Faculty Awareness and Use of an Institutional Repository at a Masters-Granting University

M. Elizabeth Downing-Turner & Jennifer Sauer

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M. Elizabeth Downing-Turner
Forsyth Library, Fort Hays State University

Jennifer Sauer
Forsyth Library, Fort Hays State University

ABSTRACT

Introduction: Assessment plays a significant role in managing a successful institutional repository (IR). This study combined the results of a faculty survey that measured faculty awareness of and participation in the IR of a single, state masters-granting institution with information regarding content type and downloads to draw conclusions regarding the composition and usage of the IR at this institution.

Method: A survey was sent to 856 faculty members at Fort Hays State University (FHSU) that asked questions regarding awareness of the IR and participation in the IR demonstrated through deposit and access of materials. Statistics regarding content type and full-text downloads were collected from the repository platform. Collected data were compared with previous studies at other similar institutions to determine similitude or difference between this IR and other IRs at masters and baccalaureate institutions.

Results & Discussion: Faculty awareness of and participation in the IR at FHSU is higher than that of other institutions, as shown in previous surveys, even though overall faculty participation remains low. The content of the IR is largely consistent with other similar institutions.

Conclusion: The faculty survey combined with information regarding repository usage demonstrates that the FHSU Scholars Repository serves a different purpose for both faculty and users than designers envisioned. Efforts to force the IR to resemble that of a research institution may be misplaced. Further research on the content makeup of IRs at masters and baccalaureate institutions is needed to establish commonalities among smaller institutions.

Keywords: institutional repositories, master's granting universities, teaching colleges, faculty awareness, faculty surveys, open access

IMPLICATIONS FOR PRACTICE

1. Repository managers at masters and baccalaureate institutions (MBIs) should take into consideration that faculty publications may not be the predominant content type for institutional repositories (IRs) at MBIs.

2. Faculty deposits in an IR as a measure of success may not be a good fit for IRs at MBIs where other content types are more commonly deposited.

3. Faculty awareness of an IR does not directly translate to faculty deposits.

4. More research is needed to establish commonalities among smaller institutions.

INTRODUCTION

Assessment plays a significant role in managing a successful institutional repository (IR). Testing assumptions regarding what an IR should be, and what purpose it serves at a particular institution, is necessary to ensure continued growth. In the fall of 2019, the IR team at Fort Hays State University (FHSU) devised a survey to measure faculty awareness and use of the FHSU Scholars Repository. Deployment of the survey was delayed because of the COVID-19 pandemic, but it was ultimately successfully distributed during the fall 2020 semester. The survey was designed to gather information about whether or not the various outreach efforts since the establishment of the IR were producing the desired outcomes of increased faculty awareness of and participation in the IR. The survey had a faculty response rate of just under 10%. From the results, the authors were able to conclude that, although the FHSU Scholars Repository resembles other repositories at similar institutions, faculty participation in the IR remains low overall in spite of a high level of awareness. These conclusions provide a baseline for further investigation into the cause of low faculty participation.

Background of the FHSU Scholars Repository

FHSU is a state public teaching college with the Carnegie Classification of "Master's Colleges and Universities–Larger Program." Total enrollment equals approximately 14,000 students. Forsyth Library began work to develop an IR proposal in 2015. The library saw the IR as a means of telling the FHSU story, collecting the creative and scholarly output of FHSU, and preserving regional cultural history. They hoped to expand the reach of FHSU scholarship as well as explore library as publisher. The library worked with the Office of the Provost to secure funding, and the FHSU Scholars Repository went live on the Digital Commons platform in January 2016 with a single philosophy open educational resource (OER) and the *Journal of International and Interdisciplinary Business Research*. The initial goal was to focus on faculty

works, archived and currently published university journals, and OERs with an eye toward encouraging open access as an economic and ethical choice.

Outreach efforts

In order to reach faculty and to encourage deposit, the FHSU Scholars Repository team held multiple faculty outreach events each year. These events focused mainly on open access as both an ethical choice as well as a means of expanding the reach of faculty scholarship. Professional development workshops that were aimed at familiarizing attendees with open access topics, Open Access Week educational events for authors seeking to retain their copyright, and presentations to departmental faculty regarding the submission process were generally well attended. In addition, email messaging was sent at least once each academic year to the departments, offering deposit assistance for faculty who wanted to participate in the IR. Messaging included information related to increased discoverability of their scholarship and publicized the benefits of having a permanent home for their works.

