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The Drama of Information Literacy: Collaborating to Incorporate Information Literacy Into a Theatre History Curriculum

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Abstract

Information literacy (IL) has been studied extensively, but little has been written about IL applied to the study of theatre. This study addresses that lacuna by evaluating the success of a librarian-faculty collaboration to integrate IL throughout a year-long course of study. Using a pre- and post-test methodology, researchers assessed students’ knowledge on a range of IL concepts. The results were used to modify the IL curriculum to place greater emphasis on IL concepts that students struggled with, and to de-emphasize IL concepts for which students demonstrated adequate incoming knowledge. This paper will provide recommendations for librarians and other instructors seeking to integrate IL concepts into a theatre (or other performing arts) curriculum.

Keywords: information literacy instruction; theatre history

Introduction

Information literacy instruction is frequently integrated into first-year writing courses, but the degree to which information literacy is a part of upper-level courses varies tremendously by institution and by discipline. Over the past few decades, information literacy has steadily become accepted as an integral component of a college education. Following the publication of Information Literacy Competency Standards for Higher
Education in 2000 (Association of College & Research Libraries, 2000) and College Learning for the New Global Century in 2007 (Association of American Colleges & Universities, 2007), many higher education institutions began to incorporate information literacy into their curriculum, often through collaboration with librarians. While research has been conducted on the incorporation of information literacy into many academic disciplines, others, including theatre, have received very little attention. This article seeks to add to the conversation by reporting on a successful collaboration between librarians and theatre faculty to design, deliver, and assess a program to integrate information literacy instruction into the curriculum of a two-semester theatre history course sequence. In particular, this article examines the impact of the instruction on students’ information literacy competence.

At Western Michigan University, the Department of Theatre hosts several programs of study at the undergraduate level. These include a bachelor of arts degree in arts administration, bachelor of fine arts degrees in theatre, including majors in acting, stage management, and theatre design and technical production. There is also a bachelor of fine arts degree in music theatre performance, and a minor in theatre. There is no graduate program in theatre at WMU. Students in the bachelor of fine arts theatre major take core courses within each major as well as required courses and electives, in addition to the general degree requirements of the University. Courses include both classroom-focused courses that emphasize study and research, such as script analysis, theatre history, and a course called “development of theatre art.” Additionally, students take many practical courses such as directing, practicum, acting, arts management, design, and others, depending on the students’ courses of study.

Although some of the IL concepts that we cover are not unique to theatre, and
some of the challenges graduates from theatre programs face are the same as all alumni face, librarians often face an additional challenge of convincing both faculty and students that these IL skills will be useful in their post-graduate lives as theatre professionals. By targeting classes in the major that have an academic research bent, we are able to find a place and time to help these students learn IL concepts. We are also able to make the transferable nature of the skills clearer to students than they would otherwise get in first year writing courses or similar courses. That is, how the IL skills can transfer to their professional lives in theatre. Also, while IL is important for everyone, it is not a discipline that one majors in. It must therefore be integrated into the disciplinary curricula (similar to critical thinking and certain other interdisciplinary concepts). It is important for a college graduate, regardless of discipline, to be able to think critically, to write/communicate, to apply information literacy. These skills transcend discipline, but they are not all equally-well-integrated into the curriculum. By integrating information literacy into the theatre curriculum, we hope to provide these critical experiences for theatre students.

**Literature Review**

There are very few examples of information literacy instruction in theatre education reflected in the professional library literature. As of June 2019, a search for the terms “information literacy” and “theatre” or “theater” in three library science databases (Library Literature and Information Science Index, Library & Information Science Source, and Library, Information Science, and Technology Abstracts) yielded 11 articles, only one of which reported on the impact that an information literacy instruction effort had on a particular theatre-related class, in this case, opera theater (Abromeit and Vaughan 2004).
Given the limited research on information literacy in theatre education, this review includes articles that explore other, related concepts in the teaching of theatre, such as partnerships between theatre courses and libraries or archives, critical thinking and metaliteracies (Mackey and Jacobson 2011) in theatre education, and faculty and librarian collaborations in information literacy instruction in the performing arts more broadly. In this last category, the authors note that there are many articles on this topic from the literature of music librarianship, including many that specifically focus on assessment of information literacy.

**Theatre faculty-librarian partnerships**

The library and theatre literature both contain few examples of information literacy instruction with theatre students. There are a few articles about collaborations between theatre faculty and libraries or archives, however. Though they didn’t use “information literacy” as a term, Barker, Barrett, and Lahey discussed the collaboration between the Dalhousie University Archives and the University’s Theatre Department to offer an instructional experience in using archival collections as primary sources for a research assignment in the course “Canadian Theatre Since 1968: Interrogating Identities” (2013, 47). Steinmetz wrote briefly about the benefits of the “intimate experience” of exploring primary historical information sources such as costume rendering by taking his theatre students to visit the Jerome Lawrence and Robert E. Lee Theatre Research Institute in the Thompson Library at The Ohio State University (2011, 65).

Ann Medaille studied the reasons for and the ways that theatre artists obtained information, which included print publications, other media, and private connections, as well as how they used it in their professional artistry (2010). Her article reported a case study consisting of a survey questionnaire and telephone interviews. It documented six
purposes for which theatre artists use information, and by extension, provided a rationale for including information literacy instruction in the curriculum of collegiate theatre majors. These purposes were “understanding a work’s historical, cultural, and critical background; finding sources of inspiration; learning about contemporary or historical theatre productions, artists, and events; learning technical or process information; finding performance materials; and furthering career goals” (Medaille 2010, 327).

