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Creating a HIP in the library: a high-impact practice case study

Abstract

High-impact practices, HIPs, have been adopted on college campuses to enhance student learning. The academic library provides services and space contributing to learning at its institution. Librarians conduct space research to learn how the library building can better serve its users. Library space assessment is one way for librarians to engage with faculty and students to create a HIP in the library. This article is a case study of a collaboration between a librarian and a sociology professor to design an observational study. It demonstrates how librarians can contribute to HIPs at their institution by involving students in meaningful research.

Keywords

High-impact practices, academic library, ethnography, observation, library space

High-impact practices or HIPs have been adopted on college campuses as ways to enhance student learning. Introduced in 2008 by George D. Kuh, these active learning practices contribute to the overall learning experience for college students. Institutions can offer HIPs that best fit their campus mission and vision but Kuh identified specific activities in his report. These include: First-Year Seminar and Experiences, Common Intellectual Experiences, Learning Communities, Writing Intensive Courses, Collaborative Assignments and Projects, Undergraduate Research, Diversity/Global Learning, Service Learning/Community-Based Learning, Internship and Capstone Courses and Projects (Kuh 2008). HIPs give students the opportunity to extend their learning outside the classroom. Students can further explore concepts discussed in class or delve deeper into a topic of interest.

There is no single way to successfully integrate HIPs into the campus learning environment. HIPs require more funding to be effectively implemented as well as assessed (Kuh, O'Donnell, and Schneider 2017). Individual faculty participation is central and crucial to facilitating HIPs thus faculty members need to be incentivized accordingly (Laird, BrckaLorenz, Zilvinskis, and Lambert 2014). Leading learning communities, designing service-learning courses, or organizing study abroad trips, require substantial faculty participation outside the classroom. Contractual obligations of full-time faculty vary across institutions. Some require higher teaching loads such as a 4-4, where faculty members are required to teach 4 courses each semester. Or faculty members have a combination of teaching and a high expectation of research activity. Such obligations do not provide the space for professors to incorporate HIPs into their courses. Furthermore, larger class sizes are also a challenge since HIPs involve personal feedback and communication with the professor. Faculty workload and the funding available to support HIPs need to be considered when determining how best to realize HIPs on a college campus.

Kuh (2008) recommends students participate in at least two HIPs during their undergraduate experience. That goal entails offering multiple HIPs that contribute to students' success at every academic level which will in turn require faculty members across the institution to be involved and supported by the administration. A 2018 study reviewed the relationship between HIPs and student graduation rates and found little correlation between student participation in HIPs and graduation (Johnson and Stage 2018). However, supporters of HIPs found the study to be restrictive in its analysis by not investigating individual students' learning with respect to HIPs nor how the experience contributed to their persistence, performance, etc. (Kuh and Kinzie 2018). For HIPs to have a formidable impact on students, access to those HIPs

that best fit their campus interest and meet the learning needs of their students must be provided. In order to make that determination, the administration must establish a process to assess HIPs and how they foster student learning individually and collectively. With that knowledge, the administration can fund those practices that most benefit students on their campus.

The services, space and personnel of the academic library are important elements to enhancing student learning on college campuses. These resources are valued by the campus community. However, the continuing growth of electronic access to content has forced librarians and library staff to rethink how the building space can be modified to better serve its users. The library has become a place for various types of learning to occur – active, group, individual, quiet. Continuous assessment of users' space is necessary to understand and meet students' evolving learning needs. Assessing library space usage can be an opportunity to engage with faculty and students, to enhance student learning, and to create a high-impact practice in the library.

For this project, the author wanted to conduct an ethnography of the two quiet floors in the library building. A recent campus discussion questioned usage in these spaces and thus stimulated the need for analysis. Librarians have adopted various ethnographic techniques, such as observation, interviews, and focus groups, to learn how the campus community used the library. An observational study would provide valuable information about the spaces on the quiet floors that users occupy. Gathering comprehensive usage data entails substantial investment – in both time and personnel. The librarian collaborated with a sociology professor to coordinate an observational study of the quiet floors so that it coincided with a semester long research methods course. After securing IRB (Institutional Review Board) approval, students enrolled in the

methods course had the opportunity to participate in a meaningful research study and be more engaged in their learning – the main goals in creating high-impact practices on college campuses.

