

The Archivist as Educator: Integrating Critical Thinking Skills into Historical Research Methods Instruction

Marcus C. Robyns

Abstract

Archivists are increasingly developing workshops and courses in order to help students better understand and use archival materials. The incorporation of critical thinking skills into these instructional programs can significantly enhance them and improve the ability of students to analyze and interpret primary sources. This article first provides an introduction to critical thinking instruction and then describes how the university archivist successfully implemented critical thinking skills into a historical research methods course at Northern Michigan University.

“It is no easy matter to tell the truth, pure and simple, about past events; for historical truths are never pure, and rarely simple.”

—David Hackett Fischer¹

Introduction

Competence in a particular discipline or area of knowledge is the primary goal of education in the United States, but teaching students to think critically and reflectively has become a major concern within the last twenty years. In fact, several national reports and studies have charged higher education with the responsibility to produce individuals capable of thinking critically and independently.² In his State of the Union address for 1990, for example, President George Bush announced the adoption of “National Goals

¹ David Hackett Fischer, *Historians' Fallacies: Toward a Logic of Historical Thought* (New York: Harper & Row, 1970), 40.

² Two important reports, *Integrity in the College Curriculum* (Washington D.C.: Association of American Colleges, 1985) and *Involvement in Learning* (Washington D.C.: National Institute of Education, 1984), emphasized the importance of critical thinking as one of the primary goals of an undergraduate education.

2000” that included strong support for critical thinking in education.³ At Northern Michigan University, the vice president of academic affairs recently challenged the faculty to produce what he called “independent learners.”

Michigan has incorporated critical thinking concepts and skills into its *Michigan Curriculum Framework* as part of the *Michigan Educational Assessment Program* (MEAP). Under standard 1.3, *Analyzing and Interpreting the Past*, for instance, Michigan educators expect students to “reconstruct the past by comparing interpretations written by others from a variety of perspectives and creating narratives from evidence.” The standard acknowledges research as a process of information gathering from a variety of sources in many different formats. However, by high school, the state expects that students to have moved beyond information gathering toward a demonstrated “ability to interpret the meaning and significance of data.” The framework recognizes the subjective nature of primary sources and appreciates the need for rigorous critical review during the research process.⁴

During the last twenty years that educators have sought and developed ways to implement critical thinking skills into the curriculum, many archivists have begun to define and widen their role as educators. Although a growing body of literature exists concerning education programs and outreach in archives, very little of this literature includes discussion as to why and how the archivist should integrate critical thinking skills into the use and analysis of primary sources. Despite the fact that critical thinking skills are a fundamental component of research in primary sources, many archivists have argued that being a teacher goes beyond the mandate of archival management and that the responsibility for teaching thinking and research skills should be left to properly trained faculty.⁵ Moreover, many have expressed a legitimate concern that this approach might jeopardize the archivist’s role as a neutral arbiter in the research process. At the same time, recent articles and papers on reference and public outreach suggest that a growing number of archivists are beginning to take a stronger and more proactive role in the promotion of archives as centers of learning and of themselves as educators.

Because archivists are the guardians of the nuts and bolts of history (primary sources), we are in a terrific position to play an instrumental role in enhancing the education of our young people. Guided use of primary sources in education can have an empowering effect on students and can improve the quality of research in archives reading rooms. “Primary sources allow students to make connections to their own ideas and develop multiple interpretations of meaning,” says

³ President George H. W. Bush, “National Goals for Education (1990),” State of the Union Address, Washington D.C., 1990.

⁴ *Michigan Curriculum Framework*, available at <<http://cdp.mde.state.mi.us/MCF/default.html>> May 29, 2001.

⁵ Margaret Hedstrom, conversation with the author, , Michigan Archival Association Annual Conference, Wayne State University, June 25, 1999. See also Ken Osborne, “Archives in the Classroom,” *Archivaria*, 23 (Winter 1986–87): 16. Osborne notes that, for the most part, archivists have not traditionally seen themselves as having an educational role beyond serving university communities or independent researchers. In fact, archivists think of education, according to Osborne, in the context of education of other archivists in the profession.

Kathleen Craver, Head Librarian at the National Cathedral School in Washington D.C. and author of *Using Internet Primary Sources to Teach Critical Thinking Skills in History*.⁶ Conversely, secondary sources present students with someone else's interpretation of past events; but because primary sources are themselves subjective in nature, their use in the research process requires the application of critical thinking skills. Here, the archivist can make a real difference in education by guiding students through the process of critical analysis, making the archives not only a repository of the past but also a challenging center of critical inquiry.

More and more archivists (and archival programs) are developing and implementing instructional workshops and courses designed to increase students' awareness of archives and improve their use and understanding of archival materials. This article will argue for the inclusion of critical thinking skills in archival instructional programs. Part I will discuss the meaning and importance of critical thinking skills within the context of education, with special emphasis on the history, library, and archival professions. Part II will offer a review of a successful program implemented at Northern Michigan University that serves as one example of how to teach the application of critical thinking skills in the analysis and interpretation of primary sources. Archivists can and must be more than simply a bridge between our patrons and our collections. Certainly the time has come for proactive archivists involved in educational outreach to move beyond showing students how to find and access information in archives and toward greater instruction in critical interpretation and analysis of that information. This article argues that archivists must join with faculty as partners in building the foundation that will support the growth of "independent learners."

Part I: The Case for Critical Thinking Instruction

What is Critical Thinking?

According to Richard Paul, director of the Center for Critical Thinking at Sonoma State University, critical thinking is basically "the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action."⁷ Others have stressed that critical thinking, in general, is just a "frame of mind" that allows for "alertness to the need to evaluate infor-

⁶ Kathleen W. Craver, *Using Internet Primary Sources to Teach Critical Thinking Skills in History*, (Westport, Conn.: Greenwood Press, 1999), 8–10. Craver's book is an example of how far ahead professional librarians are of archivists in dealing with the issue of critical thinking and primary sources. Although Craver does a fine job defining a primary source, her discussion of critical thinking is weak and really does not offer a useful breakdown of the necessary skills and their application in research. However, the book does provide an excellent compilation of primary sources taken off the Internet, along with adequate guidelines for their use in the classroom.

