

# Chapter 2

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## IDENTIFYING A RESEARCH PROBLEM AND QUESTION, AND SEARCHING RELEVANT LITERATURE

### CHAPTER OBJECTIVES

In this chapter, the reader will

- ◆ understand the characteristics of a research problem or phenomenon.
  - ◆ understand the characteristics of good research questions.
  - ◆ clarify the difference between a research problem and hypothesis.
  - ◆ understand the purposes of a literature review.
  - ◆ understand the process for conducting a literature search.
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**L**ong before you create a research proposal, let alone conduct your research, you need to identify a problem to address and then a question or questions to ask regarding your targeted problem. This chapter first discusses the nature of a research problem, where you might get ideas for a problem to investigate, narrowing down or focusing on a particular problem to address, and writing good research questions. It then discusses finding literature that is relevant to and helpful in clarifying your targeted problem and question(s).

## IDENTIFYING A RESEARCH PROBLEM

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We often think we understand problems when we don't. For example, when students encounter difficulties with word problems in math, teachers may initially think that students have not mastered the basic skills that would allow them to carry out the needed computations. However, the difficulty may actually lie in poor reading skills, which prevent the students from identifying the words in math problems.

As another example, when students do not hand in homework assignments or participate in class, some might be inclined to think that the students are not motivated. While there may be motivational issues, motivation may not be the only factor. A high school student may have an evening job that demands considerable time and energy. A younger student may be trying desperately to camouflage poor or nonexistent skills. In some cases, the chosen instructional strategy may not be well matched to the student's cognitive or attention level. Therefore, it is crucial that researchers accurately identify the problem they want to study.

### What Is a Research Problem?

A **research problem**, or **phenomenon** as it might be called in many forms of qualitative research, is the topic you would like to address, investigate, or study, whether descriptively or experimentally. It is the focus or reason for engaging in your research. It is typically a topic, phenomenon, or challenge that you are interested in and with which you are at least somewhat familiar.

### Where Do You Find a Problem or Phenomenon to Study?

Since a research problem is usually something you have some knowledge of, that personal experience is often a good starting point. Realistically, you have to select something that you are interested in, because you are going to commit yourself to a significant investment of time and energy. Thus, if you are not personally interested, it will be difficult to sustain the effort needed to complete the research with any measure of quality or validity. You may want to talk to teachers, counselors, administrators, psychologists, or others about some of the problems they face. For example, your ideas may come out of experiences like Johnny's shout outs, Madeline's reading rate, or Esmerelda's trouble with math that were discussed in Chapter 1. You may find an interesting idea that way and, in addition, address something that may have social significance beyond your research project, thesis, or dissertation. Moreover, by addressing the questions of practicing educators, you may develop important relationships with future research partners and participants.

## Narrowing or Clarifying Your Problem Focus

A problem statement such as “Students can’t read,” is not clear because many aspects of reading, including discrete reading skills and strategies, may contribute to reading difficulties. Alternatively, “Students cannot find the main ideas in reading passages,” is much clearer and potentially much easier to measure and address, since one can define *main idea* and determine student performance related to this behavior in a number of ways.

So whether in the classroom, the physician’s office, or the mechanic’s shop, defining or diagnosing a problem is key to designing and implementing effective interventions to address it. Without adequately defining the problem, researchers may find themselves going off on a “goose chase” to tackle a vague phenomenon, trying to deal with symptoms rather than root causes, and wasting time, becoming frustrated, or even making the actual problem worse.

Later in this chapter, you will read about the use of standardized test scores for entrance to undergraduate or graduate school as an example research topic. While that may be a good topic, it is not well defined; it needs to be narrowed by thinking about the kind of information that the researcher wants to find out. Whether you are interested in the kinds of tests that are used, the average cutoff scores, or the degree to which scores predict college grade point average, as examples, a topic has to be specific enough to be clearly defined and yield helpful results from a later literature search.

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## IDENTIFYING A POSSIBLE RESEARCH QUESTION

After you have narrowed down your topic or problem, searching and reviewing existing literature may further clarify your research approach. Moreover, by identifying where the conclusions of previous research are unclear or where gaps may exist in the literature, you will be better prepared to write good research questions.

### What Is a Research Question?

A **research question** is a way of expressing your interest in a problem or phenomenon. Research questions are not necessarily an attempt to answer the many philosophical questions that often arise in schools, and they are certainly not intended to be an avenue for grinding personal axes regarding classroom or school issues. You may have more than one research question for a study, depending on the complexity and breadth of your proposed work. Each question should be clear and specific, refer to the problem or phenomenon, reflect

an intervention in experimental work, and note the target population or participants (see Figure 2.1). Identifying a research question will provide greater

**Figure 2.1** Characteristics of Good Research Questions

- Are specific.
- Are clear.
- Refer to the problem or phenomenon.
- Reflect the intervention in experimental research.
- Note the target group of participants.

focus to your research or clarify the direction of your investigation, whether the research is descriptive or experimental. Quite significantly, a well-written research question will also shed light on appropriate research methods (e.g., specify the intended actions of the variables and how an experimental intervention might be measured).