HIPs and Higher Education

The Association for American Colleges & Universities (AAC&U) announced its Liberal Education and America's Promise (LEAP) initiative in the early 2000s. The group called on colleges and universities to commit to developing graduates prepared to meet the world challenges in the 21st century (Association for American Colleges & Universities, nd). Although we are well into this century, colleges and universities continue to form ways to engage students in their learning. The AAC&U report "College Learning for the New Global Century" provides an in-depth review of the learning outcomes colleges and universities must include in their curriculum in order to better prepare graduates. These include: deeper knowledge of the world and cultures, stronger intellectual and practical skills, social responsibility, and ability to apply their knowledge to solving new problems and issues (Association for American Colleges & Universities 2007). The report essentially encouraged higher educational institutions to thoroughly review their curriculum and determine ways to adopt these outcomes in their courses.

In addressing the learning outcomes proposed in the AAC&U report and with the goal to achieve better engagement with their students, colleges and universities have adopted high-impact practices. Although it is unclear how many schools offer high-impact practices, a recent study of state higher education institutions in California, Oregon, and Wisconsin revealed that first-year students and seniors participated on average between one and two HIPs during their college years (Finley and McNair 2013). The National Survey of Student Engagement (2017) revealed that for both first-year and senior students, participation in a Service-Learning project was the most prominent high-impact practice while conducting research with faculty was the

least important. Although students do participate in HIPs at their college or university, the limited depth and breadth of that participation minimizes student engagement and the benefit of HIPs to the overall student learning experience.

The diverse nature of HIPs allows for the incorporation of these practices into a variety of curricular or co-curricular programs. Examples include: a stand-alone course may assign a collaborative project; a campus-wide initiative such as establishing learning communities; or an individual faculty member and student collaborating on an extensive research project.

Undergraduate research is a HIP where students engage with faculty members on a specific project. These projects can be extensive and require substantive interaction between the student and the faculty. In 2008, Kuh reported that students who were given the opportunity to participate in research with faculty are more likely to persist at the institution, “gain more intellectually and personally, and choose a research-related field as a career.” (2008, 14). A challenge for higher education institutions in creating undergraduate research opportunities for their students is allowing professors to develop them with students. Professors are expected to focus on their personal research and publication as part of their professional development. They may be unable to commit time to supervising students on major research projects (Evans 2010). In addition, professors may be limited in how many students they supervise for a research project. Typically, these research experiences are one-on-one, and, in some situations, one faculty member may supervise a couple of students. But working with more than two or three students on an extensive research project is rare. Thus, there are limits on how many students can participate and benefit from an undergraduate research experience. Realizing the challenges that may arise when trying to offer or create an undergraduate research opportunity, a variation on this HIP is embedding the experience in a course (Lopatto 2010).

Libraries and HIPs

Although there is ample description and detail surrounding what are HIPs and the goals associated with them, institutions have flexibility in which practices to adopt into their students' learning experience and how they are incorporated on their campus. HIPs can take various forms in providing students with flexibility in finding an opportunity of interest and for faculty members in creating unique activities for their students. For HIPs to be successful, it is essential for them to be "hands on, integrative, and collaborative learning experiences." (Kuh, O'Donnell, and Schneider 2017, 11)

The role of libraries and librarians in the HIP discussion on college campuses has been limited. Although integral to student learning, libraries and librarians have been perceived as supporters to the learning process. Kuh and Gonyea researched the role of the library in student learning by analyzing student responses in the College Student Experience Questionnaire (CSEQ). Their study revealed the importance of students developing their information literacy skills while enrolled in college. Librarians are key educators in helping students determine their information needs, discovering new information, and evaluating the results. The authors found that at small undergraduate libraries, there was a strong correlation between students' library experiences and other academic work such as conducting research with a professor – one of the HIPs mentioned earlier (Kuh and Gonyea 2003). They recommended for librarians to engage with faculty members in their classes and be accessible to students to help them become information literate.