⁷ Richard Paul, "Defining Critical Thinking," in *Center for Critical Thinking* (2000). Available at <<http://www.criticalthinking.org/University/defining.htm>> May 18, 2001.

mation.” This definition suggests that a person must develop a predisposition towards reflective thought and analysis. These proponents also propose that the ability to think critically allows for “a willingness to test opinions and a desire to consider all viewpoints.”⁸

The depth and scope of the literature on critical thinking in general education is breathtaking. Over the last few years, scholars in the fields of educational theory and cognitive psychology have produced numerous books, research articles, and studies on critical thinking. Unfortunately, this overabundance has resulted in a multitude of definitions that can confuse and disorient the archivist unfamiliar with the complexities of the concept. Moreover, each of these works reflects the author’s particular discipline, bias, philosophy, and approach to instruction, making any attempt to grasp critical thinking more difficult.⁹

Educational theory scholars approach the concept of critical thinking in terms that favor the development of independent thinkers capable of navigating through today’s challenging information world. Chet Meyers sums up the sentiment of many of his colleagues when he wrote that “the development of thinking skills . . . is particularly acute today, when our culture’s output of information far exceeds our ability to think critically about that information.”¹⁰ James H. McMillan reinforces this view in a study of twenty-seven instructional programs that found that the best methods taught students the “ability to think critically, to synthesize large quantities of new information.”¹¹ Other education scholars have taken a more philosophical approach to critical thinking, seeing the skill as a fundamental part of what it means to be human. “To fail to develop one’s potential in this regard,” warns author Raymond S. Nickerson, “is to preclude the full expression of one’s humanity.”¹²

⁸ Barry K. Beyer, “Critical Thinking: What is It?” *Social Education* 49, no. 4 (1985): 271–72. See also Harvey Siegel, “Critical Thinking as an Educational Ideal,” *Education Forum* 45 (November 1980): 11.

⁹ Although too numerous to mention them all, some of the best works on critical thinking include John H. Clark and Arthur W. Biddle, *Teaching Critical Thinking*, (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1993); Grace E. Grant, *Teaching Critical Thinking*, (New York: Praeger Publishers, 1988); Chet Meyers, *Teaching Students to Think Critically*, (San Francisco, Calif.: Jossey-Bass Publishers, 1986); Richard Paul, *Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World*, (Rohnert Park, Calif.: Foundation for Critical Thinking, 1992); Louis E. Rath, Selma Wasserman, Arthur Jonas, and Arnold Rothstein, *Teaching for Thinking: Theory, Strategies, and Activities for the Classroom*, (New York: Teachers College Press, 1986). Several useful Internet sites also exist, and include; The Center for Critical Thinking (<www.criticalthink.org>), Longview Community College, Lee’s Summit, Mo., and Critical Thinking Across the Curriculum Project (<www.kcmetro.cc.mo.us/longview/ctac>)

¹⁰ Meyers, *Teaching Students to Think Critically*, 1986, xi. Meyers is a professor of humanities at Metropolitan State University in Minneapolis. See also James H. McMillan, “Enhancing College Students’ Critical Thinking: A Review of Studies,” *Research in Higher Education* 26, no. 1 (1987): 3–4. Daniel L. Wick, “In Defense of Knowledge: An Intellectual Framework for General Education,” *Change* 13 (September 1981): 8–9.

¹¹ James H. McMillan, “Enhancing College Students’ Critical Thinking: A Review of Studies,” *Research in Higher Education* 26, no. 1 (1987): 43.

¹² Raymond S. Nickerson, “Why Teach Thinking?,” in *Teaching Thinking Skills: Theory and Practice*, ed. Joan Boykoff Baron and Robert J. Sternberg, (New York: W.H. Freeman and Co, 1987), 32.

Nickerson and his colleagues in educational theory approach an understanding and definition of critical thinking more precisely. Daniel Wick, for example, reminds educators of the need to focus instruction of critical thinking skills within a subject-based context. According to Wicke, "It is impossible, for a student to reason critically concerning something about which he knows nothing." Similarly, Grace E. Grant notes that students have to think about *something*, meaning that critical thinking is "context bound." Harvey Siegal champions critical thinking as a systematically rational process and defines the skill as an ideal that "must be objective, impartial, non-arbitrary, and based on evidence of an appropriate kind and properly assessed." Reducing the concept still further to a concrete set of skills, Barry K. Beyer concludes that critical thinking is the process of determining the authenticity, accuracy, and worth of information or knowledge claims.¹³

Scholars in the field of cognitive psychology assist their colleagues in education by identifying the stages in cognitive development most conducive to instruction in critical thinking. For example, in a study of 1,051 college students, Irvin J. Lehman found that freshman and sophomores were more open to critical thinking, because, at this stage, they are cognitively more receptive to new ideas and hold fewer "stereotypic" beliefs. Similarly, in her review of William Perry's theory of intellectual and ethical development, Patricia King found that college students recognize that knowledge is "contextual and relative," meaning that they are capable of acknowledging various points of views and incorporating them into a larger perspective. King concluded that this ability is the fundamental basis for critical thinking. Patrick Terenzini, Leonard Springer, Ernest T. Pascarella, and Amaury Nora reported on a study that found "students' classroom/instructional and out-of-class experiences both make positive, statistically significant, and unique contributions to gains in critical thinking." Their conclusion supports theoreticians' long-held assumptions that academic and nonacademic experiences facilitate the development of critical thinking skills.¹⁴

The archivist working with faculty and students must synthesize the above definitions into a focused and workable program of instruction relative to historical research methods and primary sources. First, she should approach the amorphous concept of critical thinking as a method with a procedure and various steps that essentially drive the process of analysis and interpretation of primary sources. The archivist should also incorporate the central idea that critical thinking skills allow for the selection of the most authentic and credible

¹³ Wick, *In Defense of Knowledge*, 8–9. Grant, *Teaching Critical Thinking*, 2. Siegel, *Critical Thinking as an Educational Ideal*, 8. Beyer, *Critical Thinking: What is It?*, 271–72.

¹⁴ Irvin J. Lehman, "Changes in Critical Thinking, Attitudes, and Values from Freshman to Senior Years," *Journal of Educational Psychology* 54, no. 6 (1963), 305–15. Patricia M. King, "William Perry's Theory of Intellectual and Ethical Development," in *Applying New Developmental Findings*, ed. Lee Knefelkamp, Carole Widick, and Cyde A. Parker, (San Francisco: Jossey-Bass, 1978), 38–39. Patrick T. Terenzini, Leonard Springer, Ernest T. Pascarella, and Amaury Nora, "Influences Affecting the Development of Students' Critical Thinking Skills," *Research in Higher Education* 36, no. 1 (1995), 24–25.

evidence from the mountains of material available to researchers. As a first step toward achieving this goal, the archivist can approach the critical thinking process as a set of criteria or guidelines:

1. The verification of facts and the credibility of claims;
2. The reliability of the source;
3. The detection and determination of bias both in the source of the information and in one's self, the researcher;
4. Identifying unstated assumptions;
5. Identifying ambiguous or equivocal claims or arguments;
6. Recognizing logical inconsistencies or fallacies in a line of reasoning;
7. Distinguishing between warranted or unwarranted claims;
8. Determining the strength of an argument.¹⁵