### Characteristics and Examples of Good Research Questions

Given the characteristics of good research questions noted in Figure 2.1, let's take a look at some examples, and nonexamples, of good research questions. Table 2.1 illustrates a few of each type and includes explanations of why a researcher would categorize them as one or the other.

Here are some additional examples of good experimental research questions from existing literature:

- Will the use of the Self-Regulated Strategy Development model for written expression improve the composition skills of students with ADHD (Reid & Lienemann, 2006)?
- Would students in classrooms of teachers receiving professional development in early literacy skills show greater gains in cognitive development when compared to those in control classrooms (Landry, Swank, Smith, Assel, & Gunnewig, 2006)?
- Would a combined repeated reading and question generation intervention improve the reading achievement of fourth- through eighth-grade students with learning disabilities or who are at risk for reading failure (Therrien, Wickstrom, & Jones, 2006)?

**Table 2.1** Examples and Nonexamples of Good Research Questions

| Examples   | Nonexamples  |
|--|--|
| <p><i>Do students in Algebra I classes who engage in the XYZ curriculum perform significantly differently on state tests than students who do not participate in that curriculum?</i></p> <p>This one is good. It is specific and clear. One knows who the participants will be, and one knows that student performance on state tests is the problem.</p> | <p><i>Why do students seem so apathetic?</i></p> <p>This is not specific or clear, nor does it reflect an intervention, if one is planned, or a target group of participants. Better questions might be: Are science students more engaged in class discussions when a response strategy is used (experimental)? What are the reasons for apathy among various groups of high school students (descriptive)?</p> |
| <p><i>Do general education teachers evaluate student homework differently than special education teachers, based on five criteria?</i></p> <p>Assuming this is descriptive research, the problem is evident, the target participants are noted, and the question is pretty clear.</p>  | <p><i>Does computer practice improve state test scores?</i></p> <p>Even though an intervention is mentioned and a way of measuring performance is implied (i.e., state test scores), the problem and target group are unclear.</p>   |
| <p><i>Does the use of metacognitive strategies predict reading performance on standardized tests for immigrant Chinese children?</i></p> <p>This one is clear and quite specific, notes the target participants, and nicely alludes to the variables that will be studied.</p>   | <p><i>What strategies improve student understanding of main ideas in history texts?</i></p> <p>The problem is pretty clear, but the target group is not. In addition, there is no specific reference to an intervention, important if this will be experimental research. If this will be descriptive research, on the other hand, that is moot.</p>   |

The following are additional examples of good questions from descriptive research:

- What are the beliefs and self-perceived knowledge of middle school general education mathematics teachers regarding teaching students with learning disabilities (DeSimone & Parmar, 2006)?
- How are the alternate assessments and achievement standards implemented for students with the most significant cognitive disabilities across 16 states (Kohl, McLaughlin, & Nagle, 2006)?
- What are the achievement goals of students with ADHD (Barron, Evans, Baranik, Serpell, & Buvinger, 2006)?

## Writing a Hypothesis

A **research hypothesis** essentially is a declarative statement of how you expect the research to turn out. In a way, it is a possible answer to your research question.

It should be brief, note your important variables, and suggest something you can test or descriptively investigate. It is typically included in experimental research but is also found in descriptive research such as factor analyses or survey-based investigations. It is *not* typically included in qualitative research in which the results are intended to be emergent (refer to Chapter 7). In the case of experimental research and quantitative types of descriptive research, your research question often directly leads to your hypothesis. Therefore, it is good practice to ensure that your research topic or problem statement, research question, and hypothesis use consistent language regarding variables and any anticipated outcomes. Certainly, you would write a hypothesis for each question that you propose.

Let's go back to a couple of the good example research questions noted in Table 2.1 and see how a hypothesis might be written for each.

*Question:* Do students in Algebra I classes who engage in the XYZ curriculum perform significantly differently on state tests than students who do not participate in that curriculum?

*Possible hypothesis:* Students who participate in the XYZ curriculum in Algebra I classes will perform significantly differently on state achievement tests than students who do not participate in that curriculum. If one wanted a directional hypothesis, one also could have written that the target students will perform significantly *better* on the tests. A **directional hypothesis** is one that implies a difference in a particular direction when one compares two groups or a group at different points in time (i.e., if one wants to project a difference in favor of one group or condition).

*Question:* Do general education teachers evaluate student homework differently than special education teachers, based on five criteria?

*Possible hypothesis:* General education and special education teachers evaluate student homework significantly different on each of five given criteria.

You may have previously heard the term null hypothesis. A **null hypothesis** is simply a statement saying that you expect no differences in outcomes between groups or that no relationships exist between the given variables in your hypothesis. Some researchers do not think that a null hypothesis adds substantial value to research, while others do. Your advisor may want you to include it in your proposal. The null hypothesis for the example above regarding the way teachers evaluate homework might be simply this: General education and special education teachers do not significantly differ on any of five given criteria for student homework evaluation.