**Theatre education and critical thinking**

The literature of theatre education likewise contains very few articles on information literacy or affiliated concepts. Gillespie touched on the related themes of critical thinking and cultural literacy in her article, considering the hypothetical application of Hirsch’s theories of cultural literacy to theatre education at the elementary, secondary, and collegiate levels (Gillespie 1990; Hirsch 1987). Kuftinec (2001) argued that in order to fully engage students in their coursework and beyond, it is important to work with students to think critically not only about specific assignments but about the process of theatre education. Peck wrote of using plays about major historical events or circumstances in a course in directing. To explain his reasoning for this approach, Peck wrote, “most fundamentally, I want students to see that theatre is uniquely well-equipped to represent the impact of history on people’s lives.” (2007, 34). Abbitt (2007) reflected on her experiences teaching theatre history at Pepperdine University and the University of Windsor, touching on pedagogical method, students’ reluctance to study theatre history, and on developing critical thinking skills.

**Collaborations in information literacy instruction in music as a comparative performing art**
Also under the umbrella of the performing arts, the literature of music librarianship has many more examples of collaborations between faculty and librarians for information literacy instruction. These can serve as models for the intersection of information literacy and theatre. Abromeit and Vaughan, a librarian and a professor, wrote of their efforts to integrate information literacy into the sophomore-level opera theatre curriculum by designing a curriculum that included information literacy assignments and a course-related website at the Oberlin College Conservatory of Music. In a follow up survey to their instruction, all students agreed with the statement that information literacy instruction is “a vital part of the liberal arts education” (2004, 650).

Manus wrote of her experiences teaching information literacy as an embedded librarian in a music literature course for freshman music majors for the first two years of her involvement. Reflecting on her experiences teaching five information literacy sessions to this class and attending all class sessions, she identified a significant problem with her assumption that college freshmen had experience writing research papers – in fact, many had not. This should serve as a reminder to other librarians and arts faculty who are planning information literacy instruction that students’ prior research experience will not necessarily conform to instructors’ expectations (Manus 2009). Four years later, Manus (2013) also wrote of an information literacy collaboration with a professor in an embedded librarian situation with a course on J. S. Bach, leading to a student-curated exhibit in the Wilson Music Library at Vanderbilt University.

Stone and Sternfeld worked together to create an information literacy instructional experience in which students selected and evaluated historical writings for an upper-level undergraduate music history course. The librarian noted that nearly 48%
of the student citations were from print sources and of the electronic sources cited, more than 98% appeared to have been located through library resources. The instructor highlighted several anecdotes about students who found information that surprised them about the reception history of various musical works. These findings support the deduction that students demonstrated that they could understand and explain how information creation and dissemination had changed over time (Stone and Sternfeld 2014).

Some librarians developed information literacy instruction which incorporated professional standards. Zanin-Yost and Reitz (2014) developed an information literacy instructional experience for a two-course music history sequence based on the ACRL Standards, resulting in students producing improved research papers. Conor (2016) reported on developing an information literacy instructional experience based on two frames of the ACRL Framework (Association of College & Research Libraries 2016) as an embedded librarian in a music history course. As a result of this intervention, students completed research assignments that integrated a wide variety of information sources and demonstrated an understanding of how information sources on a topic inform and grow from each other.

Another assessment method is to compare students’ knowledge before and after instruction. Viles (2003) described a pre- and post-test assessment for an information literacy instruction program associated with an undergraduate-level music course for students without a formal background in music, in which 81% of students showed improvement. Finally, Myers and Ishimura (2016) assessed the information literacy skills of music students before and after an online instructional program in information literacy, showing significant improvement of 15% of students search skills evaluated.
The present study adds to the literature of theatre in higher education and librarianship by reporting the results of an information literacy program in theatre history over the course of a year. This program includes elements found in the literature: librarian-faculty partnership, and instruction in information literacy, which is arguably a subset of critical thinking. Additionally, it is informed by the published information literacy literature in music librarianship as an allied performing art.

**Purpose of Study**

All of the frames in the “Framework for Information Literacy for Higher Education” are relevant to the successful professional practice of theatre (Association of College and Research Libraries 2016). The cultural and temporal contexts that affect the setting of dramatic works, as well as the acclaim given to certain playwrights, are relevant to the frame “Authority is Constructed and Contextual.” Theatrical productions, as a means of creating new interpretations of dramatic works, are processes that create information and hence relate to “Information Creation as a Process.” The economic and cultural impact of theatrical productions as forms of information reflect the frame “Information Has Value.” The historical and cultural research necessary to design sets, to understand turns of phrase, and to comprehend contemporary references in text are reflected in the frame “Research as Inquiry.” “Scholarship as Conversation” is seen in the ongoing dialogue between theatre historians and lived in the experiences of students and scholars who write about theatre. Finally, “Searching as Strategic Exploration” is part of the theatre history course, as it is in many other courses requiring students to search for information to meet individual needs to fulfill assignments.