Historical Research Methods and Critical Thinking

Historians have never questioned the existence of a "historical fact." A historical fact, writes Richard J. Evans, "is something that happened in history and can be verified as such through the traces history has left behind." What concerned Evans, however, was how historians take historical facts and convert them through some cognitive process into supporting evidence for an argument or theory.¹⁶ Primary sources, we must constantly reiterate, are the subjective interpretations of another person's observation of an event or activity. Not surprisingly, therefore, many professional historians have written that it is their duty to approach primary sources with a healthy skepticism in the research process. Through critical analysis, historians select the best evidence to support their theses. One historian sums up the nature of the challenge this way:

A statement is nothing more than what someone has said about a matter, and there are many reasons why statements may not be wholly or even partially true. The maker may or may not have witnessed the event; he may have lied deliberately; he may have colored his report more or less unconsciously because of his own interests, sympathies, or prejudices; he may through ignorance or some other form of incompetence have been incapable of making an accurate observation and report.¹⁷

¹⁵ Beyer, "Critical Thinking: What is It?," 271–72. See also Louis E. Rath, Selma Wasserman, Arthur Jonas, and Arnold Rothstein, *Teaching for Thinking: Theory, Strategies, and Activities for the Classroom*, (New York: N.Y.: Teachers College Press, 1986): 1–30, Grace E. Grant, *Teaching Critical Thinking*, (New York, N.Y.: Praeger Publishers, 1988): 119–26, Chet Meyers, *Teaching Students to Think Critically*, (San Francisco, Calif.: Jossey-Bass Publishers, 1986): 11–25, and Robert H. Enns, "A Taxonomy of Critical Thinking Dispositions and Abilities," in *Teaching Thinking Skills: Theory and Practice*, ed. Joan Boykoff Baron and Robert J. Sternberg (New York: W.H. Freeman and Co., 1987): 1–26. In this fundamental article, Enns does an excellent job of breaking down and analyzing the process and defines critical thinking as "reasonable reflective thinking that is focused on deciding what to believe to do."

¹⁶ Richard J. Evans, *In Defense of History*, (New York: W.W. Norton and Co., 1993): 66–70.

¹⁷ Homer Carey Hockett, *The Critical Method in Historical Research and Writing*, (New York: The Macmillan Company, 1955): 13.

Given the suspect character of unpublished manuscript sources, Jacques Barzun and Henry F. Graff insist that no matter “how it is described, no piece of evidence can be used in the state in which it is found. It must undergo the action of the researcher’s mind known as the critical method.” In the modern age, with society’s emphasis on appearance and concern for the judgment of history, the historical record has become a propaganda piece, something to be manipulated and revised by authors seeking to shape events to their favor. It is the historian’s job, therefore, to subject such records to the most thorough scrutiny in order to ascertain the truth, whatever that may be. Critical thinking skills, therefore, become the guideposts that lead the historian to the truth; and with time and experience, the use of such skills become second nature to the researcher.¹⁸

The level and quality of historical research methods training for students in higher education, particularly graduate students in history, has long been a matter of concern for archivists and historians. In 1956 Philip C. Brooks of the National Archives lamented what he observed to be a general lack of historical research training, and he sought to rectify this problem by publishing, in 1969, the first major work on how to use archives.¹⁹ In the following year, Walter Rundell, published his groundbreaking work, finding most graduate programs in history offered little or no research-methods training, and that many practitioners of history were unfamiliar with archives and the use of primary sources.²⁰ In fact, Rundell observed that archivists were “displeased” with the poor level of instruction students received in basic research methods, including “inadequate training in using manuscripts.”²¹ Disconcertingly, in 1988 Janice E. Ruth claimed that training had not improved since Brooks and Rundell. Three years later, Barbara C. Orbach found that “historians generally teach what methodology courses are offered, yet they find it difficult to break research down into the kind of discrete steps that are necessary to teach systematic information gathering.” She also questioned their ability to effectively interpret and analyze primary resources.²²

¹⁸ Jacques Barzun and Henry Graff, *The Modern Researcher*, 5th ed. (Boston: Houghton Mifflin Company, 1992), 155–159. See also Fischer, *Historians’ Fallacies*, 40–63, and Conal Furray and Michael J. Salevouris, *The Methods and Skills of History: A Practical Guide* (Arlington Heights, Ill.: Harlan Davidson, Inc., 1988), 1–15, and Robert Blackey, ed., *History Anew: Innovations in the Teaching of History Today* (Long Beach: The University Press, California State University, 1993), 19–46. This book offers four excellent articles by historians on the use of critical thinking skills in reading historical literature.

¹⁹ Philip C. Brooks, “The Historian’s Stake in Federal Records,” *Mississippi Valley Historical Review* 43 (September 1956): 273–74. See also Philip C. Brooks, *Research in Archives: The Use of Unpublished Primary Sources*, (Chicago: The University of Chicago Press, 1969).

²⁰ Walter Rundell, Jr., *In Pursuit of American History: Research and Training in the United States* (Norman: University of Oklahoma Press, 1970). See also Fischer, *Historians’ Fallacies*, 40. Writing at the same time as Rundell, Fischer noted that “few graduate programs in history deliberately teach students how to discover particular truths . . . It is merely assumed that historians will do so.”

²¹ Rundell, *In Pursuit of American History*, 20–21.

²² Janice E. Ruth, “Educating the Reference Archivist,” *American Archivist* 51 (Summer 1988): 271. See also Barbara C. Orbach, “The View from the Researcher’s Desk: Historian’s Perceptions of Research and Repositories,” *American Archivist* 54 (Winter 1991): 41–42.

Wondering if much has changed since Ruth's and Orbach's articles, the author conducted an informal survey of twelve archivists working at colleges and universities with undergraduate history programs. All but one reported that their history department offered some type of course in basic historical research methods that involved training in the use of primary sources. These courses were usually a senior-level seminar that required students to research and write a paper centered on the use of primary sources. When asked if the history department works with the archivist in providing training to undergraduates in basic research methods, all but one responded with a yes. However, in most cases, the archivist initiated the collaboration by offering the history department some type of prepared workshop or presentation. One archivist summed up his frustration with the faculty's apparent indifference this way: "In many ways it has been an uphill task, because it seems a number of faculty members do not share my view that systematic archival research should be an indispensable part of teaching undergraduate history, that is, the lab work of history instruction." All respondents shared this archivist's opinion when asked if they should have an active role in the instruction in basic research methods: "I think the archivist has a critical role in teaching the use of primary sources. Students get a range of instruction from their professors but when encountering original documents for the first time, they are rarely fully prepared."²³

The historical research method does, of course, incorporate critical thinking skills into the analysis and interpretation of primary sources. Historians have divided critical thinking in the research process into two basic components: external and internal criticism.

External criticism is the process of authentication and verification of authorship, determining "where, when, why, and by whom" a document was written. As archivists have long realized, the verification of a record's provenance and authenticity "may reveal its real character."²⁴ Not surprisingly, therefore, external criticism dramatically demonstrates the importance of the archivist to the researcher, for it is the archivist, through arrangement and description, who determines and validates the provenance of a record. "The cooperation of the archivist and the user in this respect," intoned Philip Brooks, "is one of the best illustrations of the role of the archivist as a scholarly colleague of the researcher."²⁵

²³ Survey conducted by the author via e-mail, 1999.

