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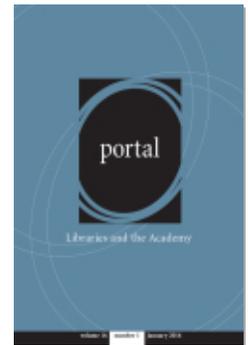
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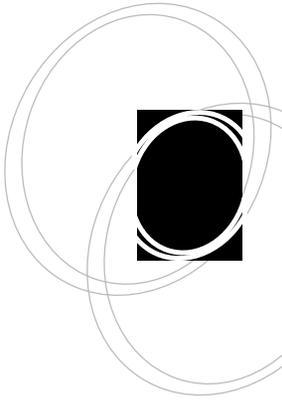
Information Literacy for Archives and Special Collections: Defining Outcomes

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abstract: This article provides the framework for a set of standards and outcomes that would constitute information literacy with primary sources. Based on a working model used at Dartmouth College's Rauner Special Collections Library in Hanover, New Hampshire, these concepts create a framework for teaching with primary source materials intended to produce expert users at the undergraduate level. At the same time, these concepts establish a structure for archivists and librarians to use in assessing their work with faculty and students.

Introduction

Librarians have discussed and worked on information literacy for more than twenty-five years. In contrast, primary source literacy has only been directly discussed in the literature for about the last twelve. The work on primary source literacy has led to the development of a definition, but there are currently no standards specifically designed for primary sources that adequately address the complexities of finding, accessing, evaluating, and interpreting these complex, mediated materials—that is, materials connected through an intermediate agency. This article will explore the definitions of primary source literacy and its value, and will put forward a set of standards and outcomes for the profession to consider and build on.

The Background to Information Literacy

The Association of College and Research Libraries (ACRL) issued in 1989 its "Presidential Committee on Information Literacy: Final Report" that defined an information-literate

person as someone who is "able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." The report frames information literacy as providing people with essential skills that will "enhance their lives" by supplying them with better access to information essential for academic and professional success. It also states that access to information and the ability to find and understand information "promote(s) economic independence and quality of existence" and is thus essential to a democratic society.[1]

The result of this report appeared twelve years later in the form of the ACRL Information Literacy Competency Standards for Higher Education, often called just the Standards. The report, the Standards, and the resulting work done by librarians have created a culture around information literacy that has reshaped library instruction. The guidelines have drawn criticism over the intervening years, and ACRL responded with a second document, the Framework for Information Literacy in Higher Education. The Framework was "filed"—that is, placed among ACRL's official records—in early 2015. Despite some weaknesses, the Standards and the Framework have provided important direction to librarians.

In reaction to the changing role of archives and special collections and in response to institutional pressure to prove their relevance, a growing number of archivists and special collections librarians have also worked to change their methods of instruction. This effort has included moving away from show-and-tell and bibliographic instruction models toward more interactive methods of teaching that aim to integrate the libraries' collections into the curriculum and pedagogical aims of their institutions. Though many have looked to the ACRL Standards for guidance, the document provides little assistance in terms of how primary sources fit into the information literacy (IL) concept.

The first step toward a standard came when Elizabeth Yakel and Deborah A. Torres published their article "AI: Archival Intelligence and User Expertise" in the *American Archivist* in 2003. It provided the beginnings of a clear direction toward an IL structure specifically aimed at primary sources. The authors set out a model for researcher expertise that could be incorporated into user education. They identified three specific areas of knowledge needed by researchers to become experts in primary source research: subject knowledge, artifactual literacy, and archival intelligence. The article concentrated on examining and defining what constitutes archival intelligence but stopped short of defining a core set of skills and outcomes that would constitute information literacy for primary sources.[2]

This article aims to provide a first framing of such a set of skills and outcomes. The standards outlined here not only delve deeply into archival intelligences as defined by Yakel and Torres but also combine these with a set of artifactual literacies. Together, the two types of knowledge will provide undergraduate students with a strong basis for working with and understanding primary sources and utilizing them for research. While a number of institutions have applied the learning objectives outlined here, either in full or in part, they have not been formally tested. Anecdotal evidence in the form of follow-up with faculty suggests that they have value and are effective. The aim of this article is not to prove that these outcomes are the answer to the need for IL for primary sources but rather to continue the discussion started by Yakel and Torres and to suggest a beginning of a possible framework for primary source IL.