Since theatre students, whether as theatre professionals, professionals in other fields, or simply as responsible citizens, will need to be able to apply information
literacy concepts throughout their lives and careers, it is necessary to incorporate information literacy instruction into the undergraduate curriculum beyond the first-year. At Western Michigan University (WMU), similar to many institutions, this requires working within the disciplinary structure of a major curriculum since there are no other universally-required courses that include information literacy beyond the first year writing course. Because the literature contains few examples of information literacy in theatre education, librarians at Western Michigan University (WMU) followed the examples of music librarians to collaborate with faculty members to design, deliver, and assess an information literacy program for students enrolled in a two-course theatre history sequence. By employing a pre- and post-test assessment instrument, the authors hoped to (1) determine students’ incoming knowledge of information literacy concepts, and (2) determine the effectiveness of integrating intentional information literacy instruction into the course curriculum. (See Appendix A for a list of pre- and post-test questions.)

Curriculum Design

All students majoring in theatre at WMU, with the exception of music theatre performance majors, are required to complete a two-semester theatre history sequence (THEA 3700 and THEA 3710). The majority of students take these courses during their junior year. The curriculum aligns closely with information literacy. Course learning outcomes include “[e]xplain the difference between, and assess the quality of, primary and secondary sources—including digital journals, archives or other examples—used in researching theatre history” and “[d]evelop familiarity with the process of historical research, including finding, selecting, and refining a topic, assessing sources of information, and drafting an argument” (Durham 2015).
Over the course of the two semesters, students wrote a 17-20 page research paper centered around one or more primary historical documents. Topics could be from any time or place, and could focus on any aspect of theatre, including design, composition, action, audience reception, or cultural context. Since 2009, librarians at WMU have worked closely with the professor who teaches theatre history, Lofton Durham, to integrate information literacy instruction into the course. Librarians and the professor have refined the curriculum each year since based on the results of previous years. Beginning with the academic year 2015-2016, librarians and the professor implemented a progressive information literacy curriculum which was closely tied to the students’ research assignment (see Appendix B). The curriculum is designed to address four information literacy concepts: (1) definitions of key concepts “primary source” and “interlibrary loan”; (2) search engine/tool selection; (3) topic selection; and (4) recognizing and choosing appropriate resource types. Throughout the year, librarians engage with the students individually, in small groups, and as a class. In addition to formal instruction, librarians provide feedback and consultations to students both in person and through Elearning, the learning management system. The course instructor also reinforces the key information literacy concepts throughout the semester in class, in one-on-one student meetings, and in comments on students’ papers. Durham introduces the concept of source types, primary, secondary, and tertiary, during the first few class meetings of the fall semester. In this instruction, he stresses the importance of context in determining whether or not a source is primary. He also introduces terminology related to primary sources and assigns students to identify sources found in typical publications found in the library. He writes, “I will have students divide into pairs and come to the front of class to select a source--I typically bring a wide selection of books, journals, periodicals, etc.--and then determine what kinds of sources are
contained within their chosen artifact. This allows us to have a conversation about the quality of source—whether or not there are clear citations, so that we can find and understand if the writer is working with primary sources or not” (Lofton Durham, email message to authors, August 12, 2019). Durham does not address interlibrary loan as a concept with the entire class, but rather with individual students as needed. Students are encouraged to research any theatre topic that interests them, often leading to research questions that are quite esoteric and may not be well-represented in the existing disciplinary literature (i.e. Indonesian shadow puppet theatre, amplification techniques of theatrical architects in Colonial America, etc). This means that it is often necessary for some students to rely more extensively on interlibrary loan than others.

Durham allows the students significant time, approximately five weeks, to do the preliminary work needed to select their topics, beginning with background reading in reference sources, or as he calls them, “tertiary sources” (Lofton Durham, email message to authors, August 12, 2019). He also schedules conferences with each student individually to discuss their interests and potential topics, after which the students submit their chosen topics before the information literacy instruction sessions. Durham also confers with the students about the resources they have chosen for their research, and ways of finding additional resources.

**Methodology**

**Data Collection**

Following a protocol approved by the Human Subjects Institutional Review Board at Western Michigan University, in order to compare students’ incoming knowledge of information literacy concepts with their knowledge at the end of the year, the authors employed a pre-test and post-test methodology. The pre-test was administered during
the first week of the Fall 2015 semester, and an identical post-test was administered during the last week of the Spring 2016 semester. Test questions are available in Appendix A. Students completed the tests in a library classroom via an online Survey Monkey form (www.surveymonkey.com). A librarian was present to proctor the tests. The tests consisted of 22 questions, 21 of which were designed to assess students’ knowledge of a wide range of information literacy concepts (the first question asked the students for their name, which was given to the instructor, but substituted with random numbers in the data analysis):

1. Definitions of key concepts (questions 2*, 3, 4*)

2. Search engine/tool selection (questions 5, 6, 9) *

3. Topic selection (question 7) *

4. Recognizing and choosing appropriate resource types (questions 19, 20, 22) *

5. Navigating and using specialized search techniques (questions 8, 10, 12, 13, 14, 15, 16, 17, 18)

6. Managing search tools and techniques (question 11)

7. When citations are needed (question 21)

*Concepts which were intentionally addressed in information literacy instruction

While all the information literacy concepts assessed in the pre- and post-test are important for students to understand, due to time constraints the instruction program only addressed the first four concepts. Given the varied nature of the students’ topics, librarians chose to teach specialized search techniques on a case-by-case basis, in
individual student consultations, at the request of students or at the direction of the professor. For the purposes of this study, the authors therefore only analyzed responses to the questions for which the entire class was intentionally exposed to corresponding instructional interventions.