²⁴ Hockett, *The Critical Method in Historical Research and Writing*, 13–15. See also Furray and Salevouris, *The Methods and Skills of History: A Practical Guide*, 142.

²⁵ Brooks, *Research in Archives*, 84. See also, Gabrielle Blais and David Enns, "From Paper Archives to People Archives: Public Programming in the Management of Archives," *Archivaria* 31 (Winter 1990–91): 103; Elsie T. Freeman, "Soap and Education: Archival Training, Public Service and the Profession—An Essay," *Midwestern Archivist* 16, no. 2, (1991): 90; Joyce, "Archivists and Research Use," 126; and Edwin Bridges, Gregory Hunter, Page Putnam Miller, David Thelen, and Gerhard Weinberg, "Historians and Archivists: A Rationale for Cooperation," *Journal of American History* 80 (June 1993): 180–82. Blais, Enns, and Freeman make reference to this relationship as "symbiotic," and to the archivist as "collaborator" to the historian. Joyce wrote, "Until documents and the circumstances of their creation are identified, they are useless to researchers." Bridges, et al., believe that "challenges to traditional interpretations of the past have left these two professions to deal with today's challenges in isolation from each other."

Once the researcher has completed the chore of external criticism, she can move on to the internal criticism of the record. Internal criticism is the process of evaluation and interpretation of the content once the researcher has determined the provenance and authenticity of evidence. Here the researcher must establish, to the best of her ability, the real and literal meaning of the information or evidence. The researcher must also test the author's competence, detect any bias in the author, and ascertain the truth of the author's conclusions or observations. Internal criticism, essentially, is the "analysis of the credibility of the statement." Consequently, Brooks concluded, "this means that the scholar should use the sources as thoroughly as possible, and be open-minded in letting himself be guided by what they actually tell him, rather than simply choosing evidence to support his own prejudice."²⁶

Libraries, Archives, and Critical Thinking

Librarians have, for some time, integrated critical thinking skills into bibliographic instruction, both during the reference interview and in the classroom. For example, in 1985 Mona McCormick challenged librarians to move bibliographic instruction beyond merely the construction of a search process. "Let's be sure that the students," "don't get the idea—especially from us—that finding information is the important thing, not what they do with information," she admonished. Echoing Daniel Wick, Sonia Bodi finds that a sufficient knowledge base was essential in learning critical thinking skills during bibliographic instruction. For Bodi, librarians must teach critical thinking skills in conjunction with some other subject-based course, such as history or English. Nancy Thomas Totten makes the case that critical thinking skills should automatically be incorporated into bibliographic instruction and that the library is the natural place for such learning. Moreover, she insists, "students benefit from having critical thinking instruction and experience as often as possible in as many contexts as possible." Indeed, the integration of critical thinking skills in bibliographic instruction has become so accepted among librarians that when the author questioned colleagues at Northern Michigan University on the subject they responded incredulously, saying, "Of course, aren't you doing the same thing?"²⁷

²⁶ Brooks, *Research in Archives*, 91–92. See also, Barzun and Graff, *The Modern Researcher*, 154–200, Hockett, *The Critical Method in Historical Research and Writing*, 41–64, and Furay and Salevouris, *The Methods and Skills of History*, 142–145.

²⁷ Mona McCormick, "Critical Thinking and Library Instruction," *RQ* 22 (Summer 1983): 339–42. Sonia Bodi, "Critical Thinking and Bibliographic Instruction: The Relationship," *Journal of Academic Librarianship* 14, no. 3, (1988): 150–53. Nancy Thomas Totten, "Teaching Students to Evaluate Information: A Justification," *RQ* 29 (Spring 1990): 348–54. See also Ethelene Whitmire, "Development of Critical Thinking Skills: An Analysis of Academic Library Experiences and Other Measures," *College & Research Libraries* 59 (May 1998): 266–73. Whitmire writes that librarians have worked with the issue of critical thinking for years. She quotes Barbara MacAdam: "critical thinking development has been the focus of considerable discussion and program development within academic libraries in recent years, primarily as a teaching strategy and as a desired outcome for bibliographic instruction." According to Whitmire, MacAdam notes that the greatest difficulty for librarians is "assisting users in critically evaluating the vast amount of information available to them."

Unfortunately, the literature indicates that archivists are not doing the same thing and have been slow to integrate critical thinking skills into their classes and workshops on basic research skills in archives. Kathleen Roe reminds archivists that students in disciplines other than history, political science, or social studies can be users of archives and often have unique educational requirements. Archivists, therefore, should make themselves aware of the educational goals and curricula goals of these groups. "Educators may use documents in the field of the social studies," Roe notes, "to teach students critical thinking skills, the ability to read, discern viewpoints, and develop interpersonal skills. Programs designed for students should take into account these educational needs." Moreover, conducting educational workshops at the archives "provides students with a realistic experience in historical research, evaluation of evidence, and drawing conclusions." In higher education, Roe recommends working with professors in "planning projects to familiarize students with the use of primary resources. Specific collections may be identified for students to use with coursework, or special assistance in research projects may be provided."²⁸

Fortunately for those in higher education, the unique nature and mission of the academic archives provides many archivists with an avenue with which to follow the librarians' lead. "As members of educational institutions, archivists are in a strong position to pursue and justify active educational projects in their outreach programs," William J. Maher, writes in his book on managing college and university archives.²⁹ Moreover, the Society of American Archivists' *Guidelines for College and University Archives* states: "The archives should serve as an educational laboratory where students may learn not only about a particular subject, but also about the resources available and the *techniques for using them* [*italics added*] . . . The archivist should provide, where interest justifies it, information sessions for students on researching archives and manuscripts." Indeed, the primary objective of the Northern Michigan University Archives is to support the educational mission of the University.

In her fundamental work on archival reference, Mary Jo Pugh notes that archivists can and should have an important impact on students' ability to work effectively with primary sources. "Historical documents," she observed, "can be illustration, but more importantly, can be evidence that provokes questions and stimulates hypotheses . . . If properly guided through archival research, students can be stimulated to think more analytically and to look for the connections between past and present."³⁰ Other archivists have even expressed

²⁸ Kathleen Roe, "Public Programs," in *Managing Archives and Archival Institutions*, ed. James Gregory Bradsher (Chicago: University of Chicago Press, 1988), 221.

²⁹ William J. Maher, *The Management of College and University Archives*, (Metuchen, N.J. and London: The Scarecrow Press, 1992), 317.