Riehle and Weiner (2013) reviewed how information literacy can be included in five high-impact practices: capstone experiences, learning communities, service learning and community-based learning, undergraduate research, and writing-intensive courses. They

determined that although information literacy was not explicitly stated as a learning goal in these practices, students did need competency in information literacy to realize the intended learning outcomes. The authors indicate that the planning and implementation process of high-impact practices should include librarians to ensure that students develop the needed skills to be effective information consumers and producers. Similarly, Gibson and Jacobson (2018) wrote that because high-impact practices are opportunities for students to question assumptions and engage in discourse outside the classroom, students need to develop their sense of inquiry and librarians must be involved in that learning.

Librarians have recognized the importance of being involved in the HIPs at their institution in order to keep students engaged in their learning and contribute to student retention. Murray (2015) examined the perspectives of academic library deans and directors about how the work of librarians, library resources, and library space align with the HIPs. His survey results indicated positive correlations between each of the ten HIPs and library instruction, library collection and library facilities. However, Murray fails to provide any insight from students on their experiences with the library – instruction, resources, or space – or how these contributed to their engagement or learning. His article does reveal the overwhelming support from library administrators regarding HIPs and the opportunities they offer librarians to actively engage in student learning on their campus.

Another way for librarians to engage with students in HIPs is to involve them in research projects. As a valued learning space, the library building contributes to student learning on campus. Librarians collect data to learn how people use the space and depending upon usage make space changes to better meet student learning needs. Librarians can engage undergraduate students in research projects to learn what are those needs. Such projects are an opportunity for

undergraduate students to enhance their learning. Students can learn more about the library and its usage by participating in a library space research project. By developing small-scale research projects in collaboration with faculty members, students are afforded the opportunity to actively participate in undergraduate research (Hunter and Ward 2011).

This author has an interest in learning how people use the library building — where they sit, what they do, and what changes are needed to better serve users in that space. Ethnographic research provides librarians with insight in how people use library services. By collecting data using ethnographic methods, librarians gain insight on what is beneficial for users and what challenges they confront when working in the library. As a campus learning space, librarians hope/wish/want people to use the library building effectively. We want the library to be a place in their lives and a place for learning. However, it is imperative to learn from our users about what spaces they frequent in the library and at what times. Are there spaces people do not wander into because they do not fit their needs? Is there something we can change about these spaces to make them more useful and pertinent in our users' lives? What makes a space attractive for student use? While research questions such as these can be examined using ethnographic methods, results from ethnographic research are limited and unique to the specific community that is being studied (Magnus, Belanger, and Farmer 2018). Ethnography helps researchers understand the patterns and connections in the specific population. In the case of libraries, ethnographic research informs librarians about their users' learning needs.

For students to benefit from HIPs, planning is essential. HIPs need to be structured, connected, and authentic learning experiences that benefit students (Landy 2015). Other features needed for HIPs to be successful include: high performance expectations, substantial time investment by students, substantive faculty-student interaction, experiences with diverse

demographic and ethnic populations, continuous and timely faculty feedback, connections between learning and real-world settings, opportunities for public display of knowledge, and opportunities to reflect on learning (Kuh, O'Donnell, and Schneider 2017). These features contribute to developing meaningful learning opportunities and increasing student engagement.

Undergraduate research is a high-impact practice that has gained substantial interest on college campuses. The focus of undergraduate research is “on the academic growth of the students” promoting inquiry and knowledge creation (Ash Merkel 2003, 40). Initially, undergraduate research centered on students in the sciences but lately has expanded to the humanities and social sciences (Brownell and Swaner 2010). For this research project, the goal was for sociology students in a research methods course to practice data collection through observation. This project provided students the opportunity to do research in a familiar space by applying the techniques discussed in class — connecting learning with real-world setting.