**Data Analysis**

The quantitative data from the pre- and post-tests was analyzed using Survey Monkey after the academic year had finished and all student work was completed and graded. Additional statistical analysis was completed after consultation with the WMU Statistical Consultation Center. The qualitative data from the pre- and post-tests was coded and analyzed using Atlas TI software. A total of 33 students completed the pre-test and consented to be part of this research study. Of these, 25 students completed both the pre- and post-test. The authors examined the results to assess students’ improvement in information literacy as a result of the two semesters of instruction.

Over the two semesters, librarians focused on the following information literacy learning outcomes in their instruction:

- Students will be able to define the key concepts “primary source” and “interlibrary loan” in the context of theatre history research (Q2 and Q4)

- Students will be able to choose manageable and appropriate research topics (Q7)

- Students will be able to recognize and choose appropriate resource types for a given research need (Q5-6, Q19, Q20, Q22)

- Students will be able to choose appropriate search engines or other tools for locating specific resource types (Q9)
The authors analyzed results from the questions from the pre- and post-tests that corresponded to these learning outcomes in order to determine whether and to what degree students demonstrated improved knowledge. Within the context of these courses, librarians did not spend significant instruction time on teaching students advanced search techniques, managing search tools, or citation, and so the authors did not analyze students’ responses to the post-test questions which correspond to these concepts.

**Results: Impact of Information Literacy Instruction on Students’ IL Competence**

*Definition of key concepts*

Students demonstrated significant improvement in their ability to define the term “primary source,” (question 2). Statistical significance was demonstrated through the use of a McNemar’s test comparing responses of the same 25 students to this question on the pre-test and the post-test. Just over 50% (13) of students could provide an acceptable definition in the pre-test, while by the post-test, 100% (25) of students provided an acceptable definition. The p-value (2 tails) for this test is 0.0015, showing statistical significance at the 95% confidence level. The McNemar’s test was run using R, a statistical software package. The authors considered a correct response to the definition of a primary source to be when students referred to first-hand information or information from the time period in question, or if the student gave an example of a specific type of primary document.

In contrast, there was no significant improvement in students’ ability to define “interlibrary loan,” (question 4). In the pre-test group, 10 students provided an acceptable definition, 7 students provided a marginally-acceptable definition, and 8 students did not provide an acceptable definition. In the post-test group, 13 students
provided an acceptable definition, 7 students provided a marginally-acceptable
definition, and 5 students did not provide an acceptable definition.

**Topic Selection**

Nearly 80% (19) of students who took both tests answered the question related to topic selection correctly in the pre-test (question 7). This meant that although the authors saw an improvement in the post-test with nearly all students (24) answering the question correctly, the authors were not able to determine a statistically significant improvement. Regardless, the high number of students who answered the question correctly is notable.

**Recognizing and Choosing Appropriate Resource Types**

In question 19, students were asked “If you are looking for a broad, scholarly overview of a topic, which type of resource would be most useful?” The answer choices were “book,” “book chapter,” “review article,” and “research article.” The authors considered “book” to be the correct answer. In the pre-test 8 students answered correctly (book) and 17 students answered incorrectly. In the post-test, 9 students answered correctly and 16 students answered incorrectly. This improvement is not statistically significant, indicating that students need more (or different) instruction in the concepts addressed by this question.

In question 20 (Table 1), students were asked to examine five different articles and identify whether each article was an original research article, a review article, or a book review. There was no statistically significant difference between the responses of students in the pre-test and the post-test. However, it is notable that in both the pre- and post-test, more students correctly identified the original research articles than the review
articles or book reviews.

[Table 1]

Question 22 (Table 2) asked students to look at three different articles, one of which was a peer-reviewed research article, one was a newspaper article, and one was an essay from an academic paper mill (a website that sells academic papers to students). The students were asked whether or not each article would be acceptable as a source for an academic research paper, and why. While there was some increase in the number of students who provided acceptable responses (the authors considered the peer-reviewed research article to be the acceptable answer) especially in recognizing which article came from an academic paper mill, the change was not statistically significant.

[Table 2]

Search Engine/Tool Selection

In question 9, students were given a series of characteristics and asked to identify which search tools exhibited each characteristic. The search tools were Google, Google Scholar, Library Search (WMU Libraries’ discovery system), WorldCat, and Library subject databases. In their instruction, librarians discussed the following concepts:

- Which search tools are most appropriate for searching for primary historical sources
- Which search tools are most appropriate for searching for books in the campus library versus other libraries
- Differences between search tools that provide paid versus open access to peer reviewed and/or newspaper articles
For each characteristic, students who selected only search tools that exhibited the characteristic were marked “correct” and given one point. Students who selected search tools that exhibited the characteristic and search tools that did not exhibit the characteristic were marked “marginally correct” and given half a point. Students who did not select any search tools that exhibited the characteristic were marked “incorrect” and were not given any points.

Students were asked to identify which search tools “search for primary documents (diaries, letters, playbills)” The mean scores were 0.52 for the pre-test and 0.78 for the post-test. A paired two sample t-test for means showed a statistically significant improvement at the 95% confidence level where p=0.003 (two-tail). The t-test was run in Excel.