³⁰ Mary Jo Pugh, *Providing Reference Services for Archives and Manuscripts*, (Chicago: Society of American Archivists, 1992), 19–20.

concern that the apparent lack of general training in historical research methods in undergraduate education may actually be an obstacle to increased use and understanding of archives, and is something archivists, therefore, should directly address.³¹

Archivists, like Pugh, writing on reference and outreach, have advocated an expanded role for archivists in the instruction of historical research methods. For the most part, however, these writings mainly stress the importance of familiarizing researchers with reading room procedures and archival finding aids. Regardless, a few writers such as William Saffady have observed that researchers require expert assistance in the use of “nonprinted textual records.” Over twenty-five years ago Saffady argued that archivists must expand their perceptions of themselves as merely preservationists to include a greater appreciation of their public responsibility to researchers and should actively participate in the instruction of historical research methods.³² Indeed, William Joyce has said bluntly that archivists simply “cannot avoid dealing with the historical method and its implications for archival repositories and archival researchers.” Noting the absence of any structured historical research methods course in many colleges and universities, Bruce Dearstyne encourages archivists to work with professors to develop such courses, or to assist them in the training of undergraduate students by offering their archives as a “lab.”

The Archives as a Laboratory in Critical Thinking

The idea of the archives as a laboratory for social science students in higher education to use for the study of historical research methods is certainly not new to archivists. Indeed, within the last ten years, many archivists have argued, and continue to argue, for an expanded role for archives in the classroom. In general, we all know that public programs go a long way in improving researchers’ understanding of archives and their use of primary sources. Michael Cook argues that archivists are fully capable of being teachers in the classroom. Archivists, he insists, are “especially qualified to determine which sources can be most fully exploited for educational purposes. The archivists also maintain that they are capable of assisting teachers in training pupils in the fundamental methods of archival research.” Moreover, a failure to use archives as a teaching resource denies education a tool in improving the quality of historical training. And on the flipside, Ken Osborne argues that “by not engaging in

³¹ Bruce W. Dearstyne, “What is the Use of Archives? A Challenge for the Profession,” *American Archivist* 50 (Winter, 1987): 84. See also, William L. Joyce, “Archivists and Research Use,” *American Archivist* no. 2 (Spring 1984): 131–32. Elise T. Freeman, “In the Eye of the Beholder: Archives Administration from the User’s Point of View,” *American Archivist* 47 (Spring 1984): 111–23.

³² William Saffady, “Reference Services to Researchers in Archives,” *RQ* 14 (Winter 1974): 139–44.

educational work, archives deny themselves the possibility of building and benefiting from the support of a knowledgeable and sympathetic public.”³³

In these educational endeavors, archivists can draw upon numerous resources and examples available in print and on the Internet.³⁴ In general, these resources offer examples and methods for “hands-on” use of primary source material in the instruction of history, particularly United States history. At the same time, various published sources offer teachers in public schools examples of how to teach history with primary sources in the K-12 system.³⁵

Given the general acceptance of the use of archives as a lab in the instruction of historical research methods, when should archivists begin instruction in critical thinking skills? As we have seen, educators and psychologists have found that college students in their freshman and sophomore years are at the stage in their cognitive development where they can best understand and use critical thinking skills. As noted earlier, Patricia King discovered that students at this level “recognize that knowledge is contextual and relative.” They are capable of understanding and processing divergent points of view and recognizing the subjective nature of human experience. Unfortunately, departments of history tend to offer courses in historical research methods late in a student’s college career. These studies, however, indicate that archivists should encourage faculty who use the archives as a lab to begin this instruction earlier.³⁶

³³ Ken Osborne, “Archives in the Classroom,” 17. Kathleen D. Roe, “Public Programs,” 220. Michael Cook, “Teaching with Archives,” *International Journal of Archives* 1, no. 1 (1980), 26. See also Mary N. Speakman, “The User Talks Back,” *American Archivist* 47 (Spring 1984), 171. Speakman recounts an experience in an archives reading room where she observed an interaction between two college students. “As they were reading and making notes, one of the young ladies said to the other, ‘Don’t you think we’d better put down the title of the book and the author?’ the other answered, No, the teacher will know we got it some place!”

³⁴ Some of the useful web sites include: National Center for History in the Schools, <www.sscnet.ucla.edu/nchs/>; Primary Source Documents from the Collections at the Library of Virginia, <www.lva.lib.va.us/k12/plans/psd99/index.htm>; Minnesota Historical Society School Programs 1999–2000, <www.mnhs.org/school/classroom/index.html>; The British Columbia Archives, “The Amazing Time Machine,” at <www.bcarchives.gov.bc.ca/exhibits/timemach/index.htm>; The National Archives and Records Administration’s “Digital Classroom,” <www.nara.gov/education/classrm.html>. See also Craver, *Using Internet Primary Sources to Teach Critical Thinking Skills in History*. Craver provides an excellent compilation of Internet sites that offer digitized primary sources. She has organized the list chronologically by historiographical subject.

³⁵ Kathleen Roe, *Teaching With Historical Records*, (Albany: University of the State of New York, 1981); Fay D. Metcalf and Matthew T. Downey, *Using Local History in the Classroom*, (Nashville: American Association for State and Local History, 1982), *Teaching with Documents*, (Washington: National Archives and Records Administration, 1989).

³⁶ Irvin J. Lehman, “Changes in Critical Thinking, Attitudes, and Values from Freshman to Senior Years,” *Journal of Educational Psychology* 54, no. 6 (1963), 305–15. See also Patricia M. King, “William Perry’s Theory of Intellectual and Ethical Development,” in *Applying New Developmental Findings*, ed. Lee Knefelkamp, Carole Widick, and Cyde A. Parker (San Francisco: Jossey-Bass, 1978), 35–51; Patrick T. Terenzini, Leonard Springer, Ernest T. Pascarella, and Amaury Nora, “Influences Affecting the Development of Students’ Critical Thinking Skills,” *Research in Higher Education* 36, no 1 (1995), 23–39; and Ernest T. Pascarella, Louise Bohr, Amaury Nora, and Patrick T. Terenzini, “Is Differential Exposure to College Linked to the Development of Critical Thinking?” *Research in Higher Education* 37, no. 2 (1996), 159–74.

Part II: Integrating Critical Thinking Skills into Historical Research Instruction: A Practical Application

At Northern Michigan University, we have worked hard to position the Central Upper Peninsula and Northern Michigan University Archives as an active partner with the faculty in training independent learners. As an assistant professor, the university archivist offers a general course in archival management and a labor history course that draws upon oral histories and research in union records. The university archivist also offers a presentation on the archives and its collections, similar to library bibliographic instruction, and a specific workshop on the use of critical thinking skills in the analysis and interpretation of primary sources.