The ACRL Standards and Primary Sources

The ACRL Information Literacy Competency Standards for Higher Education provide a broad, fairly comprehensive set of standards and outcomes for librarians to follow as they work with faculty to design curricula that will help students become competent and expert users of information. Within the Standards, primary sources are mentioned three times. The first two references appear in Standard One, Indicator 2, Outcome e, "Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline," and Outcome f, "Realizes that information may need to be constructed with raw data from primary sources." The third reference comes in Standard Two, Indicator 3: "Retrieves information online or in person using a variety of methods." The specific outcome related to primary sources is Outcome d: "Uses surveys, letters, interviews, and other forms of inquiry to retrieve primary information."

Other outcomes in the Standards also relate indirectly to using primary sources, such as Standard One, Indicator 2, Outcome c, "Identifies a variety of types and formats of potential sources of information." Almost all the other standards, indicators, and outcomes have relevance to primary source research at some level, but specific descriptions of the unique challenges these materials pose to the user are missing. For instance, the outcome "Realizes that information may need to be constructed with raw data from primary sources" does not recognize that construct-

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ing this information requires some knowledge of the nature and syntax of the documents or other materials and the context in which they were created. While the Standards do mention context, they do not specifically elucidate *historical* context as an element. But historical context and historical thinking are essential to understanding and utilizing primary source data in archives and special collections.[3]

The Value of Primary Source Literacy

To be fully information-literate, students must be able to find, access, interpret, and utilize all forms of information.[4] Primary source materials come with special and unique challenges, particularly in an era when young people are increasingly electronically literate but have less and less interaction with physical documents. In addition, primary sources come with many physical characteristics, contextual complexities, and restrictions that make them difficult to access and interpret. For instance, a mimeographed protest flyer created by Students for a Democratic Society (SDS) in the late 1960s requires that the user identify what it is and how it may have been used. Utilizing the flyer for research also requires a complex understanding of the creators, the intended audience, the technology used to produce the flyer, and the context of its production. Just finding this item in a collection requires an understanding of archival repositories as well as archival systems and structures, which are arcane to many well-educated people. Restricted hours for repositories, along with institutional and legal restrictions on access, also pose a barrier that users must understand and navigate to pursue their research.

An understanding of primary sources also fits into other curricular missions prevalent in higher education. Specifically, using and working with primary sources can support both critical thinking and experiential learning if properly applied.

For several decades, the academy has striven to teach students to think critically. In their article "Assessing Critical Thinking in Higher Education: Current State and Directions for Next-Generation Assessment," Ou Lydia Liu, Lois Frankel, and Katrina Crotts Roohr note that "95% of the chief academic officers from 433 institutions rated critical thinking as one of the most important intellectual skills for their students." In addition, they report that 92 percent of 400 employers felt that critical thinking skills were necessary for college graduates to succeed in the workforce.[5]

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The idea that critical thinking can be taught by using primary sources has been a consistent theme in professional literature. Both Marcus Robyns and Barbara Rockenbach have written on how archival materials can support critical thinking in the curriculum. Rockenbach, in particular, also discusses how teaching with primary sources can fit with inquiry-based learning. The standards outlined here provide a set of outcomes that will help archivists and special collections librarians integrate their materials into both these current areas of focus within the academy.[6]

In addition to critical thinking, working with primary sources offers an opportunity to instruct students in the creation of a narrative and how to think critically about the editorial process that is applied to most of the information they use on a regular basis. Students are regularly provided with prepackaged data in a narrative form. They are given books and articles to read, and they listen to lectures. When they are asked to create narratives, say as part of a paper, they usually work from other edited or compiled narratives (those

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same books, articles, or lectures). The narratives consist of interpretations and conclusions of the existing evidence formulated by authors. Working with primary sources offers students an opportunity to learn to create their own narratives and, in doing so, to better understand the interpretive process.

Ways of Knowing

In their article "AI: Archival Intelligence and User Expertise," Yakel and Torres identified three areas of knowledge essential to becoming an expert user of primary sources. The first is domain knowledge (or subject knowledge), the background in a particular discipline needed to work within that area of study. The second is artifactual literacy, the ability to interpret and analyze primary sources. The third is archival intelligences, an understanding of archival systems and principles that enables the user to navigate and

utilize archives and special collections as well as the individual collections or groups of records housed in repositories.[7]

Generally, domain knowledge, though it is essential to some extent for all forms of research, falls outside the purview of librarians and archivists and under the responsibility of faculty subject specialists. But the other two areas can be construed to have relevance to the librarians charged with introducing students to primary sources.