Students were also given two characteristics related to searching for books. For the characteristic “searches all the books in your library” the mean scores were 0.88 for the pre-test and 0.9 for the post-test. There was not a statistically significant improvement in students’ responses, but it is worth noting that students scored highly even in the pre-test so there was little room for improvement. The mean scores for the characteristic “books that are not in your library” were 0.3 in the pre-test and 0.52 in the post-test. A paired two sample t-test for means showed a statistically significant improvement at the 95% confidence level where p=0.02 (two-tail). The t-test was run in Excel.

Students were less successful at learning which search tools provided subscription versus open access to articles. For the characteristic “provides paid subscription access to peer reviewed journal articles or newspaper articles,” the mean pre-test score was 0.42 and the mean post-test score was 0.48. For the characteristic
“provides open access to peer reviewed journal/newspaper articles,” the mean pre-test score was 0.48 and the mean post-test score was 0.46. These results did not show a statistically significant difference.

Students were also asked which search tools they would use if they were researching a hypothetical topic: Indonesian shadow puppet theatre (question 5). They were then asked why they chose those search tools (question 6).

[Table 3]

The most notable finding related to which tools students selected was simply the number and variety - students selected an average of 4.00 tools in the post-test, compared with 2.92 tools in the pre-test. After completing the course, students may have been more willing to employ multiple search tools than before, and to explore search tools with which they may have been previously unfamiliar. While there was no significant difference in the number of students who selected any single tool, 56% (n=14) of students added at least one library resource to their list of search tools in the post-test compared with the pre-test (Table 3).

Of greater interest was the students’ rationale for choosing search tools. The most common reasons given for choosing search tools were that the tools were considered to be reliable or credible (pre-test = 6, post-test = 7), that the search tool had broad coverage (pre-test = 6, post-test = 5), and familiarity (pre-test = 6, post-test = 3). The most notable change was for the rationale that search tools would help find primary sources - seven students gave answers that were coded as “primary sources” in the post-test, while none of the students gave answers so coded in the pre-test.

A McNemar’s test comparing the change from 0 to 7 students indicating that
primary sources were a factor in tool selection is a statistically significant change at the 95% confidence level (2 tailed p=0.02). The test was run in R. This suggests that students were not thinking about finding primary sources when they completed the pre-test, but several of them were when they completed the post-test, and that the difference was probably due to student learning over the course of the two semesters of Theatre History. This difference probably cannot be explained by the librarians’ instruction, but rather to the instructor’s requirement that the students find primary sources for their research papers.

**Additional information literacy concepts**

Although the information literacy instruction program for theatre history was necessarily focused on only a few information literacy concepts, the pre- and post-tests assessed students’ knowledge of several additional concepts that librarians did not address throughout the year’s curriculum. The data, however, did provide the authors with information about students’ incoming knowledge of these concepts. These results informed changes to the information literacy instruction in subsequent years, leading to a reprioritization of which information literacy concepts would be addressed and assessed.

One area in which students showed strong incoming knowledge was in recognizing hypothetical research situations in which they would need to cite a source of information. When presented with six scenarios, 29 students (88%) were able to correctly state whether or not a citation would be needed in at least four of the six scenarios (18 students, or 55%, correctly answered five of the six scenarios).

Students showed mixed incoming knowledge in their ability to navigate some of
the advanced features of the library catalog/discovery system and databases. 26 students (79%) showed strong ability to find subject headings in a catalog record, and two-thirds (22) knew to search for an author following the “LastName, FirstName” convention. Boolean operators proved to be a larger hurdle for students, however. Only 13 (39%) students were able to recognize which search string would provide the largest number of results, and only 4 (12%) were able to recognize which search string would provide the fewest results. Likewise, only 12 (36%) were able to correctly identify an appropriate use of quotation marks in a search string.

Students also showed weak ability to craft a definition of “peer review” in an academic context. Only 8 students (24%) provided a marginally acceptable definition, and only one student provided a fully acceptable definition.

Discussion

This study sought to explore the impact of intentionally integrating information literacy instruction into the course curriculum on students’ information literacy competence. Librarians intentionally taught students to find and evaluate resources, particularly primary historical sources. Librarians also supported students throughout the academic year through individual consultations, as recommended or, in some cases, as required by their professor. There was a disparity, however, since only those students who were assigned by their professor to meet with a librarian, or those who requested the additional help, received this additional instruction.

The results of this study have informed some significant changes in the information literacy instruction program for theatre students, including which concepts are taught, with what intensity, and in which format. This section provides interpretation and perspective on the results, outlines the changes librarians have made (or are in the
process of making) to the curriculum in response to the results, and provides
suggestions for other librarians seeking to integrate information literacy instruction
more fully into a theatre (or other fine arts) curriculum.

**Interpretation of results**

The overall results of this assessment showed a mixed impact of the instruction on
students’ information literacy knowledge. Students showed significant improvement in
their ability to both identify and define appropriate search tools for finding primary
historical sources, a major emphasis of this course on theatre history. Students also
showed a significant improvement in their ability to recognize appropriate tools for
locating books from other libraries, although interestingly they did not show
improvement in their ability to define the term “interlibrary loan.” This suggests that
they may be more familiar with the concept than the term itself.

There were also areas in which students demonstrated strong knowledge of the
concepts in the pre-test, leaving little room for improvement. Since this course is most
commonly taken during students’ junior year, it is not surprising that they would have
already had experience in other classes with selecting appropriate research topics and
searching for books in their university library.