Before leaving this discussion of research questions, let's focus for a moment on the concept of significance. You may have noticed the adjective *significantly* in

front of the word *different* in each of the example hypotheses and null hypotheses above. **Significance** refers to the notion that differences between two groups or conditions are not simply due to chance or any other known variable (Gall, Gall, & Borg, 2006). The term is also typically used in reference to statistical differences that may be noted in the analysis. Significance will be further discussed in Chapter 9.

### IN THEIR OWN WORDS

#### *Defining and Writing Research Questions*

*Tamara Nimkoff, doctoral student*

What makes a good research question? It's a common query that graduate students face when developing their research topics. Unless a topic, and its subsequent questions, are handed to the student, there is often a period of uncertainty in which the student is developing a host of possible research questions all the while wondering if they are actually thesis or dissertation "worthy." Students often feel they need to demonstrate their sophistication by creating complex and multilayered questions. Certainly it's important to consider the originality of a research topic, the contribution it will make to the field. But you can approach an interesting and important topic with research questions that are uncomplicated and clear. Start with the idea—what you want to know about the topic—and then break that idea down into more and more parsimonious questions. Don't be afraid of simplicity in composing research questions. A set of straightforward research questions will help you stay focused on your research topic at those inevitable times when you need to regain your footing and will demonstrate to your committee and your readers that you have a focused research agenda.

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### THE PURPOSES OF A LITERATURE REVIEW

Depending on whether you are a teacher, graduate student, administrator, or have another role, you may have one or more purposes for conducting a literature review. There are actually many potential purposes, but let's focus on a few common ones: (a) to help figure out what works; (b) to pursue a topic, problem, or question of professional and/or personal interest; (c) to pinpoint an area of further study; (d) to provide a rationale/background for study; (e) to survey or analyze research methodology. You may have one or more, or even all, of these purposes for conducting a literature review.

## **To Help Figure Out What Works**

The introduction to this chapter alluded to the need for educators continuously to search out best practices for students, particularly struggling students. Indeed, this is an important task. Teachers, administrators, and other educators look for ideas in workshops, on the Internet, from conference exhibits, or simply in the classroom across the hall. These may provide ideas, but one may not know whether research has established their trustworthiness. By searching the literature, instead of or in addition to these efforts, educators may find valuable information about practices that have been tested with students and in situations similar to those that pose challenges for them. In that way, they may find specific information about what works and what does not.

## **To Pursue a Topic, Problem, or Question of Professional and/or Personal Interest**

Whether you are an educator, a graduate student, or both, you may want to investigate or may be assigned to investigate a topic through a literature review. Perhaps you have a research problem in mind and have even written a tentative research question or two. Whether your problem or topic is graphic organizers, multiple intelligences, class size, or any other, a literature review may be a rewarding opportunity to ask and begin to find answers to your questions. Perhaps you tried cooperative learning as a teacher but decided it didn't work for you. You may be surprised or validated by what the literature says on the topic. Regardless of the topic, a literature review is an excellent chance to learn more about an area of interest.

## **To Pinpoint an Area of Further Study**

Compiling and analyzing previous research will always reveal something to you. If you are interested in a particular topic, a literature review may reveal simply that little or no research exists on that topic. Let's say you wanted to study the effects of learning strategies on state competency test scores. You are likely to find very little on that subject, but if you look at research generally on the outcomes of learning strategies, you will find quite a bit. You might further discover that while there is a lot on learning strategies, there is little specifically on test taking. So you see, by searching and analyzing the literature, you may pinpoint a particular area where research is needed.

## **To Provide a Rationale/Background for Study**

If you are a graduate student and are required to write a thesis or dissertation or engage in a research project, you will need to include a literature review as part of



your final product. Thus, a literature review not only provides you with an opportunity to learn more about a given topic but also to create support or a rationale for engaging in a particular area of proposed research. For instance, if you wanted to research the use of math manipulatives, conducting a literature review would give you a chance to show others the importance of your topic and refine the problem, research questions, or hypotheses you have targeted as well.

### To Survey or Analyze Research Methodology

When you select a topic to study, pinpoint a particular area of needed research related to your topic, and provide sufficient background to support further research, you may also use a literature review to look at how previous researchers studied the topic. You may clarify ideas, see flaws, or discern opportunities. For example, perhaps a topic such as token systems has been studied in certain settings through single-subject experimental designs. You may look at that literature and decide that your research questions might be best answered through a large-group experiment. Alternatively, you might decide that you would like to describe qualitatively the impact of token systems on student motivation. In short, by analyzing research methodology in a literature review, you may discover how you should design your own research.

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## THE PROCESS OF CONDUCTING A LITERATURE SEARCH

Whether you have one or more purposes for conducting a literature review, there is a process for getting from point A to B. That is, there is a process that can take you from knowing little or nothing to understanding something meaningful and informative. This process may be referred to as conducting a **literature search**. This includes (a) determining your focus and (b) searching literature databases. The next chapter will help you then analyze the studies you find, as well as organize and write a literature review.