Artifactual literacy—the ability to understand, interpret, and analyze primary sources—is one of the most important aspects of primary source literacy. If a person cannot contextualize and understand the actual materials, then it does not matter if he or she can find them. This area of knowledge has received less discussion within the professional literature than it deserves.

Yakel and Torres note that students may acquire artifactual knowledge within their area of discipline. Since artifactual knowledge is not always taught as part of history courses at the undergraduate level, few students will likely receive this essential knowledge in this fashion.[8]

It could be argued that artifactual literacy belongs to the historian, and much of this area does fall within the confines of historical method. But historical method is grounded in the interrogation of texts and objects as evidence of the past. Archivists are experts in the evidentiary value of documents, texts, and objects. Part of the archival process is the appraisal of historical records for their evidentiary value. Archivists make decisions on a daily basis about what should and should not be kept, thus shaping the historical record from which historians work. In addition, archivists are versed in a breadth of historical documentation with an understanding of how the record has changed and evolved over time. For instance, receipts are essential documents for historians working in the early modern period, but they have little value in the early twentieth century, when ledgers and other instruments became the record-keeping method of choice. Because of this broad knowledge of artifacts and their role in history, archivists are uniquely placed to assist others in gaining artifactual literacy.

> **Artifactual literacy—the ability to understand, interpret, and analyze primary sources—is one of the most important aspects of primary source literacy.**

The last area of knowledge, archival intelligences, falls clearly within the realm of the archivists' understanding and expertise. This area focuses on understanding how to find primary source materials. Specifically, it includes understanding repositories, collections and their structures, rules and regulations, ethics, and the archival principles archivists rely on when working with and organizing materials. While of equal importance to the other areas of knowledge needed to understand primary sources, this area requires a deep understanding of professional principles that is unusual for someone outside a specific profession. For instance, few people understand the principles on which their physician arrives at a diagnosis, and the medical profession little expects that patients will have or need this knowledge. In the case of archives and special collections, an understanding of archival principles and practices is essential for people to access information. The first step toward IL for archives and special collections can be defined broadly as being grounded in artifactual literacy and archival intelligences.

The Need for a Standard

There are three main reasons why a common set of concepts for teaching with primary sources is needed. The first is to provide a collection of goals for planning class sessions for students, whether the session is a simple show and tell or a semester-long interaction. It is essential for archivists and special collections librarians to introduce students not just to subject-based materials but also to how to find, interpret, and create narratives using primary sources. These two goals are in no way at odds, because a carefully structured class session can easily accomplish both. Having a set of standards to help guide practitioners in this process is essential because it will allow them to determine the appropriate outcomes depending on the level of knowledge and understanding the students have.

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The second reason is that having a set of standards will help shape conversations with faculty about fitting primary source teaching into the broader curriculum. To create expert users of primary sources, special collections librarians and archivists need to integrate their teaching into the curriculum at their institutions. This will be difficult for some, even if they have a set of professionally sanctioned concepts and outcomes, because it will depend on the openness of the faculty to working with archivists. It will also depend on the faculty understanding the importance of not just information literacy but also primary source literacy specifically. But without structure to center a conversation around, it will be that much more difficult. A set of standards and outcomes that is common across the profession and defines how to teach artifactual literacy and archival intelligences in a logical progression will help archivists and special collections librarians open conversations with faculty. This is exactly what the ACRL Standards have done for librarians.

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Finally, a standard will also allow archivists and special collections librarians to better assess the work they do in their class sessions. Assessment has become a major goal within the library profession but has been slow to catch on in the arena of archives and special collections. Despite this, there is an increasing expectation that archives and special collections show how they contribute to learning in a meaningful way. To do so, archives and special collections need to develop methods for assessing their teaching activities.[9]

As a first step in this direction, a group of researchers at the University of Michigan in Ann Arbor, led by Elizabeth Yakel and Helen Tibbo, created the Archival Metrics Toolkits

in 2008. The tool kits were developed as an "initial foray into the development of user-based evaluation tools for archives and special collections."[10] Yakel and her colleagues explained, "The questions posed are specific to archives and special collections because they acknowledge the heavily mediated archives/special collections environment that does not allow common information behaviors."[11] Among the various assessment tools they created are two metrics related to classroom interaction with primary sources: one for student researchers and the other for teaching support.

