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FIVE SPACE STATIONS USE THE FRAMEWORK TO LAUNCH AT-RISK FIRST-YEAR STUDENTS INTO INFORMATION LITERACY ORBIT

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INTRODUCTION

ACRL's release of the Framework for Information Literacy for Higher Education (Framework) in 2015 represented a significant departure from librarians' historical approach to information literacy instruction. At the same time, higher education began to acutely focus on helping at-risk students persist and successfully complete their degrees. Librarians at five small liberal arts colleges—Goucher, McDaniel, Ursinus, Washington, and Washington & Jefferson—were interested in discovering if Framework-based information literacy instruction targeting at-risk students would serve this purpose. This project was made possible in part by the Institute of Museum and Library Services, grant number SP-02-16-0022-16. The colleges' goal was to create engaging educational experiences that would close the information literacy/college readiness gap between at-risk and "traditional" student groups in their formative first-year.

Grant funds were critical in giving us the means to work with experts in information literacy (Lisa Janicke Hinchliffe) and assessment (April Cunningham). These expert collaborators led workshops for librarians that supported our efforts to create Framework-focused, active-learning instruction modules and made themselves available for later consultations.

Our cohort divided the work of creating instruction and assessment tools into two teams. While both groups worked separately, we maintained contact via conference calls and two face-to-face, two-day workshops. By the end of August, we were ready to implement our plans, with each school administering: a pre-test, scaffolded learning activities, and a post-test. Our aggregated results show that, on average, students improved their information literacy competencies between the pre-test and the post-test, and several of our at-risk student groups closed the knowledge gap between themselves and those identified as not at-risk in individual learning outcomes.

In this paper, we will share our collaborative process, variations in pedagogical approaches at each institution, results, next steps, and toolkit of learning activities.

METHODOLOGY

To meet the needs of at-risk students, we first needed to identify them, which was not a straightforward process. Each college had their own definitions and ways of tracking their respective students. We decided that student outcomes would be assessed as they related to the following data points, which were available to each college: first-generation status, Pell Grant eligibility, high school GPA, race, and gender. Additionally, we decided to collect information on whether or not students had access to a library prior to coming to college.

Lisa Janicke Hinchliffe served as our pedagogical information literacy consultant and led our first workshop. Based on pre-readings she provided and through her facilitation of our workshop discussions, we decided that our guiding theme would be helping

at-risk students work towards equity with their peers. One tool we found particularly helpful was a worksheet on content sorting (L.J. Hinchliffe, personal communication, January 30-31, 2017), which led us to focus on the fundamental information literacy building blocks that at-risk students, who may have never used a library, need to master to join their peers at the research starting line.

We discussed student misconceptions and gaps in understanding that each library had observed with first-year students. Next, we focused our instruction by identifying the Frames we needed to address for our learning goals: "Research as Inquiry," "Information has Value," "Authority is Constructed and Contextual," and "Searching as Strategic Exploration." Once we identified the Frames, we were able to derive the learning outcomes upon which the Learning Activity Team could focus:

- Outcome 1: Learners will understand that information creation is a process

- Outcome 2: Learners will apply the information seeking process

- Outcome 3: Learners can read and interpret search results in order to discern if the results contain items/sources which may meet an information need

- Outcome 4: Learners will recognize the librarian as a go-to person for research help

Originally, we had identified three Outcomes, 2-4, but we quickly realized that students needed to grasp another foundational concept, that information creation is a process, before being asked to engage in the processes outlined in Outcomes 2 and 3. We compiled an extensive list of learning activities and mapped them to our outcomes and the assessment indicators for student performance, https://digitalcommons.ursinus.edu/imls_ilframework/9/. From this extensive list, we selected the activities that would meet the broadest institutional needs. We structured our learning activities to target what was most foundational to scaffold for higher learning, building from the most basic skills. Outcomes tied to the most foundational learning activities received more time and attention in their development than the higher level learning activities due to the constraints of our grant timeline. Our final instruction plan can be viewed here: https://digitalcommons.ursinus.edu/imls_ilframework/2/.