### Determining Your Focus

Determining your focus for a literature search includes three important activities: picking a topic, making decisions about what to include and exclude, and translating the topic into key terms.

*Step 1: Picking a Topic.* Let's say you're interested in the use of standardized test scores for entrance to undergraduate or graduate school. That's a good topic, although not well defined. You may need to narrow it by thinking through what kind of information you'd like to find out. For instance, do you want to find out what

kinds of tests are used? Do you want to learn about the average cutoff scores? Are you interested in how well the scores predict college grade point average or employment status after college? How about the way that admissions departments weight the scores in their decisions? One way or the other, a topic has to be specific enough to yield useful results when you get to the actual literature search.

While you may start off with too broad a topic, you could begin too narrowly also. Perhaps you are interested in the use of metacognition among immigrant Chinese children in elementary reading. My hunch is that you might need to broaden the search to look for information about metacognition in immigrant children's reading. Looking for previous research related to Chinese children in elementary reading would likely yield little or nothing. It is, however, worth beginning your search with a narrower focus to see what you can find.

*Step 2: Making Decisions About What to Include and Exclude.* After thinking through your topic so that it is not too broad and not too narrow, you can make decisions about what to look for in your search. Your topic scope will also help you decide what to disregard, should an initial computer search yield hundreds of possible articles. Moreover, it will help you in the next step of the process, searching more efficiently with key terms.

Inclusion and exclusion decisions may be based on many things, including the age of the students you want to study, the years of teacher experience, the location of the study (rural, urban, suburban), the date on which the study was conducted, whether the students have disabilities or not, and many, many other possibilities. For instance, in the previous example, one might want to start by including articles that address metacognition in immigrant children in any location, and one might exclude articles that address American-born children and those written before 1985 because one wants to look at recent experiences in research.

*Step 3: Translating the Topic Into Key Terms.* By deciding what to include and what to exclude, you prepare yourself to search more effectively and efficiently. When you begin to use online search indexes such as the Educational Resources Information Center (discussed in the next subsection), the index will prompt you to enter search terms. The index will then find articles and documents that use those terms in their descriptions.

So to take our example further, the key search terms in the topic of "metacognition among immigrant Chinese children in elementary reading" would likely be *metacognition, immigrants, Chinese, elementary, and reading*. As mentioned earlier, this is a pretty narrow topic and thus has five search terms; you certainly may have fewer than five when beginning your literature review. The more terms that you decide to search, the less likely you will find a lot of literature on the topic. Still, it may be more efficient to start your search as narrowly as possible and then broaden your effort. Let's look at that next.

## Searching Literature Databases

Generally speaking, you can search literature electronically or by hand. Certainly, using an online database is far more efficient than searching stacks of journals in the library. Nevertheless, even if you begin your search online, you may find yourself hand searching the reference lists of selected articles to find additional sources. For now, let's first walk through how you might conduct an electronic search.

*Searching Online.* There are many possible databases where you can conduct an online literature search, including those noted in the Technology Tips features box, as well as other more generic databases such as Google (google.com) or DogPile (dogpile.com). The following paragraphs highlight examples using the Educational Resources Information Center (ERIC; eric.ed.gov), a database that the U.S. Department of Education has supported for many years and perhaps the most widely used database in education. ERIC contains abstracts of over 1.3 million documents and journal articles dating back to 1966 and is updated several times a week.

### TECHNOLOGY IN RESEARCH

In addition to ERIC, there are many other electronic databases for literature searches, including PsycINFO (apa.org/pubs/databases/psycinfo/); National Early Childhood Transition—Literature Database (www.ihdi.uky.edu/nectc/DATABASES/search.aspx); PubMed, a service of the National Library of Medicine, which includes citations from MEDLINE (ncbi.nlm.nih.gov/sites/entrez); Academic Search™ (ebshost.com); and JSTOR, a digital archive of over 1,000 academic journals and other scholarly content (jstor.org).

As mentioned, to search the ERIC database, you have to enter your search terms. You can conduct a simple search or an advanced search. When you use the advanced search mode, ERIC not only lets you search by keywords but also lets you search by author, date, title, and other terms. Figure 2.2 illustrates what an advanced search prompt looks like.

First, you need to key in your terms in the right-hand column and use the pull-down arrows in the left-hand column to cue the database as to whether your term is a keyword, name of an author, date, etc. You can also use the far left pull-downs to cue the database to include multiple terms in the search, using the “AND” command, to exclude certain terms by using the “NOT” command, or to include items variably using the “OR” command.