The first metric is designed to evaluate what students have learned over a semester in their interactions with primary source repositories and materials. The second is designed to assess the services received over the semester by an instructor who has utilized the repository. While both of these tools are an excellent start, the scope of the questions is general and the answers are based on fairly unfocused impressions by the students and instructors. For example: "What did you find most useful about the orientation? Learning about the archives' holdings, Seeing and/or handling the documents, Learning about the archives' policies, and Instruction on how to use access tools (i.e. catalogs, finding aids, online databases)."[12]

A better assessment would be one that focuses on specific skills acquired by the students during their sessions in the archives. This assessment would be still stronger if it were designed around skill sets that were the intended outcome of a specific session. The outcome of an introductory show-and-tell session should differ from that of a one-off, full-class session, which in turn would differ from the outcome of multiple interactions with a class over the course of a semester or a year.

Assessment should be tied to some extent to the level of expertise of the students. The outcomes expected from a session given to an introductory writing class should be different from those of a senior seminar. These assessments are meant as a tool to inform archivists' and librarians' teaching and to help them create more meaningful sessions that will result in better-educated users.

To create a truly robust metric, we need a curriculum or set of standards that, as a profession, we agree will teach students the skills necessary to become expert users of primary sources. These standards, in turn, would be tied to a set of outcomes that could drive metric assessments such as the one designed by Yakel and Tibbo.

Primary Source IL Standards: A Proposal

What follows are a set of standards created at Dartmouth College in Hanover, New Hampshire, as a personal teaching guide. These standards were developed based on the areas of knowledge defined by Yakel and Torres, specifically artifactual literacy and archival intelligences. Within these two areas, six key standards were identified. They are (1) know, (2) interpret, (3) evaluate, (4) use, (5) access, and (6) follow ethical principles. The standards are presented, roughly, from simple to complex.

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Even so, there are elements within each standard that are advanced, even though the

overall concept is fundamental. While the focus of these standards is to create better users of primary sources, many of the outcomes are applicable to general research and critical-thinking skills associated with the ACRL Standards.

"Know"

The first standard, "Know," is the simplest and can be achieved by the most basic interaction with primary sources, such as a brief orientation or a short show-and-tell session. Teaching students to "Know" introduces them to the existence of primary sources, teaches them to recognize primary sources, and familiarizes them with the range and variety of these sources as well as their relationship to secondary sources. This concept is a mix of archival intelligences and artifactual literacy. The outcomes are:

1. Knows that archives and special collections exist and are there to be used.
2. Knows what constitutes a primary source.
3. Is aware of the range of primary sources that may be found in a repository.
4. Understands the role of secondary sources in relation to primary sources.

"Interpret"

The second standard, "Interpret," is one of the most important skills students must acquire to work with primary sources. It is presented early in the order of standards because it is essential that students are able to interpret the information in primary sources; if they can find a source but cannot interpret it, the data in the source are of no use. This standard is based solidly in the area of artifactual literacy. Teaching students to "Interpret" provides them with the tools and specific skills they need to extract, understand, and interpret the information in a variety of primary sources. It also teaches students the importance of chronology and context in the formation of a narrative, as well as advanced skills surrounding the interpretation of silences or gaps in the archive and other issues related to underrepresented groups. The outcomes are:

> **Teaching students to "Interpret" provides them with the tools and specific skills they need to extract, understand, and interpret the information in a variety of primary sources.**

1. Knows the importance of, and how to use, observation as a tool to understanding and analyzing documents.
2. Understands the importance of audience (is the audience an individual as in the case of a private letter, or the world as in the case of a press release or published work).
3. Understands the importance of the relationship between the creator and the audience (what one writes to a parent from college is different from what one writes to a friend or sibling and therefore should color the use and evaluation of the content).
4. Understands the importance of dates (a date can add context to a document that can enhance a researcher's understanding of the circumstances surrounding its creation).

5. Can interpret the tone of a document, lending an understanding of the creators, their mood, and their outlook.
6. Knows how to physically evaluate primary sources. (For example, understands that the quality of the paper, ink, handwriting, and imprint or impression—if printed—plays a role in interpreting primary sources.)
7. Has an understanding of the importance and role of chronology.
8. Understands the nature and syntax of a variety of document types and sources, including written, printed, visual, and financial.
9. Understands historical context and its importance in the interpretation of primary sources.
10. Can create a narrative from a variety of primary sources.
11. Can recognize and interpret silences or gaps in the archives.
12. Knows how to interpret evidence surrounding underrepresented or nonliterate groups.

