Strengthening Curricular Relationships between Libraries and Communication Centers: A Case Study at James Madison University

Kathy Clarke
James Madison University

Paul E. Mabrey III
James Madison University

Carolyn Schubert
James Madison University

Introduction

Academic support programs and programming in higher education are becoming increasingly important. Students are facing greater financial pressure to complete their college degree efficiently. Students are completing more and more course credit away from their degree granting institution, whether via advanced placement test scores, dual enrollment courses, or summer transfer credit. As a result, some scholars and administrators have argued that students are not necessarily ready for the academic challenges that a bachelor's degree requires. This becomes even more complicated as higher education institutions encounter changing student demographics not necessarily prepared for navigating college infrastructures, expectations, and bureaucracies.

Libraries and Communication Centers are crucial places for supplementing student learning both inside and outside of the classroom as part of the academic support system. They have independently played vital roles in helping students develop and advance their research, information literacy, and oral communication skills. But just as the demand for these skills have changed over the last decade, so too must academic support systems adapt to these changes. Rather than treat research, information literacy, and oral communication as siloed competencies to be learned, libraries and communication centers are uniquely situated to partner and collaborate as integrated sites for learning, teaching, and researching these intertwined sets of knowledges, skills, and behaviors. Collaborations between academic support structures like libraries and communication centers can help students and higher education institutions better succeed in today's ever-changing landscape.

The partnership between the University Libraries and Communication Center at James Madison University provides a case study of collaboration between academic support programs to improve student success and development. JMU is a public comprehensive undergraduate institution with a smattering of graduate programs, masters and doctoral located in northwest Virginia. Our student body is mostly undergraduate (20,779) and a developing graduate program (1,888). Most JMU students enter as traditional first year students (4,564), but we are seeing steady increases in the transfer class (1,050 admitted in 2017-8). JMU enjoys a very high retention rate with 91% of our first-year students returning.

JMU Libraries partners with faculty, staff, and students through our liaison librarian program, housed in the Research & Education Services department. The liaison librarians work closely with academic departments to support information literacy education in curriculum, as well as research support. The program accomplishes the education and research goals through

instruction, consultations, robust collections, and continuous relationship development. We currently have 13 full-time liaisons assigned to academic programs. On average, this equates to ratio of 1 liaison to approximately 1580 students and 82 faculty. Many university libraries support or are organized around a liaison model as such, this model could easily be replicated and expanded.

The Communication Center is located within the Learning Centers, which also provides academic support for writing, English-language, digital media, science, and math. The Communication Center offers assistance to students, faculty, and staff on a range of communication-related items from public speaking and group presentations to communication specific exam tutoring and the use of argumentation across the curriculum. Since 2014, the Communication Center has been typically staffed by ten or more peer tutors and one faculty member. In that timespan, they have averaged 1,450 appointments or consultations at the Center a year. Moreover, the Center also provides workshops, individual faculty consultations, and other forms of support to the JMU community.

In 2011, the-then Director of the Learning Centers approached the General Education librarian with an invitation to become a Writing Center fellow. Every year, two faculty members are tapped to spend a year in the Writing Center. Writing Center fellows are embedded within a course (Writing Rhetoric & Technical Communication/WRTC336) and begin tutoring students mid-way through the course and through the remainder of the academic year. The Communication Center and the Writing Centers were both experimenting holding tutoring sessions within the Libraries. This practice ended when the Learning Centers moved into a new building very near one of the main library buildings, but the seeds of collaboration had already taken hold. In 2014 a new director of the Communication Center was hired, and he saw an opportunity to further collaborate by offering peer assistance for students who struggled with the information literacy requirements.

The ongoing collaborative partnership between the JMU Communication Center and JMU Libraries provides an example for how these particular academic support programs can work together to support student learning inside and outside of the classroom. The curricular relationships presented here can be adapted based on the needs, expertise, or resources of any given institution. Through the rest of this essay, we discuss the existing curricular collaborations and potential for expanding collaborations within and beyond curricular interventions. First, we analyze the collaboration on supporting information literacy curriculum into the general education program. Second, we discuss curricular support partnerships in upper division courses through debate across the curriculum and research poster conference presentation support. Finally, we suggest other possible productive relationships between a communication center and library.