Library space research

Research on library space has attracted serious scholarly attention. The continuing growth of information available electronically reduces the need for people to travel to a library to satisfy their information needs. The discussion of library space has evolved from a space for books to a space for people. Library spaces need to encourage users to “expand learning and facilitate the creation of new knowledge” (Association of College & Research Libraries. 2018). Librarians have embraced the challenge of researching library space by investigating usage and learning from their users (students, faculty, staff, etc.) how the library building contributes to the campus learning culture.

The library building continues to be a valuable space that contributes to student learning on a college campus. The learning that occurs in the library is one that cannot be measured by tests or quizzes. It is an informal learning space where users choose the type of learning experience they want to have there. Librarians have redesigned spaces to support and encourage users learning behaviors (Lewis 2016). Thus, libraries offer spaces for group and collaborative learning and individual learning. Libraries have introduced new technologies to enhance student learning in the space. To create these spaces, librarians research library usage to help determine what are the users' space needs. Those spaces which users are drawn to may need to be expanded and the spaces which are underutilized may need to be reimagined. The physical space can be reconceptualized as one for teaching and learning on campus rather than one for storage (Harloe and Williams 2009). Librarians want these spaces to inspire users' learning and by observing how the space is used, they can better understand how it encourages such learning.

Conducting research is a valuable learning experience for college students. Research methods courses inform students about the different ways to collect data for analysis. Professors grapple with developing ways for students to operationalize the techniques taught in class and provide student with an authentic learning experience. A research project where students are actively participating in gathering data using a specific research method discussed in class enhances their learning and makes the theory more "real" or "relevant" to them (Liu and Briet 2013).

Collecting observational data is a time-consuming process for a single researcher. In an observational study, it is important to collect data at regular intervals on different days to see trends. The researcher also does not want to impact the behavior of the subjects occupying the research site. Thus, when investigating space usage in the library building, people might be

alarmed seeing the same individual observing their behavior. Often in observational studies, more than one researcher is collecting data and providing competent training to all involved is important.

Student researchers in a library space study

The library has two floors that are designated as quiet floors. On these floors, there are small study rooms, study carrels, table seating, and individual comfy chairs. The research question was simply “what spaces on these library floors do people use?” The data collected would help inform the librarians on what types of seating and spaces are popular as well as areas not being used. With this information, the librarians could discuss what changes they could make to improve the space for users. Collecting ethnographic data requires a consistent data intake system for it to be accurate and representative of the research site. The librarians knew students were using the quiet floors and using it as intended, but they were unsure which spaces students occupied on those floors and at what times.

To answer this research question, the author enlisted the help of a sociology professor teaching a research methods course. The librarian collaborated with the course professor to determine the appropriate time during the semester to conduct the observational study. It was important for the students to have the knowledge about observation as a research method prior to launching the project. The librarian also taught a session to students about the library as an “informal learning space” on campus and the challenge with collecting information on how people use the spaces in the building. She also explained how she has used observation in the past and how it has informed her librarianship. Students were trained on how to collect the data by tapping on the iPad where people were located on the 3rd and 4th floors of the library building. She also discussed with them the need to walk through the spaces systematically in order to

collect accurate data. Students were also provided walking maps of the floors so they knew how to proceed with the data collection.

Students were expected to observe the spaces three times for one week. They signed up online for slots to conduct the observation. Maps of the quiet floors indicating the seating locations were uploaded into Qualtrics® and formatted using the “Heat Map” specialty question feature in the system. Direct links were configured to the Qualtrics® surveys on the library iPads. Students borrowed the iPads from the library circulation desk to conduct the observation. At their designated time, students walked around the floors and tapped on the iPad the location on the floors where people were seated. They were instructed to tap once for each person they saw. The data collected gave the author insight on the usage in these spaces and helped determine popular areas and which areas could be modified to enhance usage.