**Figure 2.2** ERIC Advanced Search Prompt

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### Advanced Search

Use My Clipboard to print, email, export, and save records. 0 items in My Clipboard

Basic Search | **Advanced Search** | Search the Thesaurus

Search for: Keywords (all fields) [input]  
 AND Keywords (all fields) [input]  
 AND Keywords (all fields) [input]

[Search] [Clear] [Add Another Row]

**Full-Text Availability:**  Show only results with free full text directly from ERIC

**Publication Date:** From pre-1966 to 2010

**Publication Type(s):**

- Any Publication Type
- Journal Articles
- Book/Product Reviews
- Books
- Collected Works - General

**Education Level(s):**

- Any Education Level
- Adult Basic Education
- Adult Education
- Early Childhood Education
- Elementary Education

[Search] [Clear]

**Search Tips**

- > To search for a journal name, select the Source field.
- > Use quotation marks around a phrase to find an exact match.
- > For an exact match of an author name, use the format "Last name, First name"

Using our example topic of metacognition among immigrant Chinese children in elementary reading, you would enter our key terms *metacognition*, *immigrants*, *Chinese*, *elementary*, and *reading* in an advanced search and click on the submit button. As this book goes to press, no ERIC documents are found in the database for this search. As suggested earlier, you may have to broaden your search by eliminating one or more keywords. Alternatively, you may need to use different keywords from the ERIC thesaurus. By clicking on the thesaurus link above the keyword entry boxes, you can easily find other possible keywords.

Let's say you've eliminated *Chinese* and *elementary* from your keywords and just searched using *metacognition*, *immigrants*, and *reading*. Now ERIC gives you just one document. So expand your search, using the "OR" command: *metacognition*, *immigrants*, *reading* OR *metacognition*, *immigrants*, *writing*. Figure 2.3 illustrates the result.

So now the ERIC database has produced two documents to consider. That's not many, but for now, look at them to understand the information you've received, as well as to consider whether they fit within the inclusion and exclusion criteria you set earlier.

Figure 2.3 ERIC Search Result

The screenshot shows the ERIC (Education Resources Information Center) search results page. At the top, there is a navigation bar with links for Home, Search ERIC, Our Collection, Thesaurus, About Us, and My ERIC. The search criteria are displayed as: `((Keywords:metacognition and Keywords:immigrants and Keywords:reading) or (Keywords:metacognition and Keywords:immigrants and Keywords:writing))`. The search results are sorted by Relevance and show 10 results per page. Two results are visible:

- 1. Deepened Mirrors of Cultural Learning: Expressing Identity through E-Writing (EJ822669)**
  - Author(s):** Andrew, Martin
  - Source:** CALICO Journal, v26 n2 p324-336 Jan 2009
  - Pub Date:** 2009-01-00
  - Pub Type(s):** Journal Articles; Reports - Evaluative
  - Peer-Reviewed:** Yes
  - Descriptors:** Foreign Countries; English (Second Language); Qualitative Research; Immigrants; College Students; Second Language Learning; Reflection; Journal Writing; Electronic Journals; Self Concept; Metacognition; Cultural Awareness; Cultural Education
  - Abstract:** This paper qualitatively analyzes reflective data gathered from learners' electronic and paper writings about their cultural learning in and about New Zealand. The data comes from three intakes of learners in "Culture and New Zealand Society," a second-year course for migrant and international learners within a Bachelor of Arts in English as an Additional Language (BA [EAL]) at a tertiary institu [Show Full Abstract](#)
  - Related Items:** [Show Related Items](#)
  - Full-Text Availability Options:** [Help Finding Full Text](#) | [Find in a Library](#) | [Publisher's Web Site](#)
- 2. Academic Difficulties and Early Literacy Deprivation: The Case of Ethiopians in Israel. (EJ521682)**
  - Author(s):** Barkon, Elisheva; Avinor, Eleanor
  - Source:** Language, Culture and Curriculum, v8 n2 p201-09 1995
  - Pub Date:** 1995-00-00
  - Pub Type(s):** Reports - Descriptive; Journal Articles
  - Peer-Reviewed:** N/A
  - Descriptors:** Academic Achievement; Case Studies; Cognitive Development; College Students; Foreign Countries; Hebrew; Immigrants; Interviews; Learning Problems; Literacy Education; Low Achievement; Metacognition; Questionnaires; Reading Strategies; Uncommonly Taught Languages
  - Abstract:** Investigates a possible link between academic difficulties and early literacy deprivation among the immigrant Ethiopian population in Israel. Findings suggest that such deprivation can affect the person after he becomes literate and multilingual and that literacy exposure in early childhood and first-language maintenance is important. (11 references) (Author/CK)
  - Related Items:** [Show Related Items](#)
  - Full-Text Availability Options:** [Help Finding Full Text](#) | [Find in a Library](#)

At the bottom right of the results area, it says "Now showing results 1-2 of 2."

*Understanding Online Search Results.* First, you will notice that the ERIC document numbers begin with the “EJ” code. ERIC uses two primary document codes. The “EJ” refers to educational journals that you might find online or in your

university library. If you cannot access a journal on the Internet or your library does not carry it, you can order it through ERIC services for a fee. The other main code, “ED,” refers to an ERIC document that may be a research report, conference paper, issue paper, or monograph. These complete documents may be either accessed online, through your library ERIC microfiche collection, through your library’s interlibrary loan service, or by mail for a cost. The online directions for ordering either ERIC documents or copies of journal articles are very simple to follow.