General Education & Information Literacy Collaboration

Since the late 1990s, JMU's General Education program has had information literacy learning outcomes embedded in the first-year core curriculum. These outcomes were based on the Association for College and Research Libraries' (ACRL) Standards for Information Literacy in Higher Education. At JMU, the Standards were almost adopted verbatim, but several tweaks have occurred over time. JMU's most

recent information literacy outcomes based on the Standards were:

- Recognize that information is available in a variety of forms including, but not limited to, text, images, and visual media.
- Determine when information is needed and find it efficiently using a variety of reference sources.
- Evaluate the quality of the information.
- Use information effectively for a purpose.
- Employ appropriate technologies to create an information-based product.
- Use information ethically and legally.

This year, our outcomes were revisited to reflect ACRL's shift from the former Standards to the new Information Literacy Framework. The Frames were not meant to be used as learning outcomes, but modifications were made in order to keep the tutorial-test model while using the discipline's preferred Framework language. These new outcomes are:

- Recognize the components of scholarly work and that scholarship can take many forms.
- Demonstrate persistence and employ multiple strategies in research and discovery processes.
- Identify gaps in their own knowledge and formulate appropriate questions for investigation in academic settings.
- Evaluate the quality of information and acknowledge expertise.
- Use information effectively in their own work and make contextually appropriate choices for sharing their scholarship.
- Use information ethically and legally.

JMU Libraries has ownership over these outcomes in the General Education program, but these are not delivered via a formal stand-alone class. Students demonstrate that they have developed these competencies by completing a combined tutorial and test. The tutorials are a combination of video content, arranged by outcome, and practice exercises. Students are assigned to view tutorials by their Human Communication instructor. This course was selected as it is the commonest of the JMU general education core. Communication faculty assign students to view video tutorial content, hosted on the Libraries' website, and then have their students complete a series of practice exercises that librarians embed in each instructor's online course in the learning management system (Canvas). After students view the tutorials and complete the practice exercises, they are instructed to meet the requirement, successful completion of the Madison Research Essentials Skills Test (MREST).

The MREST is a fixed-item multiple choice test given in a proctored lab and is a high-stakes test. Students may take the test as many times as they need to in order to achieve a passing score. Non-complying students risk an academic hold preventing them from subsequent class registration. Most students pass the MREST by their second attempt and 98% of students in Academic Year 2017-18 met their MREST requirement by the end of the Spring semester. While most students meet this requirement with minimal difficulty, some students require additional assistance.

In 2014, the Communication Center and Libraries decided to collaborate and have the Center tutors offer assistance to students who struggle to meet the MREST requirement. This affords the struggling student with more opportunities to seek out help that will best fit their schedules and needs. Further, it offers a peer-to-peer intervention that can be less stressful for a struggling student. These students are

referred to the Communication Center by testing lab personnel, administrators, and librarians. Students with special needs, non-native English speakers or students with disabilities may be referred to the librarians directly or afforded different assistance. This collaborative arrangement allowed the students easier access to academic support, increased awareness about the Communication Center around campus, and enabled the one librarian handling all of the support previously to shift attention to specialized MREST tutoring and other demands of the position.

Near the beginning of the fall term, the General Education librarian and the Communication Center director meet with incoming and returning tutors to update them on changes to the test or other new content. Also, at the beginning of the academic year, tutors are trained specifically on offering MREST support appointments. Tutors receive an overview of the MREST, review an internal Communication Center training document for MREST appointment best practices, go through the MREST video tutorials, practice quizzes, and actually attempt the MREST in the assessment center. The combination of face to face and self-guided training offers the initial training on MREST appointments. Tutors are then entered into a Canvas course that allows them access to the practice exercises that are embedded in the Human Communication course. This allows the tutors to go over the practice exercises with the students in person such that difficult questions can be discussed and made clear. Students who meet with a tutor and continue to struggle are referred to the General Education librarian. Data collected during the 2014-2015 academic year found that 86% of the students who attempted the MREST after their Communication Center appointment passed it. Almost half (47%) passed it the first time attempting the MREST after their Communication Center tutoring appointment.

In addition to one-on-one tutorial appointments, the Communication Center also holds walk-in workshops where multiple students may get help simultaneously. When possible, librarians attend these sessions to see where the students are currently struggling, such that, we can make modifications to the tutorial content. These workshops typically happen every semester, just before the semester mid-point. They are capped around 50 people and usually have 2-3 peer educators leading the session. This shared commitment to first-year information literacy skills continues to help our students make connections between resource material and effective speeches, presentations, and papers.

Curricular Support & Collaboration

Debate across the Curriculum.

