERIC also lists on the left side, just below Publication Type(s), a box that says “ERIC Thesaurus Descriptors (found in your original results).” This gives you an opportunity to say what kinds of information you are looking for among these citations. One possibility is that you want to see those articles where student attitudes have been described through case studies. Scroll down in the Thesaurus

Descriptors box and you’ll see “Case Studies.” Click the check box, and again click “Narrow My Results.” Now you’ve got a manageable five research publications to review.

These options are also available on the main Advanced Search page, so you can always return there to start a new search with the same caveats. The Advanced Search page also has other search options, such as a method for searching the Thesaurus Descriptors to find specific search terms. For example, if you want to find articles that contain survey results, but you don’t know exactly what kind (e.g., mail, telephone, for teachers, for students), click the button next to the Thesaurus Descriptors box. A new window will open. Type in survey and click “Search.” You’ll get a list of the different types of surveys that ERIC includes citations on; you can check off those that are appropriate to your question, then click “Add These Descriptors To My Search” and ERIC will put the terms in the Thesaurus Descriptors box.

Finally, you can also click the check box on the search page to include only results with free full-text availability.

Happy searching!

Resources

Boolean Searching on the Internet: <http://2library.albany.edu/internet/boolean.html>
ERIC: <http://eric.ed.gov>
What Works Clearinghouse: <http://www.w-w-c.org> (Make sure to put in the hyphens between the w’s and the c.)



Robert Kadel is the founder and a general partner of Kadel Research Consulting, LLC, located in Columbia, Maryland. His firm focuses on the evaluation of educational programs in technology, school reform, and community involvement. Robert serves as volunteer editor of L&L’s Research Windows column.

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