"Evaluate"

The standard "Evaluate" is closely related to "Interpret" and "Use," and is where we start to delve more deeply into archival intelligences. To evaluate, in the archival context, encompasses understanding the archival principle of provenance—that is, the history of the item and its ownership—and how it relates to finding appropriate repositories, collections, and documents. The outcomes for "Evaluate" are:

1. Understands the archival principle of provenance.
2. Knows how to find repositories appropriate to a particular research topic.
3. Knows how to determine which collections in a repository are appropriate to the research.
4. Knows how to determine which individual sources in a collection are appropriate to the research.

"Use"

"Use" is designed to teach students about the physical handling of primary source materials as well as about restrictions to access. It also aims to impart the role of citation and, perhaps most importantly, the need for a flexible research process. The outcomes are:

1. Knows the proper way to physically handle a variety of primary source materials.
2. Understands the concept of a collection (for example, a repository or a group of manuscripts or records).
3. Understands the importance of original order.
4. Understands the role and use of restrictions to access.
5. Has a basic knowledge of copyright and fair use.
6. Knows how to properly cite primary source materials.
7. Understands the importance of a flexible research process that lends itself to change and departure from the usual methods when appropriate.

"Access"

The standard "Access" may appear to mirror the standard "Evaluate," but there are important differences. "Evaluate" is primarily focused on the concept of provenance and how it can be used to identify appropriate repositories, collections, and sources. "Access" focuses on how to locate repositories, collections, and documents in general. More specifically, it involves how to use and interpret finding aids, collection guides, and other documents that summarize the contents and organization of stored materials to facilitate their access and use. It also helps students understand that surrogates—scholarly editions of primary sources whether digital, paper, or microfilm—are mediated versions of primary sources because almost all are edited to some degree. The outcomes for "Access" are:

> To evaluate, in the archival context, encompasses understanding the archival principle of provenance—that is, the history of the item and its ownership—and how it relates to finding appropriate repositories, collections, and documents.

1. Knows how to identify and find primary source repositories.
2. Knows how to find primary source collections.
3. Understands finding aids and their structure.
4. Understands the relationship between originals and surrogates—both print and digital.

"Follow Ethical Principles"

"Follow ethical principles" introduces students to the ethical use and portrayal of primary source materials. The outcomes are:

1. Understands the consequences of removing data from their context in order to reshape them to make a point.
2. Understands the consequences of the destruction or alteration of primary sources and the dangers associated with such actions.
3. Understands the consequences of the misrepresentation of individuals represented in primary sources.
4. Understands the importance of presenting a balanced picture by including alternate points of view.
5. Understands the importance of being true to the chronology.

Application

Archives and special collections play different roles at their respective institutions. For instance, many institutions view archives as more of an administrative unit and less of a curricular asset. At other institutions, special collections operate as centers for advanced research and do not cater to or support undergraduate teaching. Because of these differences, some institutions will integrate primary sources into the curriculum more easily

than others. In addition, the ability to bring primary sources into the classroom will also depend on an understanding of the importance of primary source literacy both by library colleagues and by the faculty. Even within a single institution, some disciplines will be more open to including primary sources and education about their use in their curriculum than others. For instance, humanities and social science disciplines may be quicker to see the value in their students understanding primary sources than science disciplines might be, particularly such fields as math or computer science. While the standards outlined here are designed to create expert users over the course of their college education, the inability of an individual library or repository to achieve this should not be seen as failure. The idea behind these standards is to provide some guidance for archivists and special collections librarians as they work to create a better, if not complete, understanding on the part of the students.

As noted previously, the standards are arranged in a rough order of simple to complex, or concrete to abstract. But within even some of the simpler concepts there are more advanced outcomes. An example of this is the outcome "Can recognize and interpret silences or gaps in the archives" that is part of the concept "Interpret." This is an advanced outcome that would not be expected of a novice, or even intermediate, user of primary sources. Because of this, utilizing these concepts is not simply a matter of teaching each concept in the order presented but rather involves developing class sessions that will teach across these concepts.