Debate across the curriculum is an innovative approach uniquely situated with the potential to teach information literacy, research, and communication skills (Conis, Clay, & Mabrey III, 2018; Davis, Clarke, & Mabrey III, 2013; Mabrey III, 2015). Debate pedagogy is an active way to engage students through role-playing, simulations, and debates. Teaching through debate has been demonstrated to help students with communication skills, problem solving, group collaboration, advocacy, research, empathy and much more. Students are asked to rigorously engage evidence-based decision-making processes in different contexts and from different perspectives. Debate pedagogy has the potential to help students better understand and apply fundamental concepts of information literacy and research by emphasizing reason, perspective taking, and the process of decision-making.

At JMU, the Debate Across the Curriculum Initiative, http://www.jmu.edu/commcenter/fac-staff/debate-across-the-curriculum.shtml, is largely organized through the Communication Center with the support of faculty associates across different disciplines, including the Libraries. Through this initiative, the Communication Center hosts introductory workshops for using debate or argument-centered pedagogy in the classroom, conducts one-on-one faculty consultations, and provides peer support throughout the semester with the use of communication fellows. All of these different paths of faculty support are focused on helping faculty implement debate related learning outcomes, curricular interventions, and assessment strategies. Since the Communication Center began housing Debate Across the Curriculum in 2014, over forty faculty across every college across campus have implemented some form of debate or argument-based pedagogy in their college class. The following example of curricular support and collaboration between the Communication Center and Libraries comes from one of the first faculty members to attend a Debate Across the Curriculum workshop and integrate debate into her coursework

In 2013, James Madison launched the Madison Collaborative: Ethical Reasoning in Action program to begin addressing ethical reasoning across campus (James Madison University, n.d.). The Madison Collaborative developed a framework of 8 key categories to prompt ethical reasoning. At the same time, the Medical College Admission Test (MCAT) was adding in questions to assess critical analysis and reasoning (Association of American Medical Colleges, 2012). Health Sciences faculty began exploring ways to incorporate and further develop critical thinking into the pre-medicine curriculum.

After attending a workshop about Debate Across the Curriculum, a pre-professional Health Sciences faculty member decided to explore the use of debate in her Use and Effect of Drugs course. In the course, students learned about drugs, as well as the policies surrounding their regulation, prescription, and marketing. While presentations documented the learning of content, students did not fully engage in critically examining topics. Debates were introduced as a final project that connected course content with critical thinking and ethical reasoning skills. Broadly, health education requires a strong foundation in evidence-based practice which involves drawing information from patients, research literature, and clinical expertise in order to make the best decision and plan of care for each patient. There is some evidence that learning how to effectively debate during pre-professional and professional health education helps students to develop problem solving, critical thinking skills, and information synthesis and application skills (Boucard, Nabel, & Eggers, 2013; Candela, Michael, & Mitchell, 2003; Hall, 2011; Hanna et al, 2014; Jha, 2013; Jhaveri, Chawla, & Shah, 2012; Lampkin, Collins, Danison, & Lewis, 2015; Mamtani, Scott, DeRoos, & Conlon, 2015; Nguyen & Hirsch, 2011; Rubin, Weyant, & Trovato, 2008; Saito & Fujinami, 2011; Shah, Mattana, & Jhaveri, 2013; Shaw, 2012; Wahabi & Al-Ansary, 2011).

The course instructor and Communication Center director met to collaborate on designing a debate assignment centered on drug policies topics. The collaboration also provided an opportunity to invite the Health Sciences and Nursing Librarian to join the redesign project since research would be part of the learning process. The JMU Communication Center collaborated with the faculty on developing debate outlines, sample debates,

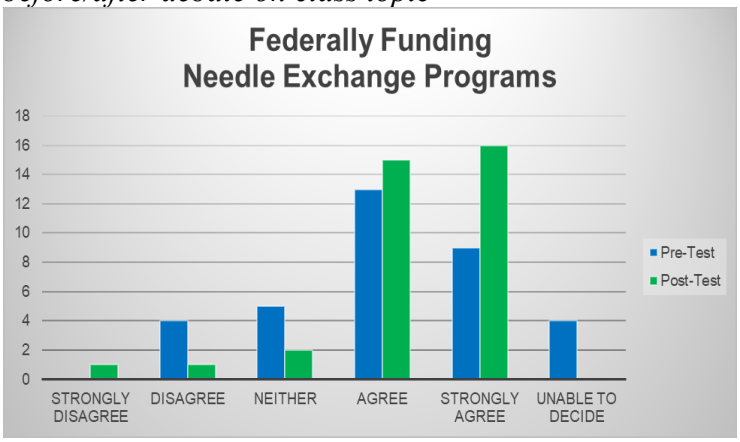
and an assignment rubric (JMU Communication Center, n.d.). The librarian collaborated with the faculty on generating debatable topics, providing information literacy instruction, creating a customized course guide of credible resources, and evaluation of student annotated bibliographies. Together, the instructor and was able to redesign and scaffold the course assignment across the span on the semester.