Now, let’s look a bit more closely at each of the ERIC document abstracts that appear when you click on the document title links. Figure 2.4 shows the first abstract.

You will notice that the ERIC document reference number, the title, author, and other identifying information are repeated. In the list of descriptors, your keywords are highlighted: *immigrants*, *writing*, and *metacognition*. Below that are other headings including the publication type, which tells you this document is a journal article, and the number of pages in the document. The number of references indicates whether this document provide leads on other sources on the topic. Below the abstract, the document citation tells you the language in which the article is written, where it came from, and any other special notes.

Let’s look at the abstract for a moment in terms of the inclusion and exclusion criteria noted in step 2. This article is about immigrant students in college in New Zealand. It doesn’t say they are Asian, let alone Chinese, but New Zealand does see many immigrants from Asia, it is an English-speaking country, and that may be as close as you get given the narrowness of our topic. Besides, the article may reveal that there is an opportunity for work to be done with the population of interest to you. The date of the publication is very recent, fitting well within our criteria. All in all, this article would probably be worth tracking down. Usually when one wants to obtain the complete journal article, one needs to find it at a library or online at the journal’s website or via a search engine like Google Books or Google Scholar. Sometimes, however, ERIC provides a link to a free downloadable PDF version of the actual article. By accessing that, you will, of course, save yourself time and possibly some money.

Let’s now go back to the search results and click on the link for the second abstract. Figure 2.5 shows what the second abstract looks like.

Again, you get the title, author, and other identifying information repeated from the original search results. In looking at the abstract, you see that while the article may not be specific to reading and metacognition, those terms do appear in the descriptors, and it does address literacy. Also, it is not about the Chinese population, but it does address an immigrant population. Therefore, you might try to locate this article, particularly since you only have two right now.

Figure 2.4 ERIC Abstract of Article on Immigrants and E-Writing



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## EJ822669 - Deepened Mirrors of Cultural Learning: Expressing Identity through E-Writing

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0 items in My Clipboard
Add record to My Clipboard

**Record Details**

**Full-Text Availability Options:**  
[Help Finding Full Text](#) | [Find in a Library](#) | [Publisher's Web Site](#)

**Related Items:** [Show Related Items](#)

Click on any of the links below to perform a new search

**ERIC #:** EJ822669

**Title:** Deepened Mirrors of Cultural Learning: Expressing Identity through E-Writing

**Authors:** [Andrew, Martin](#)

**Descriptors:** [Foreign Countries](#); [English \(Second Language\)](#); [Qualitative Research](#); [Immigrants](#); [College Students](#); [Second Language Learning](#); [Reflection](#); [Journal Writing](#); [Electronic Journals](#); [Self Concept](#); [Metacognition](#); [Cultural Awareness](#); [Cultural Education](#)

**Source:** CALICO Journal, v26 n2 p324-336 Jan 2009

**Peer-Reviewed:** Yes

**Publisher:** Computer Assisted Language Instruction Consortium, 214 Centennial Hall, 601 University Drive, San Marcos, TX 78666. Tel: 512-245-1417; Fax: 512-245-9089; e-mail: info@calico.org; Web site: http://calico.org

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**Pages:** 13

**Pub Types:** Journal Articles; Reports - Evaluative

**Abstract:** This paper qualitatively analyzes reflective data gathered from learners' electronic and paper writings about their cultural learning in and about New Zealand. The data comes from three intakes of learners in "Culture and New Zealand Society," a second-year course for migrant and international learners within a Bachelor of Arts in English as an Additional Language (BA [EAL]) at a tertiary institute in New Zealand. As part of an assessment of cultural learning, students write and reflect on their cultural observations and experiences. They submit reflective writings in two forms: a 150-word e-text journal entry using the rhetorical e-spaces of "Blackboard," and a 1,000-word paper journal account of cultural and linguistic learning during community participation. After the data in the e-writings had been open coded, a range of themes emerged. This paper presents results in two key areas: the development of identities through reflective positioning (Pavlenko & Blackledge, 2005), and the useful "realness" of community placement to highlight and complement class "content." Themes emerged from analyzing the e-texts and matched themes in the journals. The analysis suggests that e-writings have the potential to make students "think beyond the square" (Coster & Ledovski, 2005). E-text journal entries are at least as useful as paper texts in mapping learners' cultural and metacognitive awareness. This poses the question that e-moderated writings might reflect more candor and could hence reflect deeper mirrors of learning. (Contains 1 table and 1 note.)