The standards might break down something like this: for first-year, first-term students with little or no experience with primary sources, the goal is to get them to understand that archives and special collections exist, to know what constitutes a primary source and the range of materials primary sources might encompass, and to understand how to physically handle these sources. Thus an introductory session would utilize the standards and outcomes mostly from the first standard, "Know," but would also include one outcome from the fourth standard, "Use," as represented in Table 1.

Table 1.

Standards and outcomes that might be taught in an introductory session

Standard	Standard title	Outcome
One	"Know"	Knows that archives and special collections exist and are there to be used.
One	"Know"	Knows what constitutes a primary source.
One	"Know"	Is aware of the range of primary sources that may be found in a repository.
Four	"Use"	Knows how to properly physically handle a variety of primary source materials.

Intermediate students, in this case late freshmen through sophomores, would be introduced to a broader range of standards and outcomes that cut across the first, second, and sixth standards—"Know," "Interpret," and "Follow ethical principles"—as outlined in Table 2. The outcomes included here are primarily designed to introduce students to concepts related to artifactual literacy. Students at this stage of their learning are ready to take on critical analysis, but more importantly, they need to understand how to interpret primary sources before they are taught how to find them. There is no point in students being able to find a historic document if they have no idea what the document is or how to determine its purpose. Likewise, trying to interpret a document when the student has no understanding of the audience for the document, or why understanding the audience might be important, makes no sense. For this reason, outcomes related to "Interpret" are placed before archival intelligences that deal with how to find materials and with archival concepts such as provenance. Ethical issues are also introduced at this stage, since students are working directly with the documents, though these concepts are more advanced and will need to be reinforced throughout a program of primary source literacy.

The arrangement of the concepts also intentionally places repository rules and regulations, in the form of restrictions on access, under the concept "Use" as an advanced outcome. Archives and special collections are by necessity restricted, mediated environments that require researchers to pass through a number of gates to obtain access. While it is essential for the expert user to understand this, beginning a student's education about primary sources with a set of restrictions is not the best way to introduce a newcomer to these resources. After all, we want them to know they can access and use the materials. Instead, these concepts are intended to get students into the repository and interacting with the sources as part of the standard "Interpret" early on by mitigating some of the barriers of the repository to engage them with the material.

The advanced standards would be taught later in the college curriculum, once students have a clear understanding of what archives and special collections are, what types of materials they hold, and how to interpret the materials at an intermediate level, and once they have been introduced to basic ethical concepts and considerations. The advanced standards include higher-level artifactual literacy and the remaining archival intelligences from standards three, four, and five, "Evaluate," "Use," and "Access."

The higher-level artifactual literacies have been left to later, not because they cannot be taught earlier, but because many of them are complex and involve a more sophisticated understanding of primary source artifacts. For instance, understanding the nature and syntax of a variety of document types and sources including written, printed, visual, and financial takes time and experience. It cannot be achieved without repeated exposure to primary source collections. In other instances, the outcomes will require a sophisticated understanding of context and chronology that can only be gained through experience and careful teaching. An example would be "Can recognize and interpret silences or gaps in the archives." Silences in the archives, the lack of documentation surrounding an event or incident or the lack of documentation in the archive about a certain group or class of people, must be approached with care and understanding. The lack can be as simple as no documentation having been created in relation to the issue, event, or group; or it can signal a lack of importance afforded the issue, event, or group by the

Table 2.

Standards and outcomes that might be taught in intermediate sessions

Standard	Standard title	Outcome
One	"Know"	Understands the role of secondary sources in relation to primary sources.
Two	"Interpret"	Knows the importance of, and how to use, observation as a tool to understanding and analyzing documents.
Two	"Interpret"	Understands the importance of audience (is the audience an individual as in the case of a private letter, or the world as in the case of a press release or a published work).
Two	"Interpret"	Understands the importance of the relationship between the creator and the audience (what one writes to a parent from college is different from what one writes to a friend or sibling and should color the use and evaluation of the content).
Two	"Interpret"	Understands the importance of date (a date can add context to a document that can enhance a researcher's understanding of the circumstances surrounding the creation of the document).
Two	"Interpret"	Can create a narrative from a variety of primary sources.
Six	"Follow ethical principles"	Understands the consequences of removing data from their context in order to reshape them to make a point.
Six	"Follow ethical principles"	Understands the consequences of the destruction or alteration of primary sources and the dangers associated with such actions.
Six	"Follow ethical principles"	Understands the consequences of the misrepresentation of individuals represented in primary sources.
Six	"Follow ethical principles"	Understands the importance of representing a balanced picture by including alternate points of view.
Six	"Follow ethical principles"	Understands the importance of being true to the chronology.

archive-creating class. Less likely, a silence might be evidence of a concerted effort to cover up or marginalize a group, issue, or event. Without a sophisticated understanding of primary sources and how to contextualize and interpret them in the setting of their time, unraveling these silences can be tricky and can result in gross misinterpretation of the evidence.