The instructor chose 10 topics for students to debate in teams of 3 or 4. Teams researched together but divided positions among members. Students had library instruction and received training on how to debate a topic. To scaffold their development, students completed annotated bibliographies and received feedback on sources from both the librarian and the instructor. The annotated bibliography also provided a mid-point for the instructor to check in and make sure students had enough evidence to support arguments on both sides of the conversation.

The collaboration on this assignment redesign provided several benefits. The instructor had support to try an innovative new teaching approach. The Communication Center Director got to learn more about unique characteristics of pre-medicine curriculum and education. The librarian got to be involved in a different type of assignment that relied on research but produced a very different end product. By collaborating closely together, the interdisciplinary team gained a greater understanding of student learning across different periods of the semester and both inside and outside the classroom. The successful collaborative relationship also led to other joint ventures, such as the librarian spending a year embedding in the Learning Centers.

The faculty member and librarian collaborated on a scholarship of teaching and learning study to measure the impact of this newly designed assignment on student perceptions and opinions on these debatable drug policies (Howley, Schubert, & Sapp, 2014). Students were surveyed about their opinions at the beginning and end of the course, 35 students participated in the study. Some opinions on topics changed dramatically, such as a 26% change towards the statement that needle exchange programs should be federally funded (Figure 1). Other changes in student opinions were that they reversed their position to oppose drug advertisements. Between the pre-test and post-test, most students had a large shift away from earlier positions of Neither & Unable to Decide to a more concrete direction of agreement or disagreement. Therefore, the change towards an opinion on these topics was considered a successful outcome in student knowledge, critical awareness of a topic, and confidence in formulating an evidence-based opinion.

Figure 1. *Student opinion change before/after debate on class topic*



Research Posters. Building upon the pre-existing relationship with the Communication Center, the Health Sciences & Nursing Librarian found other opportunities to collaborate and improve scientific communication skills with a research posters assignment. During the

2013-2014 academic year, there was a demand for the Communication Center to develop expertise in supporting research poster presentations. While the Center had experience and expertise in supporting traditional panel conference presentations and public speaking, staff were not as familiar with research poster presentations. One of the upper-class undergraduate consultants took lead on researching and developing support materials to assist faculty and students across campus in developing research poster presentations. Immediately, physician assistant students and faculty were interested in this type of information literacy and presentation support.

Physician Assistant students are graduate level students completing a professional degree. Research and evidence-based practice are required components of the didactic curriculum; most students (81.7%) achieve this through a Master's capstone project (Physician Assistant Education Association, 2018). In a recent study, the most common methods of assessing student abilities with evidence-based practice occur through written examinations, presentations, and written papers (White & Stephens, 2018). At JMU, students develop the research skills across a four-sequence Managing Medical Information course series. In the first course, the librarian helped with foundational information literacy skills, such as scoping a clinical question, searching for evidence, and evaluating evidence, to complete a research paper. In the third course, students chose a topic and conducted a systematic critical appraisal; they then completed a research paper synthesizing their response to the question for review by program faculty.

With a new professor coming in to teach the course series, there was an opportunity to redesign and scaffold the skill development. Previously, students completed very rigorous literature reviews in the first and third courses but were frequently frazzled with the search process and found the research artificial in comparison to practicing evidence-based care at the bedside. The librarian also struggled since so much in-depth information searching instruction happened early on that the library instruction in the third class about staying organized with research and citation management tools seemed out of sync. Therefore, the goal was to make sure the research activities were more authentic to the applications of research in health care delivery and professional practice. The instructor redesigned the first course to have students present one article to their peers in a journal club discussion format, a common mechanism for ongoing professional development. In the third course, students received a clinical question from practitioners in the local area, completed the systematic critical appraisal and paper, but also worked to develop scientific posters to present back to local practitioners. The poster format is a common, quick way to communicate research findings, as the students would experience at professional conferences and professional development events in a health care system. Scientific research posters are a common mechanism student use to communicate research findings at the end of a course or capstone research project (Dinkelman, Aune, & Nonnecke, 2010; Lewis, 2017; Widanski, Thompson, Foran-Mulcahy, & Abato, 2016). This was a great opportunity for the librarian to refer the faculty member to bring in the Communication Center to support student learning through this new assignment.