In order to make the workshop on critical thinking skills and primary source research successful, the university archivist carefully solicited appropriate review and feedback. As a unit of Academic Information Services (AIS), one of the archives' goals is to provide instructional and research support to faculty and students. Recognizing the importance of critical thinking instruction, the university archivist developed the critical thinking workshop and submitted it for review to an ad hoc committee made up of two faculty members from the Department of History and one member of the library's reference staff. This committee reviewed the program and provided important feedback and suggestions for revision and additions. Before offering the workshop to the general faculty, however, the university archivist tested the workshop on students in AIS 330, *Management and Use of Archival Information*, as part of a section on educational outreach in archives. These students provided important feedback from the workshop's prospective audience.

Given the almost universal nature of critical thinking and the faculty's desire to integrate this skill into their curriculum, the university archivist received widespread support and interest in the program. Faculty from multiple disciplines, including the hard sciences, availed themselves of the service. In order to facilitate awareness of the program, the archivist made available to the faculty the workshop's PowerPoint presentation and narrative online. Each semester, the university archivist sent out an e-mail message to the faculty that summarized the content and goals of the critical thinking workshop and included a hypertext link to the server. Interested faculty then contacted the university archivist, who scheduled an appointment with faculty member to determine if the workshop could be successfully integrated into the proposed course. Besides the traditional humanities courses, such as history, the university archivist has taught the workshop to such diverse courses as nutrition science and chemistry. In each instance, the archivist worked with the instructor to modify the program to make the workshop relevant to the course content. In the case of the nutrition science class, for example, the archivist utilized primary sources available in the library's government documents collection.

Although the above approach occurred at a university, a similar process could occur in other structured formats. For example, the staff of an archives or manuscript collection in a state historical society might develop a similar critical thinking workshop, submit the program for review to its advisory board, and then test the workshop on a select group that is representative of the institution's diverse patronage. The workshop would then become part of the society's community educational outreach program.

Northern Michigan University's critical thinking workshop is divided into two parts conducted by the archivist over a two-day period. The first part is a one-hour, in-class review of primary sources, the historical research method, and critical thinking skills. During the presentation, the archivist also discusses and defines the *Document Analysis Worksheet*. At the end of the presentation, the archivist distributes a packet of document reproductions and presents students with a typical thesis statement relevant to the topic covered by the documents. In essence, students are asked to suspend reality and pretend that they are researchers in an archives, confronted with a set of documents. Their task is to select the most credible documents from the packet to use in support of their thesis. Students are instructed to study the material overnight, conduct a critical analysis, and return to the next class session prepared to present and discuss their results. The second part of the workshop is a seminar-style discussion of each student's critical analysis, with the archivist serving as a facilitator.

In-Class Presentation

The in-class presentation covers the definition and meaning of historical research, primary sources, and critical thinking, including the topics of verification, reliability, and inference. The archivist combines a PowerPoint slide presentation with the demonstration of key ideas using actual documents.

1) What is a Primary Source?

In general, undergraduate students at the freshman and sophomore level have little practical or cognitive understanding of what constitutes a primary source. For the most part, public education for them only involved the use of published secondary sources. Consequently, it is important that any workshop on critical thinking skills and historical research methods first establish a solid understanding of what a primary source is. This is no easy task. To rationalize the process, the archivist approaches the concept of a primary source from three perspectives: 1) a primary source is subjective in nature; 2) the archival concept of provenance aids in the analysis of a primary source; 3) primary sources exist in various formats.

First of all, the definition of a primary source must establish the fact that a primary source is the *subjective* interpretation of a witness to an event or activity, not just an original, unpublished manuscript. In his famous declaration to a friend, T.H. Lawrence wrote: "The documents are liars."³⁷ He may have exaggerated, but Lawrence's bluntness serves a purpose; not all documents lie, but, at the same time, neither do all documents tell the truth. Part of the problem also has to do with a human being's limited perception: we just can't see and comprehend everything that happens. Understanding this fundamental fact is essential when instructing students in the use of critical thinking skills with primary sources. At this stage in the workshop, the archivist discusses how an observer's unique set of biases, prejudices, cultural or ethnic background, and education colors or distorts her perception and interpretation of an event. No two individuals see or interpret an event in the same way. A dramatic and easy way to demonstrate this fact is to ask two students to briefly describe what happened just ten minutes earlier. In every instance, each student will describe the past event differently, sometimes to the consternation of others in the class.

A definition of primary sources should also incorporate the archivist's concept of provenance. As any professional archivist knows, the provenance of a primary source is the historical function of its creation, so, in this sense, archival methodology augments historical methodology by greatly assisting the historian in her external criticism of the source. As Susan Grigg has written, "archivists, have the advantage here because they are more accustomed to viewing source materials from this perspective." Using provenance as a guide, the researcher captures "the relation between the source and the original activity in the arrangement and description of the materials."³⁸ For purposes of the workshop, an easy way to demonstrate this concept is through a brief review of a standard archival inventory or register, with emphasis on the biographical or administrative history and the general scope and content note. This approach not only serves the purpose of clarifying the definition and relevance of provenance, but it also introduces the students to an archival finding aid, something they most likely have never seen before.

As the presentation continues, the review of primary sources moves from a discussion of the definition to a review of general types and formats. To the consternation of many archivists, most students labor under the notion that archives are musty/dusty depositories of old paper (and managed by musty/dusty old men and women!). Consequently, it is important to inform students that primary sources can exist in archives in written, oral, visual, and electronic formats. The archivist reinforces this fact in a display of sources grouped

³⁷ Jacques Barzun and Henry Graff, *The Modern Researcher*, 4th ed. (New York: Harcourt, Brace and Jovanovich, 1985), 48.

³⁸ Susan Grigg, "Archival Practice and the Foundations of Historical Method," *Journal of American History* 78 (June 1991): 230–33.

in personal, social, and legal categories. For example, students are asked if they keep a diary, scrapbooks of photographs, records of legal value, or if they write letters. The archivist then displays a diary written by a young college student in 1918 and remarks that the student recorded her observations of the impact of the influenza epidemic on the Northern Michigan University campus. In a nod to the information age, the archivist also displays a set of floppy disks (8 inch, 5 ¼ inch, and 3 ½ inch), all the while deriding the perils of hardware and software obsolescence with electronic records. Given their familiarity with computer technology, this demonstration usually sparks a spirited discussion with the students.

2) What Is Historical Research?

The discussion of historical research focuses on the determination of authenticity and the credibility of evidence. Little time is spent on specific methodologies except to emphasize that research is the process of determining historical truth and what that means to historians. Students are reminded that historical research begins with a problem or thesis that must be proved or disproved. They are encouraged to think of the archives as a lab in much the same way a student in the hard sciences uses a chemistry or physics lab. In her survey of ten professional historians, Barbara Orbach found that seven had “claimed that they had a thesis or hypothesis in mind when they began the research; in the other three cases, the historians had developed or were developing hypotheses in the course of the research.”³⁹

Research starts with the gathering of information, or evidence, to support the researcher’s thesis. In the presentation, students learn that research also requires analysis and interpretation of data. At the end of a research project, a student must come to some conclusion, understand their implications and consequences, and, at the same time, take into account alternative points of view. To accomplish the latter, students are taught the importance of a solid understanding of relevant historiography. Indeed, Mary Jo Pugh cited a study at the Michigan Historical Collections that found “nearly 40 percent of the users were judged to have read extensively on their subject. Another 40 percent were unprepared. The remaining 20 percent had done some preparation.”⁴⁰ This finding suggests that archivists should stress to students the importance of solid preparatory research prior to work in an archives, and how that preparation will aid in the critical analysis of primary sources.