IMPLEMENTATION BY COLLEGE

While we all worked from the same instruction plan, delivery methods varied from site-to-site: broad implementation face-to-face (McDaniel) and hybrid (Ursinus); traditional one-shot instruction (Goucher); and narrow embedded face-to-face (Washington & Jefferson) and hybrid (Washington). At each location, librarians worked with a campus partner to administer a pretest, posttest, and focus group.

McDaniel College

To reach at-risk students, the Information Literacy Coordinator collaborated with the Director of College Writing and First Year Composition to lead face-to-face instruction sessions in ENG 1002, a preparatory writing course targeting students who were developing their composition skills before entering ENG 1101. Working with this course allowed McDaniel to most effectively reach at-risk, first-year students. This course, in part, was chosen because McDaniel librarians had been embedded into first-year seminar (FYS) courses and ENG 1101 for years with an established and effective curriculum. Most importantly, "at risk" students were more likely to be enrolled in ENG 1002, for a variety of reasons.

One challenge in working with ENG 1002, ENG 1101, and FYS was making sure McDaniel librarians were reinforcing, not duplicating, content that was presented in all of these first-year courses. Another challenge was timing: ENG 1002 faculty, the majority of which were adjuncts, had been informed that they would be involved in the IMLS Sparks! Grant in the summer but were not fully debriefed about the project particulars—such as learning activities, time commitments, and timelines—until their faculty orientation, less than one week before the first day of class. Faculty, in support of our shared goals, quickly adjusted their syllabi to integrate and schedule our library instruction as best they could.

Two librarians engaged with eight sections of ENG 1002, reaching a total of 97 students. Scheduling instruction for multiple first-year courses with a limited number of librarians was a challenge. As there was a need to provide a relatively uniform experience for all students, and desire to test the effectiveness of our instruction modules as they stood, McDaniel closely followed the proscribed scripts and slides, available at this link: https://digitalcommons.ursinus.edu/imls_ilframework/8/.

In preparation for next year, McDaniel has continued collaborating with their Director of College Writing and First Year Composition and ENG 1002 faculty via a focus group and early lesson planning to create stronger connections between faculty and librarian content. Future instruction sessions will be hybridized and some learning activities will be delivered by the ENG 1002 faculty, rather than a librarian. Outcomes 1 and 2 will be the focus as these align best with their learning goals. McDaniel is keen to improve student performance for Outcome 3 but recognizes it may need to do so by retooling their approach in FYS. These

continuous efforts will improve our ability to develop and integrate our learning modules, to make the greatest impact for our at-risk students.

Washington College

I was embedded in one first year seminar (FYS) class working closely with its Sociology professor, planning library classes, during the summer. During the semester we tweaked lessons adding a class to match student needs. Together, we devised a grading system as motivation for library activities. I met with students in multiple face-to-face classes, individually outside of class, and interacted in Canvas, our LMS. Collaboration between me and the professor was key to executing a variety of learning-centered approaches. I implemented all modules developed by our grant instruction team while adding a few of my own.

Students here showed the greatest gains pre- to post-test on Outcome 3 with the highest post-test scores on average compared to the other colleges. I believe our additional in-class instruction focusing on searching and culling search results for their papers, was influential. The flipped classroom requirement to view a Lynda.com tutorial, "Information Literacy: Search Terms and Methods: Keyword vs. controlled vocabulary" and complete a quiz, allowed in-class time for more individualized attention, which helped students interpret their search results. Students followed a worksheet that asked them to identify titles and subject fields within their search results, among other things. After this class, I directed them to complete a "reading log" justifying top choices to include in their research paper.

The student who met the most "at-risk" criteria showed the greatest improvement of all on the overall score from pre-test to post-test, improving by seven points over average class improvement of two points. Anecdotally I can attest that this student benefited from our time together as our rapport outside the classroom continues.