Communication Center involvement to support research poster development and presentation has typically involved two classroom interventions during the semester.

First, a communication consultant visits the class to lead a workshop on research poster best practices. This usually happens toward the beginning of the semester as the assignment is being first introduced and explained. The discussion focuses on the technical aspects of designing a research poster, the organizational and style elements, and how poster presentations differ from traditional conference presentations. Second, a center consultant is invited back to the class toward the end of the semester for leading constructive feedback discussion of the developed research posters. Usually the consultant is the same person who first visited the class for the introductory workshop but has occasionally needed to change for availability issues. Other times a second consultant will also attend for training purposes and to learn about the research poster service. Each student will display their poster on the projector screen and give a brief description of their project, like they would at a conference poster session. The center consultant then guides the rest of the class and faculty in a discussion highlighting the strengths, weaknesses, and lessons of each student's research poster.

Over the last few years, the Communication Center and the Health Sciences Librarian continue to work together on refining the process by sharing best practice articles from the professional literature, as well as discussing unique elements for the field. For instance, the librarian could describe the systematic searching process expected for the students to use and the standard documentation for the process, such as a research article evaluation flow diagram. Another example was with citation styles; the librarian could identify that American Medical Association (AMA) style is appropriate for use while the Communication Center Director worked with students on how to balance the presentation of these citations in the overall landscape of the poster design. The librarian also met with the Communication Center peer tutors to discuss scientific poster best practices.

Future Directions

The Communication Center and Libraries have enjoyed a supportive and collaborative relationship since early in the Center's history at JMU. Even though the last five years have had both departments more actively seeking out possibilities for genuine partnership, new opportunities still exist. First, libraries are increasing their areas of expertise and support. Subject librarians can continue to provide key updates to the Communication Center about curriculum changes related to communication skill assignments and competencies. In more functional areas of expertise, librarians can offer cross-training on emerging digital literacy topics and the Communication Center can extend the reach of the libraries with providing information to users actively working on communication projects. For example, copyright librarians can offer guidance on how to evaluate copyright and access permissions of existing materials for use in communications, as well as teach individuals how to manage permissions for their own unique works. Also, digital collections librarians can also recommend best practices for preserving multimedia objects either for campus purposes or for a student's personal portfolio. For example, the Physician Assistant capstone posters and papers are now also archived in JMU's Scholarly Commons for worldwide access to the answers of these clinical questions; over the last two years, these student works have been downloaded over 3,500 times.

Second, the Communication Center and University Libraries could explore a

permanent or rotating faculty associate role. The University Writing Center currently hosts a library faculty associate every semester for ten hours a week. The Communication Center could look into sharing or rotating this current faculty associate position, developing a new, or even facilitate an exchange. A faculty or graduate student exchange might offer an additional benefit to both if someone from the Communication Center spent ten hours a week in the Libraries working with liaisons or other library staff on research strategies, information literacy instruction, data visualization, assessment, peer education and supervision, or other professional development areas.

Third, the two departments could experiment with sharing physical space. Before the Communication Center moved into their current location in the newly renovated Student Success Center, they actually shared a presentation/consultation room in the basement of one of the two main campus libraries. This was beneficial to the Center because their main location was in the attic of a quad building and did not receive much traffic. The Communication Center did not pursue any shared space outside of Carrier Library because of its new prime location. Perhaps they could revisit hosting special hours in one of the libraries, especially Rose Library, which specializes in the health and science disciplines. Alternatively, the Communication Center could host librarian faculty for special office hours or other collaborative endeavors.

Finally, there still remains untapped potential in collaboration over tutor training and peer education. Communication Center consultants and faculty could benefit from cross-training with library faculty, especially as technology provides more avenues for creating multimedia assignments. Other topics for cross-training for center staff might include data visualization, research techniques, citation styles, working with non-text sources, digital literacy, copyright, and so much more. Library faculty might be interested in collaboration on how peer educators are trained, work, supervised, and assessed. Or library liaisons could collaborate with center consultants on supporting faculty curricular innovation, course design, and student academic support. Of particular interest could be insights that center consultants have from directly working with students on a given assignment or with students from a particular faculty member's course. Librarian and Communication Center staff could gather this data to share with faculty and departments to improve student learning and faculty teaching.

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