One challenge facing college and universities that have adopted HIPs into their student experience is expanding student participation. The National Survey of Student Engagement indicated in 2007 that African-American, Latino, Transfer, and First-Generation students participated the least in HIPs (Kuh, O’Donnell, and Schneider 2017). For this observational study, all the students enrolled in the research methods course were expected to participate in the research project. As a course integrated undergraduate research project, this study allowed for an entire class to participate regardless of their academic status or ethnicity. The main limitation was that only students enrolled in this specific course were invited to serve as data collectors on the project. For students, the main challenge was choosing a day and time that worked with their schedule. Since data collection lasted for a week, students could choose from a wide range of timeslots to complete the study. The inclusive nature provided all the students enrolled in the course the opportunity to apply a research method to an actual research project.

This project was a first step in developing a hands-on research opportunity for the students. Students were only involved in data collection of usage in the library space. They did not conduct any data analysis, nor did they develop any conclusions based on the data. The intention is for the librarian and the faculty member to further collaborate and improve this initiative so that students can be better informed about a research project using observation as a method. In addition, the librarian now has a repository of usage data for the quiet floors in the library building.

Students were also required to write a reflection piece for the professor about the data collection experience. These essays were shared with the librarian after the conclusion of the semester. The reflections gave students the opportunity to discuss how the experience informed their knowledge of using observation as a research method. A key dimension of high-impact practices, reflection allows students the opportunity to “see connections between their studies and experiences in work settings” (Kuh, O’Donnell, and Schneider 2017, 11). The essays also informed the librarian about the challenges the students faced to complete the observation. Using the students’ reflection essays, the librarian can improve the project and give future students enrolled in the research methods course the opportunity to collect data and develop their skillset. (See the appendix for excerpts from the student reflection essays).

Reported student challenges/benefits

Students reported feeling awkward walking around the library to tabulate usage. Some tried to hide the fact that they were using an iPad so as not to draw attention to themselves. Others said they tried not to make eye contact particularly if they knew the people in the space. In one reflection piece, a student suggested making it possible to complete the data collection on their phone. The student felt that using a phone to collect data would be less conspicuous than on

the iPad. Another challenge posed by the students was what to do if a person's belongings were in the space but not a person. Should that space be indicated as being occupied at the time even though nobody was in the space? Through a discussion of the goal of the research project, the class concluded that those spaces should not be counted in the study. These discussions about conducting a research project gives students insight on new ways to collect data and thinking about possible glitches in the process that need to be resolved to maintain data integrity.

Students also commented on the benefits of completing the observation as part of the class. One of the HIP outcomes is to give students the opportunity to apply knowledge and skills to new settings (Kuh 2008). In this learning experience, students reported that conducting actual research gave them the opportunity to apply the technique they discussed in class. They found that collecting data via observation can be more difficult in practice than how it was presented in the literature. Students also provided suggestions to improve the project. These included more guidance on completing the observation and improving the visual quality of the maps on the iPad. Since the librarian created the maps, it did not pose problems for her to read. However, it will be necessary to gather more feedback to determine how to improve the maps for future studies.

Conclusion

Colleges and universities have incorporated HIPs into their educational structure to enhance student learning. The diverse nature of HIPs allows institutions to be intentional and selective as to which practices best fit the students' needs and the institution's values. Libraries have been involved in HIPs primarily in the realm of information literacy. Since preparing students to be competent consumers and producers of information during and after their undergraduate education, librarians are well-prepared to serve in this role.

However, librarians are researchers as well and can lead students in research projects. In this case study, the librarian collaborated with a course professor to design a research study of the library space. Together they created the assignment, the outcomes, and the librarian took responsibility for leading the students on the space study. The study provided students the opportunity to practice research techniques discussed in class and collect meaningful data. Essentially, this project emulated a form of undergraduate research where students performed research and created new knowledge. Students were also expected to reflect on this process where they discussed their experiences and what they learned from it. The challenges students expressed following the study will help improve the process for future classes where this project can be completed again. Any future collaboration between the librarian and the professor on this project, or another similar HIP experience will need to include a fuller assessment of student learning and engagement.