The FHSU Scholars Repository team developed a curriculum vitae (CV) analysis process whereby interested faculty needed only to submit their CV to the team and they would be contacted regarding eligible works for deposit. The Digital Commons SelectedWorks add-on was included in both events and messaging as another benefit of participating in the IR. Departments with robust research output were initially targeted, but messaging quickly expanded to include all departments.

LITERATURE REVIEW

The body of literature on the topic of IRs continues to grow; however, there is a significant gap regarding the experience of smaller institutions. The 2019 systematic literature review by Asadi et al. on the topic of IRs studied 115 articles published from 2007 to 2018 (p. 35,247). Of those articles, fewer than 10 related specifically to non-research institutions. A 2007 survey by Markey et al. found that, of institutions that have implemented an IR, 62.5% were research universities whereas only 18.8% were masters-granting universities. These numbers may help explain the gap in the literature regarding smaller institutions. To fill this gap, in 2008, Markey et al. surveyed 289 masters and baccalaureate institutions (MBIs). Of the MBIs surveyed, 18% had fully implemented an IR at that time. Comparing this with the 62.5% of research universities surveyed that had fully implemented an IR demonstrates the nascent presence of IRs at MBIs at the time (p. 162).

Nisa's 2021 review found that most literature reported that faculty articles are the most commonly deposited content type (9). Given that most repositories are at research institutions, it

follows that, while these conclusions would hold true for RIs, they may not extend to MBIs. In 2009, Xia and Opperman surveyed 20 masters-granting institutions and found that, unlike research universities, students contributed the largest percentage of content to the IR (p. 12). Most of this content took the form of masters theses. They also found that masters-granting institutions tend to have more faculty publications than bachelors-granting institutions, more peer-reviewed journals, and fewer teaching materials. Masters-granting institutions also tended to include archival and special collections materials. This supports the argument that, at the masters level, an IR plays a different role than it does at a research university. Its function more closely resembles that of a digital library than an open access clearinghouse for faculty works.

Nykanen's (2011) work reinforced Xia and Opperman's findings that student content dominated IRs at smaller institutions, with faculty works playing a significant yet secondary role in content contributions. Nykanen also found that smaller institutions included publications and archival materials, further supporting the conclusion that IRs at teaching institutions are more akin to digital libraries than their research institution counterparts (p. 13).

Oguz and Assefa (2014) addressed the challenge of soliciting faculty contributions to IRs at MBIs. They reported that just over half of faculty surveyed had a positive perception of the IR and its open access mission, and that their participation was tied to rank and scholarly output (p. 200). In 2017, Henry and Nevill revisited the topic of IRs at MBIs and found that 27% of institutions surveyed had an active IR. The content of those IRs mirrored that found in previous studies. Student theses represented a large portion of deposits, with peer-reviewed scholarly works making up the majority of faculty deposits (p. 131). This demonstrates that, as the number of IRs at MBIs grew, their content continued to resemble that of a digital library rather than shifting closer to the content makeup seen at large research institutions as demonstrated by the Nisa (2021) review.

Several studies have been conducted on the topic of faculty awareness of IRs, but as with most of the literature, they generally focus on larger schools with more research-based missions. In 2007, Watson surveyed faculty at Cranfield University, a small STEM college in the United Kingdom, and found that, among faculty, 57% had heard of the IR, but fewer (43%) could identify its purpose. Of those who reported knowledge of the purpose of the IR, 43% reported that they had deposited some work (p. 227). Watson concluded that, despite multiple presentations from IR staff and publicity through university print and electronic channels, faculty awareness of the IR and subsequent participation remained low. In 2011, Kim specifically looked at faculty awareness of IRs and discovered that direct contact from IR staff members is the most common means of developing

repository awareness in faculty. The author observed that about 40% of faculty members surveyed reported being aware of their institution's repository. Most faculty (30%) learned about their institution's IR directly from IR staff. Faculty cited website publicity from either the university or the library as the second most common means of developing IR awareness. IR staff presentations in meetings accounted for 17% of all responses. Only about 3% of faculty reported learning about the IR from email, mail, or fliers from library outreach efforts. This suggests that outreach efforts of this type are the least effective (p. 249).