³⁹ Barbara C. Orbach, “The View from the Researcher’s Desk: Historian’s Perceptions of Research and Repositories,” 33.

⁴⁰ Mary Jo Pugh, “The Illusion of Omniscience: Subject Access and the Reference Archivist,” *American Archivist* 45 (Winter 1982), 272.

3) What is Critical Thinking?

Once the archivist has established a working definition for primary sources and has described the fundamentals of historical research, the focus moves to a discussion of critical thinking skills and their application in the analysis and interpretation of primary sources. The archivist begins with a breakdown of the general definition of critical thinking offered by Richard Paul. This definition can be seen as having two principal components: 1) a set of skills to process and generate information and beliefs, and 2) the habit, based on intellectual commitment, of using those skills to guide behavior.⁴¹ This definition sets in the students' minds the idea that critical thinking is both a procedure and a personal commitment. The archivist, in essence, asks students to abandon the rote memorization of knowledge in favor of the process of actively evaluating information.

The presentation then moves to a subdivision of the general definition of critical thinking and examines the two component parts used by historians: *internal and external criticism*. This approach to critical thinking incorporates the eight steps of analysis discussed earlier. At this stage in the workshop, the archivist distributes the *Document Analysis Worksheet* and begins a discussion of its definitions and use.

First, the archivist explains the meaning of *external criticism* as the process of verification and authentication of evidence and introduces the archival concept of provenance. A researcher conducting external criticism of a primary source would likely pose the following questions:

1. Where was the document written?
2. When was the document written?
3. Why was the document written?
4. Who wrote the document?

Answers to these questions establish and verify the context of the record's creation. For example, confirming where and when the document was written helps the researcher determine whether or not the witness was in a position to even observe the events recorded. Similarly, knowing who wrote the document might help determine whether or not the witness was competent enough to record the event accurately.

Next, the archivist defines the meaning of the term *internal criticism* as the process of reading and interpreting the contents of the primary source. In this instance, the researcher would consider the following:

1. What is the real and literal meaning of the document?
2. Can you detect any bias or prejudice that calls into question the author's argument?
3. Can you ascertain the truth of the author's conclusions?
4. Do you need more information or corroborating testimony to understand the document?

⁴¹ Paul, "Defining Critical Thinking."

Sometimes the tone used by the author of a document might conceal the real meaning. Similarly, changes in the meaning of words may confound the literal meaning of a document. A document rife with bias and prejudice would weaken the validity of the author's observation and call into question the truth of the author's conclusions. And finally, some primary sources cannot stand alone. For example, a statement by an oral history interviewee may need corroboration from another source before it can be accepted as evidence.⁴²

To demonstrate the use of the *Document Analysis Worksheet*, the archivist distributes a copy of a letter written by Michigan author John Voelker.⁴³ For the purpose of demonstrating external criticism, the letter has value since it is signed only by "John," and includes a date, but does not specifically indicate where the letter was written. Without further contextual information, or provenance, students are unable to authenticate the letter. At this point, the archivist distributes a copy of the biographical sketch on Voelker that appears in the finding aid. From this, students are able to verify the author and date by learning from the sketch that Voelker was a young attorney in Chicago in 1933, and that he had a two-year-old son named Bobby and a wife named Grace.

Voelker's letter is also useful as a simple way to introduce the concept of internal criticism. It is clear in the letter that some kind of social upheaval has occurred, and from verification of the date we can confidently determine that Voelker is referring to the onset of the Great Depression. Since he was in Chicago, we know that he was in a position to report on events in the city, and from our general understanding of history, we know that Chicago experienced the same sort of financial and social upheaval, more so in many ways, as other parts of the country. Moreover, President Franklin D. Roosevelt had just been inaugurated for his first term, and Voelker appears biased in favor of the Democrat. Again, a reading of the biographical sketch shows that Voelker was a lifelong Democrat, having served the party in various capacities. Finally, Voelker's reference to alcohol use is interesting, since we know that his biographer has concluded that Voelker had a drinking problem much of his life.

The use of the Voelker letter is an effective vehicle by which the archivist can briefly introduce the important concept of critical thinking and the steps used in critical analysis. Also, by drawing upon the biographical sketch from the archival finding aid, the archivist is able to further explain the concept of

⁴² Furay and Salevouris, *The Methods and Skills of History*, 137–67. Furay's and Salevouris' work is the best and most accessible text on basic historical research methods the author has found to date. It lays out the basic components of historical research, including critical thinking, in easy-to-read prose that is free of heavy theoretical discussions. Moreover, the authors provide very effective examples at the end of each section.

⁴³ John Voelker was the famous author from Michigan's Upper Peninsula who wrote *Anatomy of a Murder* and other novels. He was also a state supreme court justice and avid trout fisherman. The John Voelker papers reside at the Central Upper Peninsula and Northern Michigan University Archives.

provenance and its usefulness in critical thinking. Experience has shown the author that this procedure is an effective way to initiate students to the second part of the workshop, the group discussion exercise.

The Group Discussion Exercise

The group discussion exercise involves the use of a selection of documents that are photocopies of original records taken from a collection or record series in the archives. For the best results, archivists should select primary sources that document a controversial and/or familiar subject, activity, organization, or individual. Experience shows that such material helps motivate students' interest in the project. Also, documents that are visually appealing or unique, such as nineteenth-century handwritten documents, help maintain students' attention and interest in the exercise.

The structure of the exercise draws on the ideas and examples presented by David Kobrin in his book *Beyond the Textbook: Teaching History Using Documents and Primary Sources*.⁴⁴ Kobrin's work is very useful to archivists who want to integrate their programs into instruction but do not have training in pedagogy. Among other things, Kobrin is convinced that working in groups is the best way for students to learn how to critically analyze primary sources. "When the group works well," Kobrin insists, "the kids usually divide the jobs themselves, relying on their personal styles and needs to decide who should do what."⁴⁵ For their part, archivists and instructors provide guidance, organization, and support. They "set the table" by creating the classroom conditions that prompt students to cooperate with one another "naturally" on research projects.⁴⁶

Kobrin recommends some simple steps to help instructors promote this kind of cooperation among students. He suggests student involvement activities and written structures that subdivide tasks and clarify for students what teachers expect of them. Moreover, teachers should organize students' work so that it would be difficult for anyone to complete the unit without depending on others. Finally, Kobrin found that when teachers effectively model their own collaboration in the classroom every day, students eventually follow their example.