The largest disappointment was that students did not show much improvement
in their ability to correctly identify different types of sources, what kinds of information
were likely to be found in different types of resources, or whether a given source was
appropriate or not for college-level research.

Another disappointment was that students did not show improvement in their
ability to select appropriate tools for finding peer-reviewed journal or newspaper
articles in subscription databases versus open-access resources. This may, however, not be a meaningful distinction for students - while still in college, what matters to them may simply be accessing usable information, not whether or not it requires an institutional subscription. While librarians make a distinction between materials accessed from subscription or open access sources, students may not find this distinction relevant. This distinction between subscription and open access resources may have more meaning once students graduate and no longer have easy access to subscription resources, but it may not. As the barriers between material types continue to erode, students and theatre professionals may be able to complete their research with publicly-available materials, so long as they have the information literacy skills to properly evaluate those materials. For this reason, it may not be necessary for librarians to focus on this distinction in class.

The effectiveness of purposely integrating information literacy instruction into the theatre history curriculum is reflected in the improvements the students made in defining and identifying appropriate search tools for primary source work and for identifying appropriate search tools for using materials from other libraries. The authors can confidently state that intentional teaching of recognizing and choosing appropriate resource types as an information literacy concept resulted in student learning in this area.

**Instructional changes**

The results of this study have given the authors a stronger understanding of both the areas of information literacy that many students have prior to taking the theatre history courses, and the impact of the instruction while students are enrolled. These results led the fine arts librarian to make several changes to the information literacy curriculum.
The fine arts librarian is continuing to emphasize finding and using primary sources in theatre history. This is not only a fundamental component of the theatre history curriculum and research assignment, but will continue to be important for students as future theatre professionals researching set design, costuming, or characterization for productions set in different times and places. At the same time, the fine arts librarian will increase emphasis on “interlibrary loan.” While librarians previously explained the service to students, the fine arts librarian and the professor are now integrating specific activities into the curriculum, such as requiring students to investigate holdings in WorldCat or to create an interlibrary loan account. Another concept which the fine arts librarian is adding to the curriculum is “peer review.” Librarians did not intentionally address peer review in the instruction since most students are introduced to this concept in their first-year writing course. However, librarians believe that this concept is important for all college graduates to understand, so the fine arts librarian and the professor have developed an activity within the instruction session in which students must find and evaluate a peer-reviewed article on their topic. This will provide structure to the “free” class time that students previously had to find information on their topics.

Students receive directives from their instructor on which types of sources are required for their research projects. However, they showed limited ability to recognize which search tools would be most likely to provide appropriate types of information, or to recognize appropriate types of information when they saw them. The fine arts librarian is therefore developing additional activities to integrate into the curriculum. The fine arts librarian and the professor are adding an activity in which students match search tools with examples of sources most likely to be found there. The course instructor will include a discussion in his lecture prior to the information literacy
instruction sessions focused on evaluating the best uses of different types of sources - scholarly books, peer-reviewed journal articles, professional websites, etc. The fine arts librarian will also put greater emphasis on the difference between resources available through open-access platforms and those that require a subscription. Librarians will especially emphasize that, while this distinction may not seem immediately relevant to students who have easy access to subscription resources while enrolled at the university, they will likely need to rely more on open-access resources once engaged in post-graduate professional practice.

In order to accommodate this new material, the fine arts librarian will also reduce emphasis on concepts that students either demonstrated strong incoming knowledge of, or which are considered to be less essential to their education at this point (this does not mean that these concepts are unimportant, but with limited time the fine arts librarian must prioritize which concepts are emphasized). Since the pre-test data showed that most students came to the course already able to select appropriate topics, the fine arts librarian will not focus on this in class. Instead, the fine arts librarian and the course instructor will work with them individually as needed. While advanced search techniques (i.e. Boolean operators) are undoubtedly useful skills for many students and practitioners to know, the authors believe that they are not as vital with the ability to successfully use natural language searching and discovery interfaces. For this reason, the fine arts librarian has limited instruction on specialized search techniques to those related to finding primary historical sources.

**Recommendations for librarians engaged with theatre students and recommendations for future research**

Librarians who are engaged with theatre students would do well to approach students
where they are in terms of their studies and professional preparation. Theatre students are often preparing for careers as professional practitioners, and as such, information literacy instruction can be more meaningful to them - and result in greater engagement - if geared toward that end. Connecting instruction to future practice can help students care about information literacy. For instance, theatre professionals will need to understand the historical or cultural context in which theatrical works are set, and they will be better equipped to do this by developing skills to locate and interpret primary documents, scholarship, and news sources. Another example might be the ability to find, assess, and use other, non-academic information sources to develop productions - sources such as performance reviews, published interviews with industry professionals, or even their own professional networks. Further, theatre professionals may need to secure funding for their professional endeavors. For example, the National Endowment for the Arts (NEA) Grants for Arts Projects Guidelines, explicitly seek projects that, among other things, “Celebrate America’s creativity and/or cultural heritage,” and “invite a dialogue that fosters a mutual respect for the diverse beliefs and values of all persons and groups” (National Endowment for the Arts). In order to demonstrate to the NEA that projects will do these things, theatre professionals will need to conduct research about the aspects of the project and how they fit into American culture or particular beliefs and values of different groups.