Kocken and Wical (2013) were the first to address faculty awareness of IRs at teaching institutions. Their survey focused on a single liberal arts institution and specifically addressed awareness of open access among faculty members. Kocken and Wical argued that faculty awareness of open access was a precondition to IR contribution. From their survey, they observed that many faculty did not have a robust understanding of open access as a scholarly communications concept. They concluded that this lack of understanding created a barrier to faculty participation in the absence of mandates from administration or a clear tie to the promotion and tenure process (pp. 144-149).

When Hahn and Wyatt (2014) surveyed business faculty across multiple institutions, nearly 70% of respondents reported no knowledge of their IR, and fewer than 15% had actually deposited works in an IR (p. 96). A 2014 study by Dutta and Paul on faculty awareness of IR-related issues found that 51% of faculty surveyed reported being aware of their IR. Of those respondents, 79% reported learning about their IR from the internet, whereas only 12% had heard about the IR from their librarians (p. 295). In 2015, Yang and Li surveyed TAMU faculty and found that 27% of responding faculty reported being aware of the IR, with only 7% having deposited into the IR (p. 8). They also found that the deposit process served as the greatest barrier to faculty participation, with 84% of responding faculty reporting that they did not understand the process. Many faculty reported concerns regarding IR deposit affecting the publication process (p. 9). Overall themes within the literature suggest that faculty awareness does not always translate to faculty participation in the IR and that barriers to success in this area are variable depending on the institution, faculty promotion and tenure, and faculty discipline. (Figure 1)

METHODS

The FHSU Scholars Repository team designed a 12-question survey for the purpose of collecting data on faculty awareness of the existence of the FHSU Scholars Repository and faculty use of the IR. Demographic information collected pertained to appointment status, length of employment, and general discipline. Responses were completely anonymous. The survey was
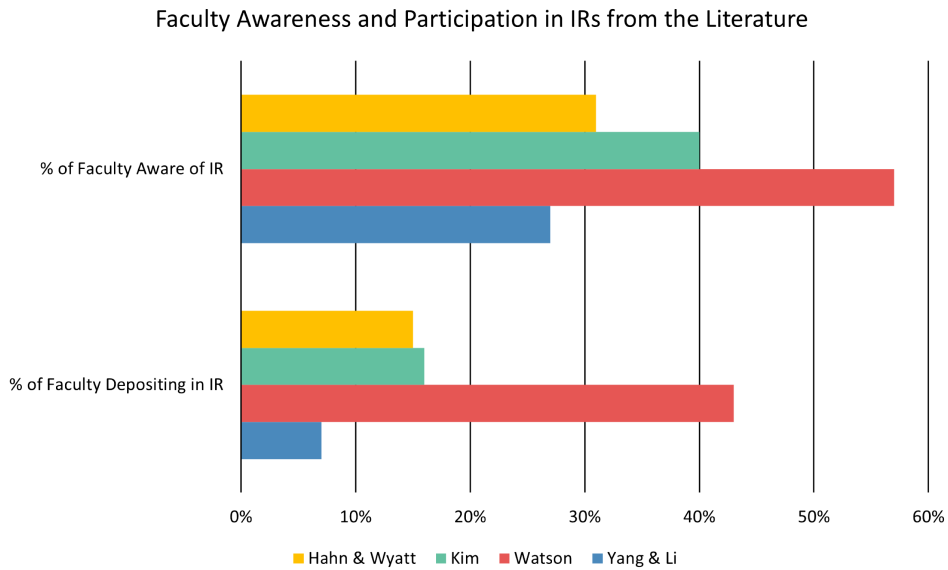
Faculty Awareness and Participation in IRs from the Literature

Figure 1. Faculty Awareness of and Participation in IRs from the Literature.

approved by the institutional review board in spring 2020 and deployed during the fall. It remained open during the 16-week period of the fall 2020 semester. It was administered through Qualtrics software, and a link to the survey was sent by email to the faculty list. The survey was also advertised through the daily campus-wide email, and two reminder emails were sent during the semester to encourage participation. Limitations included that it was a self-selecting population. There were no means of verifying faculty appointment status, and so some individuals reporting non-faculty appointments answered the survey.

In order to facilitate the comparison with other institutions from the literature, content type statistics and download numbers were exported from the Digital Commons platform. Data were collected from the first day the repository went live on January 16, 2016 to June 30, 2021. Content was separated by type as indicated in Table 1, and downloads were reported as full-text downloads.