Both the professor and I shared the positive results of our partnership with the faculty at the end of the academic year. My faculty partner spoke to how beneficial it was seeing the gaps in her students' research process early in the semester, when adjustments could be made. This testimony might be useful in promoting further faculty-librarian partnerships. In addition, I plan to work with the new FYS coordinator in the upcoming semester to make allies, discuss specific challenges, and offer more personalized solutions based on the grant experience. Like our peer institutions, we have a small library team, which will make it challenging to provide this level of service across multiple sections. We will develop a FYS LibGuide to supplement our face-to-face instruction and also consider pre- and posttest longitudinal assessment for all FYS sections.

Washington & Jefferson College

Two librarians at Washington & Jefferson College were embedded in one section of the First-Year Seminar, led by a Political Science faculty member. Over the summer, they worked together on assignment development and syllabus organization. Instruction sessions were scheduled so as to have the most impact for the students. Both the faculty member and the librarians agreed that repeated exposure to librarians would help reinforce Learning Outcome 4 which they believed was important because if students remembered nothing else from our instruction, at least they would remember where to come for help with research related tasks. Librarians ended up being present for eight class meetings, four of which were library work days during which time librarians were on-hand to offer reference services while students worked independently.

Due to repeated interactions with the class by more than one librarian, in both an instruction role and a reference role, we believe our students made good progress on Learning Outcome 4, with 37% of students who completed the post-test indicating that they had already contacted a librarian for research help. The rest of the students indicated that they planned to contact a librarian for research help in the future. On the post-test, our students had the second highest score on Learning Outcome 4, after Washington College, the other school that provided embedded instruction. We believe that a high level of interaction reinforced the "librarian as go-to person for research help" at both institutions. However, due to staffing limitations, it is not feasible for us to embed to this degree in all sections of FYS. We are currently working on ways to adapt this process to accommodate more sections next fall.

We also found a lot of value in the pre-semester faculty collaboration. Working to match our learning activities with assignment requirements and scheduling them to be delivered at the time that the students need them helped to make those learning activities more impactful than what was delivered in other FYS sections. We are currently working with the Coordinator of First-Year Seminar to find ways to incorporate librarians with the FYS faculty orientation that occurs each spring. It is our hope that by reaching out to faculty sooner, when they are still developing their assignments, librarians can discuss specific challenges faculty observe and come up with targeted learning activities scheduled to be delivered at the time of student need in each section.

CONCLUSION

Across our institutions, we reached more than 150 students. About 37% of the students who completed both the pre- and post-test met at least one of our criteria for identifying students as at-risk. On average student participants showed improvement

from the pre-test to the post-test on all four learning outcomes. We were able to close the gap for many at-risk student groups in several outcomes but not all at-risk groups across the board. You can see our full results as part of the report found here, https://digitalcommons.ursinus.edu/imls_ilframework/7.

Our results showed that students struggled most with Outcome 3 which is not surprising since our learning activities team also struggled with this Outcome. We needed more time to break down the discrete, foundational competencies, often taken for granted, in order to develop new learning activities that would meet the needs of at-risk students.

As shown in our discussion, each institution had successes and areas for improvement. We plan to continue to conduct focus groups with our student participants in the future to collect information and learn from their experiences about how working with a librarian has made a difference, ideally leading to increased graduation rates as compared to students who did not participate in our project.

Perhaps the biggest success was giving the over-extended small liberal arts college librarians the opportunity to connect and think deeply about Framework-based instruction. Access to experts in the field of information literacy pedagogy and assessment would not have been possible without this grant. We are leaving this project with a network of colleagues with whom we can share ideas and learn. We are thankful to Jessame Ferguson for developing and leading this grant, without whom these opportunities would not have existed.

The variety of ways the content was delivered shows that there are many formulas for success. Therefore, institutions of all sizes can continue this scholarly conversation by taking our work and adapting it in a way that works for them. We look forward to continuing to refine these techniques with your help and to seeing more institutions use our toolkit of learning activities and contribute new ideas. You can access our materials here, http://digitalcommons.ursinus.edu/imls_ilframework.

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