High-impact practices will continue to develop and expand in higher education. The various activities included in HIPs lend themselves to be developed in new ways to boost student engagement. More faculty members and departments will integrate HIPs into their work and librarians need to be involved. Librarian involvement in developing HIPs has centered primarily on developing information literacy skills in college students. However, as innovative professionals in higher education who are dedicated to enhancing student learning, librarians can create unique learning experiences at our institutions. These experiences will make us more accessible to students and help demonstrate to them and to our institutions our commitment to student learning and success.

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Appendix: Excerpts from student reflection essays regarding the observational study

“During the first observation, it was difficult to read the map. The third floor was a lot more difficult than the fourth floor. I wish the walk-through map would’ve been on the iPad because I constantly had to refer back to my phone in order to make sure I was going the right way.”

“I used the book shelves to hide behind when I was trying to see the people who were sitting in cubicles as I didn’t want them to see me looking at them and trying to count. Various times, I slowed down to look at books so I would blend in and not look suspicious.”

“Another challenge that occurred was while collecting the data, the students in the seats noticed I was collecting data for something and they became suspicious of what it was for. This may have caused some individuals to move seats.”

“In a way I felt some pressure to make sure I was correctly marking the people in their seats. In the back of my head I was thinking to myself I better not mess up or I could sku the data.”

“In general, data collection was awkward. I was not quite sure how to be subtle or blend into my surroundings. I attempted to be as casual as possible and not draw attention to myself, but holding an iPad, walking around the library, and kind of creepily looking at people made things a little weird.”

“Over all, the biggest challenge was being subtle and not too obvious about what I was doing. I wanted to get good data, but I also did not want to stand in one place for a while counting the amount of people in a specific area.”

“I thought it was very cool to actually experience going through a field study process. I also thought that the process was overall fun, and I could definitely see myself doing something like this in the future for my own studies. I liked the feeling of having to be inconspicuous and making sure others were not feeling uncomfortable or even offended by me standing near them with an iPad.”

“I also found it difficult to focus on the study when, at times I saw my friends sitting in certain areas and they had questions about what it was I was doing. I also ran into my boyfriend at one point on one of the floors and I couldn’t really stop to explain to him what it was I was doing wandering around the 3rd and 4th floors.”

“Walking upstairs and looking around, it was obvious to others that was observing them. For the most part no one asked questions, but I did receive some curious looks from students. One of the major reasons to why I feel this way is because I was walking around from one spot to another. Students may have interpreted it as suspicious because I was constantly moving.”

“I could not let anyone I knew that I was observing them; I was a complete observer. I had to be as invisible as possible. Observing actually made me realize how diverse the space usage is in the [retracted] library during this time and that many students are in the library at this time; at the least for my time observations. Challenges I faced in the data collection was trying to not seem so obvious even though I was carrying an iPad and walking around different areas of the library.”

“When I got in the field things weren't as simple as I thought that they would be, so finding out exactly where people were on the iPad was a bit challenging.”

“One challenge was that it was difficult to be subtle and not be obvious when I was taking the notes. I tried my best to not show anyone that I was taking notes about them. In addition to this was hard to avoid being seen by people I knew because I was not allowed to talk to them.”

“Another challenge was that the map was sometimes difficult to read so it took a while to figure out who was where. The experiment was interesting and I was glad to take part in it.”

“First of all, the map of the floors was very hard to read and identify what we were looking at.”

“Overall, this process was a great starting point for collecting this data but needs some tweaking. In my role I felt like I was correctly collecting the data, but I became weary of the process because I knew the results also relied on a number of other students to correctly collect the data. While it was a simple data collection process in the field, it was a great starting point to actually experience helping conduct a field study.”

“I felt very authoritative walking around the library with an iPad, but I think people did wonder what I was doing. I tried to be sly, but iPads are not subtle. I think if the iPad were replaced with iPhone, the study would be less intrusive and obvious.”

“It was very strange trying to casually take notes on people’s locations throughout the library without them noticing. It was especially hard when I had to record data on the inside of the classroom on the second floor, because I always got caught peering through the window.”

“The first was that the map was very confusing. I would have found it easier to navigate if it had incorporated more landmarks.”