Instruction librarians should consider and assess what students may have already learned in other classes, such as required undergraduate writing courses or other general education courses. Instructors should build on the concepts taught in those classes. Especially in upper-level theatre courses, students may need librarians’ expert assistance when digging into the specialized literature related to their research topics, and in understanding the writing conventions of scholars in their field.
Instructors should consider what students need to know for practical application, both while they are students and once they graduate. First and foremost, students should understand where they can get help finding more information. This could come from their professors, their peers, and from library staff and librarians. Self-sufficiency in information literacy skills is an important goal, but students should know that it is always acceptable to ask for help with information problems. In addition, instructors should be mindful of the types of materials that will be available to students upon graduation, and help students learn to search for and access those resources that are commonly open to the public. As both students and professionals, they must also understand the need to cite the sources they consult for their research, and the corresponding need to cite sources of artistic inspiration. And finally, they must understand when permission or licensing is required for theatrical productions, whether they are using the work of others or protecting their own artistic endeavors.

For information literacy instruction to be effective within the context of post-secondary theatre history education, it is essential for librarians and theatre faculty to collaborate on lesson and activity design for future theatre professionals. Information literacy instruction must not only address local objectives for information literacy, but it must also be relevant to students’ academic and professional interests. The faculty can also lend crucial support by integrating information literacy into their courses, both with the help of librarians and through incorporation of information literacy practices into day-to-day teaching.

The authors asked Durham two questions about instructional interaction with his students.

1. Would you be willing to share your thoughts about your perception of the
impact of our instruction on your students’ ability to master our expected information literacy concepts? He replied: “The repetition and reinforcement of the overall conceptual ideas that occurs in the library instruction is essential for students to retain and use the information. Moreover, the library instruction, especially with the library instructors acting as individual research consultants, enables students to experience modeling of many of the concepts, directly in application to their research problem. As each student is individually held accountable for work in the library using worksheets, homework assignments, and an annotated bibliography, I can see the impact through the documentation of actual achieved research as a result of the library instruction time.” (Lofton Durham, email to authors, August 12, 2019).

2. [Would you be willing to share] your perception of whether or not those information literacy concepts are important for your students’ ability to succeed in your course? He replied: “Since the paper I assign requires the use of primary sources, I believe that students’ familiarity with that key concept, as well as the recognition and choice of appropriate resource types concept, are absolutely essential to succeed in the course. Topic selection is also an important one, and being able to refine sufficiently a topic to conduct primary and secondary research on it helps ensure success on the final paper.” (Lofton Durham, email to authors, August 12, 2019).

The practice of information literacy instruction in academic performing arts programs could benefit from more research studying the ways that performing artists, such as actors and dancers, as well as technical theatre artists use information literacy in their careers. In this way, instruction programs could be designed to enable early career
artists to use the information at their disposal to their greatest benefit.

**Conclusion**

In the future, the authors would like to review the research papers for several years of this course to find ways that students applied their learning of information literacy concepts to their writing. This would allow the librarian to assess the practical application of the information literacy instruction provided, and the students’ learning in response. The fine arts librarian is continuously revising information literacy curricula in all of the performing arts disciplines so that the introduction of all information literacy concepts is more fully scaffolded (Sachs and Duffy 2017).

As outlined in the literature review, there is a dearth of representations in the library literature of information literacy instruction for performing arts students outside of music. The authors encourage librarians and faculty who work with information literacy to explore the application of information literacy concepts within their performing arts courses, and to share their findings.

The present study is limited in that it only covers one class section in one year, not all students received the same level of individual consultation with a librarian, and due to time constraints, the instruction program did not address all the concepts tested in the pre- and post-test. The authors hope to study the impact and effectiveness of information literacy instruction on theatre courses further, and encourage others to pursue this as well, with the goal of identifying how theatre students best learn, and how information professionals may develop instructional best practices for work with theatre students and faculty. The authors look forward to the growth of this research area.
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References

*Theatre Topics* 17 (1): 69–79.


Appendix A: Pre- and Post-Test Survey Questions

Welcome to the Information Literacy Pre-Assessment for Theatre History. Please complete the following questions to the best of your ability. You may refer to outside sources, including the WMU Libraries' website or internet searching.

Some questions will require you to review materials posted on the Theatre History Research Guide. You will find links to those materials directly under the link you clicked to access this assessment.

1. Your name

2. In academic research, what is a “primary source?”

3. In academic research, what is “peer-review?”

4. What is “interlibrary loan?”

5. Imagine you are researching Indonesian shadow puppet theatre. Which of the
following search tools would you use?

- Google.com
- Google Scholar
- Historical Abstracts
- WMU Library Search
- International Index to the Performing Arts
- Humanities Index

6. Why did you select the tools you chose in Question 5?

7. Which of the following topics do you think is the most appropriate for a 10 page research paper at WMU?

- History of theatre in the Middle Ages
- The role of the Tanner's guild in the performance of mystery plays in fifteenth century York, England
- The impact of mystery plays on social cohesion in English towns and cities in the Middle Ages
- Which Medieval mystery plays survive today
8. In the course of your research, you found a reference to the following article:


Locate the full text of the article and explain, step-by-step, how you found it.

9. Which of the following characteristics apply to each of the search tools listed below:
[Search tools listed are Google, Google Scholar, Library Search, WorldCat, and Library Subject Databases (e.g. International Index to the Performing Arts, Historical Abstracts)]

- Searches all the books in your library
- Provides up-to-date information about theatrical performances in your town
- Provides paid subscription access to peer reviewed journal articles or newspaper articles
- Provides open access to peer reviewed journal/newspaper articles
- Search for primary documents (diaries, letters, playbills)
- Search for archival materials/records
- Legal access to video or audio recordings of copyrighted performances
• Books that are not in your library

10. On the Research Guide for this course, look at the record for a book at the WMU Libraries. Enter the “Subject Terms” for the book in the box below.