The workshop at Northern Michigan University relies on a set of documents copied from the records of the Citizens to Save Lake Superior Shoreline. This group was formed in the late 1960s to prevent a power company from constructing a coal-fired electrical generation plant near an environmentally pristine beach along Lake Superior's south shore, north of Marquette, Michigan.

⁴⁴ David Kobrin, *Beyond the Textbook: Teaching History Using Documents and Primary Sources*, (Portsmouth, N.H.: Heinemann, 1996).

⁴⁵ Kobrin, *Beyond the Textbook*, 36.

⁴⁶ Kobrin, *Beyond the Textbook*, 37.

Today the area is an immensely popular attraction for tourists and locals, making the topic provocative and instantly identifiable to the students. The documents consist of letters written to and from members of the citizen's group, politicians, and company officials. Many of the documents are handwritten and some include annotations. Two of the documents are letters written by two famous, and controversial, politicians of the time. Taken together, they provide a snapshot view of the fundamental issues and positions of the participants.

As mentioned earlier, students are instructed to conduct a critical analysis of the documents outside of class using the *Document Analysis Worksheet*. They are told to conduct an analysis similar to the exercise with the Voelker letter. However, before students leave class at the end of the in-class presentation, the archivist presents them with this simple thesis statement:

Beginning with the decline of iron and copper mining and the corresponding rise of tourism in Michigan's Upper Peninsula in the late 1960s, environmental protection and preservation became an important issue for many citizens of the region. Not surprisingly, the Citizens to Save Lake Superior Shoreline received active and positive support from politicians and government officials in their effort to prevent the construction of the Little Presque Isle power plant.

As stated earlier, the purpose here is to create a hypothetical situation where the student acts as a researcher confronted with a set of primary sources, and must select sound and credible documents that support the above thesis statement. A secondary concern is to highlight the need for preparation prior to any research visit to the archives.

As a twist designed to shake things up a bit, the archivist consciously selected documents that demonstrate the opposite of the thesis statement; indeed, the documents clearly show that politicians and government officials were anything but supportive of the Citizens to Save Superior Shoreline. In fact, they were downright hostile. The purpose is to confront students with the possibility that the critical analysis of primary sources may provide evidence that refutes a researcher's thesis. Any workshop or training exercise in historical research methods should include the issue of honesty in the analysis of primary sources. At the same time, the archivist carefully selected a mix of documents that, in his judgment, provided a balanced representation of sound and unsound evidence. The archivist arrived at this selection based on his own critical analysis of the documents.

Upon their return to the classroom on the second day, the archivist divides the students into groups of no more than four, instructing them to discuss their findings and prepare a unified presentation to the class. Each group is assigned one or two of the documents in the packet to analyze. This limitation is not a problem, since the students have read and analyzed all of the documents prior to class. Students are given approximately twenty minutes to prepare. Using the

chalkboard, each group lists the results of their external and internal criticism of the document(s), and their conclusion as to whether or not the document is a sound and credible enough piece of evidence to support the thesis. Each group is made to justify its conclusions and members of other groups are encouraged to challenge those conclusions by offering their own arguments. In the end, the archivist attempts to bring the groups to a consensus as to the documents' credibility and reliability as evidence to support a thesis or argument. For evaluation purposes, students prepare a formal write-up of the worksheet and submit it to the instructor.

Conclusion

Clearly, critical thinking is an important and essential component of instruction in education. A solid understanding of critical thinking skills will aid students in their analysis and interpretation of the mountain of knowledge available to them in this information age. Librarians learned this truth many years ago, and the time has come for archivists to join their colleagues and begin integrating critical thinking skills into courses and workshops they developed to introduce students to the use of archives and historical research. This article has demonstrated the importance of critical thinking to the historical research method and the archival profession, and has described a practical application of those skills in the classroom. The mandate exists for archivists in higher education to actively assist in the creation of "independent learners."

This mandate, however, in no way violates or compromises the archivist's objectivity and/or neutrality as a facilitator in the research process. First of all, the archivist conducts this workshop outside of the reading room environment as part of an external educational outreach program. There is no suggestion that archivists should attempt to instruct the researcher in the critical analysis of primary sources while assisting them in the identification and retrieval of those sources. What is suggested, however, is that archivists become proactive in seeding the ground for improved inquiry before the researcher enters the reading room. In some ways, this call is similar to records management's insistence that archivists become involved in the design and implementation of electronic-records management programs that will facilitate the proper disposition of electronic records. Both approaches improve on a component of the archival mission by relying on the unique training and experience of the archivist.

In the past two academic years, practical experience in the classroom has helped perfect the instructional workshop. Two important changes include the number of documents in the packet and the vocabulary of the *Document Analysis Worksheet*. For example, the initial packet of documents contained ten items. Students had difficulty assessing ten documents in a single assignment, and the larger number also made it impossible to effectively discuss the contents in a

one-hour seminar so the archivist quickly reduced this set to five. Using five documents made it easy to divide the class into five groups of four (classes at Northern Michigan University average twenty students per class) with each group, assigned one document to review. Reducing the number of documents to five simply made the logistics of the workshop easier to handle, but still accomplished its objective. Over time, the archivist also altered the questions posed by the *Document Analysis Worksheet* but retained their essential meaning. For example, words and phrases such as “equivocal”, “ambiguous,” or “warranted and unwarranted” were eliminated in favor of more accessible words. Time spent defining and explaining the context for these words detracted from the limited time available for the larger concepts concerning critical thinking.

Another important change was the use of the hypothetical thesis statement. The use of the statement and the imaginary research setting really helped to keep the focus of the workshop on the goal of historical research: setting out to prove or disprove an argument or historical problem. Having students understand the task of selecting sound and credible sources to support an argument dramatically brought home the importance of using critical thinking skills in their analysis and interpretation. For many students, this exercise taught them, for the first time, that citations used in a paper are important for reasons other than as a requirement from the instructor. It had never occurred to many of the students that the reader might actually look up a citation in order to ascertain whether or not the author had used sound evidence to support her argument.

Archivists interested in implementing a similar workshop might also wish to consider the following insights: First, seek out and cooperate with faculty members who demonstrate the most interest in teaching critical thinking skills. (Reviewing course syllabi and faculty publications or presentations related to teaching can help accomplish this task.) Work closely with the interested faculty members and be willing to modify the workshop to conform to the objectives of the instructor’s course. Although stated previously, this point bears repeating: choose material for the document packet that is provocative, controversial, and also visually stimulating. Students will respond to the project better if the material piques their interest. Make yourself readily available to students following the workshop to answer questions or clarify concepts. Finally, offer to complete the program with a visit to the class to “debrief” students on the project, and review those areas where the students did well and where they did not. The students will thank you for the effort, and, in the long run, the profession will benefit from these labors.