**Abstractor:** As Provided

**Reference Count:** 41

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**Note:** N/A

**Identifiers:** New Zealand

**Record Type:** Journal

**Level:** N/A

**Institutions:** N/A

**Sponsors:** N/A

**ISBN:** N/A

**ISSN:** ISSN-0742-7778

**Audiences:** N/A

**Languages:** English

**Education Level:** Higher Education

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- > [The Paradox of English](#)
- > [Teacher-Based Assessment for Foreign Language Pragmatics](#)
- > [Implementing Reflective Practices for Promoting Autonomous Learning among EFL College Students in Taiwan](#)
- > [Comparing Protest Movements in Chile and California: Interculturality in an Internet Chat Exchange](#)
- > [Polar Bears, Hot Coffee, Wireless Schools, and Much More: Teaching American Studies in Homes](#)

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**Figure 2.5** ERIC Abstract of Article on Literary Deprivation

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EJ521682 - Academic Difficulties and Early Literacy Deprivation: The Case of Ethiopians in Israel.

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**Record Details**

**Full-Text Availability Options:**  
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**Related Items:** [Show Related Items](#)

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**ERIC #:** EJ521682

**Title:** Academic Difficulties and Early Literacy Deprivation: The Case of Ethiopians in Israel.

**Authors:** [Barkon, Elisheva](#); [Avinor, Eleanor](#)

**Descriptors:** [Academic Achievement](#); [Case Studies](#); [Cognitive Development](#); [College Students](#); [Foreign Countries](#); [Hebrew](#); [Immigrants](#); [Interviews](#); [Learning Problems](#); [Literacy Education](#); [Low Achievement](#); [Metacognition](#); [Questionnaires](#); [Reading Strategies](#); [Uncommonly Taught Languages](#)

**Source:** Language, Culture and Curriculum, v8 n2 p201-09 1995

**Peer Reviewed:** N/A

**Publisher:** N/A

**Publication Date:** 1995-00-00

**Pages:** N/A

**Pub Types:** Reports - Descriptive; Journal Articles

**Abstract:** Investigates a possible link between academic difficulties and early literacy deprivation among the immigrant Ethiopian population in Israel. Findings suggest that such deprivation can affect the person after he becomes literate and multilingual and that literacy exposure in early childhood and first-language maintenance is important. (11 references) (Author/CK)

**Abstractor:** N/A

**Reference Count:** N/A

---

**Note:** N/A

**Identifiers:** Ethiopians; Israel

**Record Type:** Journal

**Level:** N/A

**Institutions:** N/A

**Sponsors:** N/A

**ISBN:** N/A

**ISSN:** ISSN-0790-8318

**Audiences:** N/A

**Languages:** English

**Education Level:** N/A


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**Related Items**

- > [From "Acting Reading" to Reading for Acting: A Case Study of the Transformational Power of Reading](#)
- > [The Developmental Nature of Meta-Cognition and the Relationship between Knowledge and Control over Time](#)
- > [Catalytic Tools: Understanding the Interaction of Equity and Feedback in Teachers' Learning](#)
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- > [Differences between High and Low Academic Achieving University Students in Learning and Study Strategies: A Further Investigation](#)

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*If at First You Don't Succeed.* To summarize the search process to this point, you know that you have to pick a topic that is of interest to you. It must also be sufficiently well defined so that an electronic search is efficient but broad enough that you have enough literature to draw from in your written product. In this example, the research keywords are still too narrow; hence, only two articles to look at. You have a few options for proceeding: (a) eliminate one of the keywords



in the initial search, such as *metacognition* or *reading/writing*, and see what you come up with; (b) use a different search term, probably in place of *immigrants*; or (c) look at the articles you do have and conduct a secondary search of references. You may need to do all three things in order to acquire a sufficient number of articles for an adequate review and analysis of your topic/problem.

In terms of option A, if you eliminated *reading/writing* and reran the search, ERIC would retrieve seven documents, including the two you already had. In terms of option B, look back at the descriptors for the ERIC document that you first pulled up. Notice the list includes *English (Second Language)*. That might be a good one to try in place of *immigrants*. You could look for other possible terms by using the ERIC search thesaurus mentioned earlier. If you go this route, you will find a bunch of alternative terms for *immigrants*. For the purposes of this example, if you search using *English (Second Language)* with *metacognition* and *reading*, you retrieve 148 documents, most of which were published since 1985. Now you may be getting somewhere!

Option C still may be worth pursuing. It is simply this: after accessing an article that meets the inclusion and exclusion criteria, read the article and look at the reference list. The author(s) of the article may have cited other literature that you should look at too.

This is a good time to introduce you to the practice of relying on **primary sources**. Primary sources are the original literature pieces written by authors whom you wish to cite in your paper. You can also choose to cite what others have cited, but then you are relying on those authors' interpretation of those sources, now called **secondary sources**. Secondary sources might include existing literature reviews, such as those published in the *Review of Educational Research* or the *Handbook of Research on Teacher Education*. These may be great for helping you sift through a lot of literature or validating your analysis. Nevertheless, the rule of thumb is this—whenever possible, find the primary source, read it for yourself, and cite it if it fits within your review parameters.

### IN THEIR OWN WORDS

#### *Tips for Conducting an Electronic ERIC Search*

*Courtney Valdes, master's degree student*

1. *Keep it simple.* You may be researching the effects of parenting style on the language development of at-risk children, but if you enter that mouthful into the ERIC search engine, you will find exactly nothing. Instead, focus on the key terms, such as *parenting style*, *language development*, and *at-risk children*.