11. Imagine that in doing your research you need to search many different search engines/databases. How would you keep track of what terms you search in each place?

12. When searching the “subject” field in a database for information about a person (such as Eugene O’Neill), what is the best way to enter the person’s name to get the most relevant results?

• Eugene O’Neill
• O’Neill, Eugene
• O’Neill, E.
• E. O’Neill

13. Imagine you are searching for articles on the use of masks in ancient Greek theatre. Write down as many words or phrases that you can think of (minimum 10) that you would enter into a search engine/database to find materials on this topic.
14. Imagine you are searching for articles on “Commedia dell’arte.” You have created this list of keywords:

- Italy
- Renaissance
- mask
- improvisation
- gender
- women
- travel
- Carnival pageants
- stock characters
- character of Harlequin
- theme of love

Write down three different searches that you would enter into a search engine/database.

15. Which of the following search strings will give you the MOST results when entered
into a search engine?

- women and Kabuki and stage design
- (women or girls or females) and Kabuki and stage design
- women and Japan and Kabuki and stage design

16. Which of the following search strings will give you the FEWEST results when entered into a search engine?

- women and Kabuki and stage design
- (women or girls or females) and Kabuki and stage design
- women and Japan and Kabuki and stage design

17. Which of the following results will you get if you search for the following term (check all that apply):

synth*

- synthetic
- synthesis
18. Imagine you are interested in the relationship between lighting on stage and lighting in the house. How would you structure your search?

- “house lighting” and “stage lighting”
- house lighting and stage lighting
- house and stage lighting
- relationship between house and stage lighting
- “house and stage lighting”

19. If you are looking for a broad, scholarly overview of a topic, which type of resource would be most useful?

- Book
- Book chapter
- Review article
- Research article
20. Go to the Research Guide for this class. Click the links to view each article and match it with the correct type of article [article types: book review, review article, original research article].

Article 1 - Theatre reform as censorship

Article 2 - Performing hybridity

Article 3 - Arts-Based Research

Article 4 - Opera in Paris

Article 5 - The Third Citizen

21. In which of the following situations do you NOT need to use a citation (in-text citation or footnote)? (check all that apply)

- You are writing about something which is considered general knowledge
- You are paraphrasing (rewording) the statements from an article
- You are paraphrasing (rewording) an interview on YouTube
- You are quoting from a website
- You are quoting yourself
- You are quoting from a friend’s Facebook page
22. Imagine you are researching representations of gender in Shakespeare's plays. Go to the Research Guide for this course and look at the sources for Question 22. Do you consider them to be appropriate for your research paper? Why or why not?

Resource 1 - Where are the mothers?

Resource 2 - What a piece of work is a (wo)man

Resource 3 - Gender roles in Shakespeare

Appendix B: Timeline of Information Literacy Curriculum

September:

- Librarians administer pre-test evaluation of students’ incoming knowledge of information literacy concepts
- Students complete assignment on evaluating information sources - receive feedback and grades from faculty
- Students view online video on finding and refining a research topic in theatre history (via library course research guide)
- Students submit preliminary topic idea(s)
- Librarians provide individual advice to students on refining research topics

October:
● Students submit revised research topic

● Librarians lead in-class workshop on finding and evaluating resources, with a special focus on primary sources; includes workshop time with individual consultations as needed

● Students complete activity in which they cite and annotate one primary and one secondary information source on their topic - receive feedback and grades from faculty

● Librarians provide additional individual feedback and suggestions for further research

● Librarians lead second in-class workshop centered on a discussion of common issues revealed through evaluation of students’ initial work; includes workshop time with individual consultations as needed

November-December:

● Librarians meet with students for individual research consultations as needed; respond to individual questions posed in Elearning discussion forum

● Students submit annotated bibliography (early November)

● Students submit partial draft (late November)

● Students submit revised partial draft (mid-December)

February:

● Librarians and faculty review students’ annotated bibliographies and first drafts;
meet with students in small groups to discuss research strategies

March-April:

- Librarians meet with students for individual research consultations as needed; respond to individual questions posed in Elearning discussion forum
- Students submit full draft (early March)
- Faculty meets with each student for individual consultations (mid March)
- Students submit final draft (late April)
- Librarians administer post-test evaluation of students’ knowledge of information literacy concepts
Table 1. Student scores for question 20

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<th>Post-test: correct</th>
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<td>8</td>
<td>18</td>
<td>6</td>
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<tr>
<td>article 1</td>
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<td></td>
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<tr>
<td>Book review 1</td>
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<td>13</td>
<td>13</td>
<td>11</td>
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<tr>
<td>Review article</td>
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<td>Book review 2</td>
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<tr>
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</tr>
<tr>
<td>Peer-reviewed research article</td>
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<td>8</td>
<td>18</td>
<td>7</td>
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<tr>
<td>Newspaper article</td>
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<td>Academic paper mill</td>
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<td>15</td>
<td>15</td>
<td>10</td>
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Table 3. Change in student responses from pre-test to post-test for question 5

<table>
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<td>Stayed the same</td>
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