Table 3.
Standards and outcomes that might be taught in an advanced session

Standard	Standard title	Outcome
Two	"Interpret"	Can interpret the tone of a document, lending an understanding of the creators, their mood, and their outlook.
Two	"Interpret"	Knows how to physically evaluate primary sources. (For example, understands that the quality of the paper, ink, handwriting, and imprint or impression—if printed— plays a role in interpreting primary sources).
Two	"Interpret"	Has an understanding of the importance and role of chronology.
Two	"Interpret"	Understands the nature and syntax of a variety of document types and sources, including written, printed, visual, and financial.
Two	"Interpret"	Understands historical context and its importance in the interpretations of primary sources.
Two	"Interpret"	Can recognize and interpret silences or gaps in the archives.
Two	"Interpret"	Knows how to interpret evidence surrounding underrepresented or nonliterate groups.
Three	"Evaluate"	Understands the archival principle of provenance.
Three	"Evaluate"	Knows how to find repositories appropriate to a particular research topic.
Three	"Evaluate"	Knows how to determine which collections in a repository are appropriate to the research.
Three	"Evaluate"	Knows how to determine which individual sources in a collection are appropriate to the research.
Four	"Use"	Understands the concept of a collection (for example, a repository or a group of manuscripts or records).
Four	"Use"	Understands the importance of original order.
Four	"Use"	Understands the role and use of restrictions to access.
Four	"Use"	Has a basic knowledge of copyright and fair use.
Four	"Use"	Knows how to properly cite primary source materials.
Four	"Use"	Understands the importance of a flexible research process that lends itself to change and departure from the usual methods when appropriate.
Five	"Access"	Knows how to identify and find primary source repositories.
Five	"Access"	Knows how to find primary source collections.
Five	"Access"	Understands finding aids and their structure.
Five	"Access"	Understands the relationship between originals and surrogates—both print and digital.

The archival intelligences would be taught in conjunction with the higher-level artifactual literacies starting with outcomes from standard four, "Use," and standard five, "Access." These standards introduce students to finding aids, the concept of a collection, and the subtleties of what the word *collection* can represent (for example, a repository, a thematic group of materials within a repository, or a group of records that make up a manuscript collection or archival records group). At the advanced end of these archival intelligences is an understanding of archival concepts, such as provenance and original order, along with being able to determine what repositories or collections will best serve one's research purpose, represented in standard three, "Evaluate" (see Table 3).

Conclusion

The objectives outlined here will need further investigation and formal testing before they should be adopted. A possible next step would be to develop a metric and test the objectives at a number of institutions. As mentioned earlier, a metric like this has already been devised and tested at the University of Michigan but would benefit from the structured approach outlined here.[13] Similarly, Anne Bahde and Heather Smedberg have declared the need to better assess primary source instruction.[14] Again, the specific objectives outlined in this article will help inform this process.

It is important to understand that this curriculum is not put forward as a finished product. It was developed for local use and needs careful thought and refinement before it can be applied more broadly. It would be desirable to have a committee of professionals actively working in the field discuss and further develop this framework. In fact, the Society of American Archivists (SAA), ACRL, and ACRL's Rare Books and Manuscripts Section (RBMS) have set up just such a group in the form of the SAA-ACRL/RBMS Joint Task Force on the Development of Guidelines for Primary Source Literacy.

This curriculum is not put forward with the intention of creating a rigid standard that everyone must adopt or to which everyone must adhere. Rather, it is proposed in the same vein as archival appraisal policies, which archivists use as a guideline to achieve a consistent outcome in collection building. It is intended as a first step toward a common understanding of outcomes that will lead toward creating better users of primary sources. Such a common understanding will ultimately strengthen conversations within institutions regarding the integration of primary sources into the curriculum. It will also strengthen the quality of teaching by providing a consistent set of concepts and outcomes to aim toward, and create a more consistent platform for archivists and special collections librarians to use when assessing their teaching programs.

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Notes

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