*(Continued)*

(Continued)

2. *If at first you don't succeed, search, search again.* Didn't find much? It's more likely that you weren't searching ERIC properly than there is no literature on your subject. ERIC employs very specific descriptors (descriptive terms) for cataloging articles. Try using different, but similar, terms. For example, use *literacy* instead of *language development*, or broaden the term *at-risk children* to simply *at-risk*.
3. *Descriptors, descriptors, descriptors.* Sometimes common sense just won't cut it, and you will need to do a little extra leg work to find descriptors that will work for your search. In these instances, you have two choices: you can search the Thesaurus of ERIC Descriptors Manual, or you can look at the descriptors listed for the few articles your search turned up or for articles that may not exactly fit your needs but touch on some aspects of your topic.
4. *Look beyond the abstract.* Don't get seduced by a pretty abstract. Often the abstracts don't give a completely accurate picture of the article they are representing. Therefore, it is best not to stop your search after finding one or two articles that might fit your topic. If you have access to an electronic database of articles, you can actually review the articles before ending your search. Otherwise, gathering a good list of potential articles to take with you to the library could be a real time-saver.
5. *Don't forget to read literature reviews.* Even if an article doesn't exactly meet your needs, other research referenced in its literature review might. This can often be a quick and effective way to find relevant literature for your paper. Once you have a reference for an article, you can enter its author(s) or title into the ERIC database and—voilà!—you've found a great article for your review, or at least some useful descriptors to help you continue your search.

## PUTTING IT ALL TOGETHER

Identify three potential research problems of interest.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

3. \_\_\_\_\_  
\_\_\_\_\_

Write a possible research question for each of the above research problems.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

Write a possible hypothesis for each of the above research questions.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_

## SUMMARY

The first part of the chapter discussed identifying research ideas and narrowing your problem focus. It is important to point out that these efforts, while essential at the beginning of your research, sometimes reoccur later as well. That is, you may define a problem initially and then truly define, clarify, or even redefine it later after conducting a literature

search and review. Keep this thought in mind as you turn to the next chapter. You see, research is a far more iterative or even recursive process than a linear one. Even though the author suggests that you take the time to focus carefully on a specific research problem and then write good questions and hypotheses (when appropriate to the method) early in the process, you will likely continue to revise your questions and hypothesis even as you later shape your research design and method. Designs and methods are discussed in Chapters 5, 6, and 7. Chapter 8 on proposal development will refer to research questions yet again in order to apply and extend your understanding as you link your questions and hypotheses to design and methods.

To conclude, consider the following anonymous “thought for the day”: “A problem well stated is a problem half solved.” There is probably a great deal of truth in that, and it is particularly true for writing good research questions and for selecting a research design and methods.

### DISCUSSION QUESTIONS

1. What is the difference between a research problem and a research question?
2. What makes a good research question?
3. What’s the difference between a research question and a hypothesis?
4. Is this a good research question? Why or why not?

*Does peer tutoring affect the performance of ESL students on essays written in language arts classes?*

5. Is this a good research question? Why or why not?

*How can I improve student grades in science?*

6. How might making decisions about what to include and exclude from your search be valuable *before* you begin your literature search?
7. What are the advantages and disadvantages of using a database such as ERIC over using a search engine such as Google?

### YOUR RESEARCH PROJECT IN ACTION

Based on your completion of activities in Chapter 2, select the research problem you are most interested in and conduct a literature search using the ERIC or another database. Use the following guide.

Research problem: \_\_\_\_\_  
\_\_\_\_\_

Keywords to search by: \_\_\_\_\_  
\_\_\_\_\_

Did those keywords pull up documents?    Yes    No

Were there too many documents or not enough?    Too Many    Not Enough

Redefine keywords to search by: \_\_\_\_\_  
\_\_\_\_\_

Find five resources that have abstracts directly pertinent to your research problem.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

Identify which of the resources are primary or secondary sources.

- | Primary | Secondary |
|---------|-----------|
| 1.      | 1.        |
| 2.      | 2.        |
| 3.      | 3.        |
| 4.      | 4.        |
| 5.      | 5.        |

## FURTHER READING

Gall, M. D., Gall, J. P., & Borg, W. R. (2006) *Educational research: An introduction* (8th ed.). Boston: Allyn & Bacon.

This book has been highly referenced by many graduate students for many years. Qualitative and quantitative methods of study are presented, compared, and analyzed in great detail. The authors describe the interconnections among educational research, educational philosophy, and educational practice.

McMillan, J. H. (2004). *Educational research: Fundamentals for the consumer* (4th ed.). Boston: Allyn & Bacon.

This book is an introduction to education research for students who want to conduct research, particularly in their own settings. Research credibility is a central theme of the book. The book includes tools to facilitate this research process, such as technology activities, personal author reflections, and self-test questions and answers.

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