RESULTS

The survey was emailed to 856 individuals and received 84 total responses for a response rate of 9.81%. Of the 84 initial respondents, 80 agreed to continue the survey, with 54 respondents answering every question. Of the faculty members who responded, 68% reported being generally aware that the IR existed. (Figure 2) This number is higher than what other investigators found in previous studies (Watson, 2007; Kim, 2011; Dutta & Paul, 2014; Hahn & Wyatt, 2014; Yang & Li, 2015).

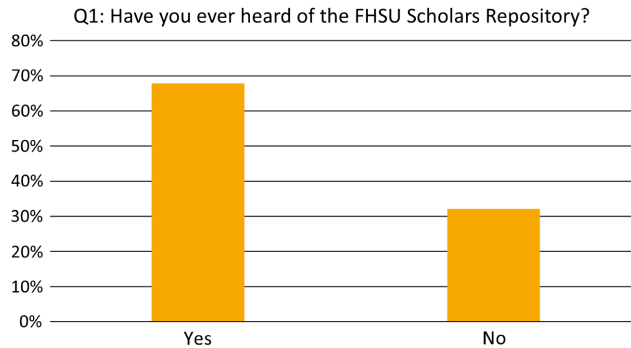| Type	Total No. of Items	%
Archives	3,940	46.07%
Faculty Monographs	98	1.15%
Faculty Publications	111	1.30%
OERs	8	0.09%
Other	37	0.43%
Other Student Work	167	1.95%
Peer-Review Journals	1,077	12.59%
Theses	3,114	36.41%
Total	**8,552**	**100.00%**

Table 1. Types of Content.

Figure 2. Survey Reponses to Question 1

Of the faculty who reported awareness of the repository, 78% indicated that they knew the purpose of the IR, and 79% indicated that they knew who was eligible to deposit work into the IR. A little over half of faculty respondents (54%) reported that they knew who to contact in the event they wished to submit a work. For faculty who reported awareness of the repository, only 40% reported having deposited a work in the IR. (Figure 3) This number is higher than what Kim (2011), Hahn & Wyatt (2014) and Yang & Li (2015) observed but similar to what Watson (2007) found.

Faculty use of the IR

When asked about their personal use of the IR, the vast majority (71%) reported that they had never used the IR for anything other than depositing their own work. Of the 29% who reported using the IR for purposes other than deposit, 30% reported using it to access other
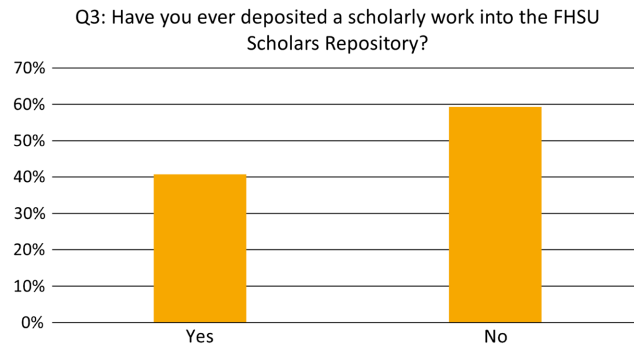
Q3: Have you ever deposited a scholarly work into the FHSU
Scholars Repository?

Figure 3. Survey Responses to Question 3

faculty research, and 22% reported that they went to the IR to seek out masters theses. Nineteen percent went to the IR looking for undergraduate research. Only 3% of respondents reported that they went to the IR to access university-hosted peer-reviewed journals. (Figure 4)
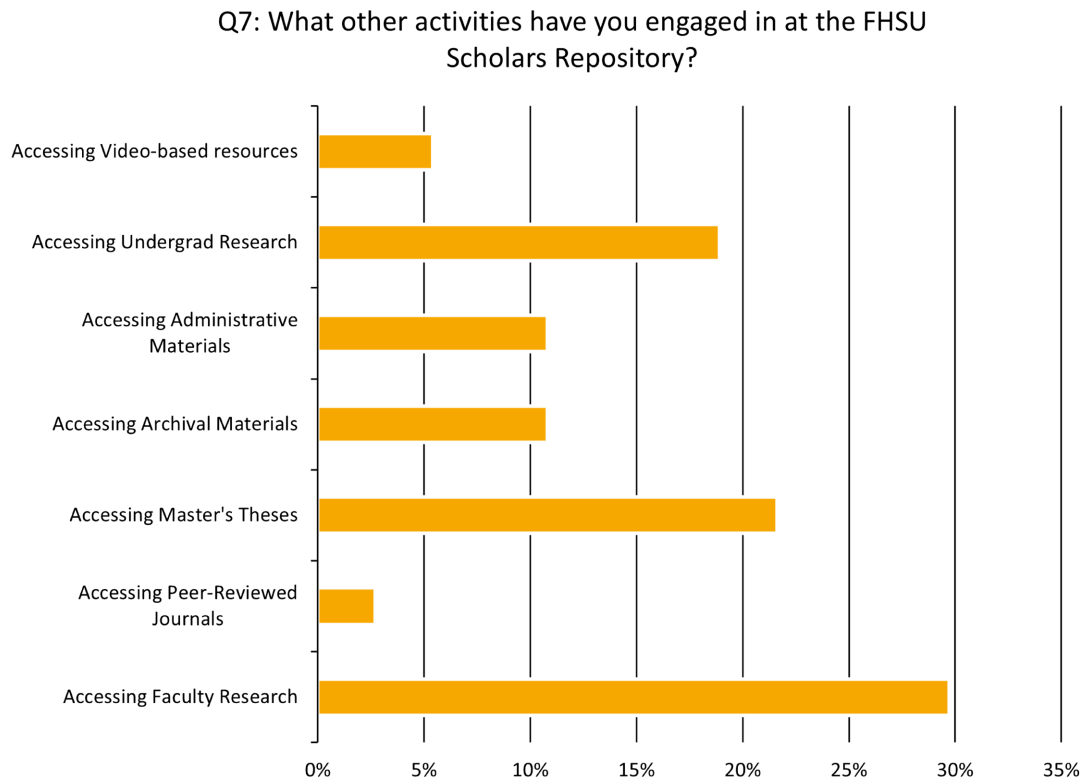
Q7: What other activities have you engaged in at the FHSU
Scholars Repository?

Figure 4. Survey Responses to Question 7

Respondent demographics

Respondents were not asked detailed demographic information, but they were asked about appointment status, employment length, tenure status, and their broad disciplinary area. The majority of respondents (71%) reported being on the tenure track, and 29% reported being non–tenure-track faculty members. Five adjunct faculty members participated in the survey. A total of 14 respondents reported not being on a faculty appointment. Most respondents reported that they were not tenured (72%) and that they had either been with the university for more than 11 years (31%) or for fewer than 2 years (28%). About a quarter of respondents fell into the 3- to 5-year employment length range, whereas only 16% reported being employed for between 6 and 10 years. (Figure 5) The majority of respondents reported that their field fell into the broad social sciences (46%), with 39% coming from the humanities and 15% from STEM fields. When asked about whether or not they had published a peer-reviewed article in the past two years, the numbers were almost evenly split between those who had published and those who had not. (Figure 6)

FHSU Scholars Repository content and usage summary

The content in the FHSU Scholars Repository is largely similar to that of other MBIs examined in the literature. At the time of the survey, the repository hosted 8,552 individual items. Of those items, the majority were from archives (46%), followed by masters theses (36%). Faculty publications, including articles and monographs, represent 2.4% of deposits. Peer-reviewed journals hosted on the platform constituted 12.6% of all deposits, while teaching materials in the form of OERs made up less than 1% of deposits. (Table 1)
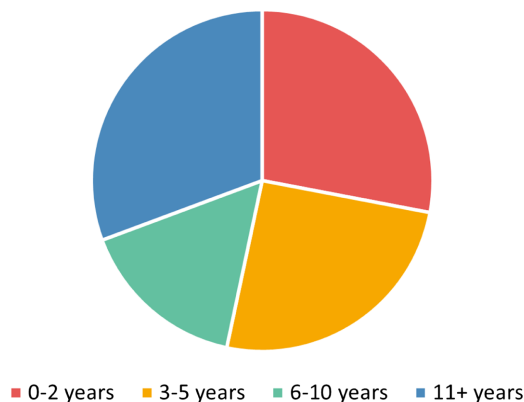
Q10: How long have you been faculty at FHSU?

■ 0-2 years   ■ 3-5 years   ■ 6-10 years   ■ 11+ years

Figure 5. Survey Responses to Question 10

Q12: Have you published a scholarly work in the past two years?
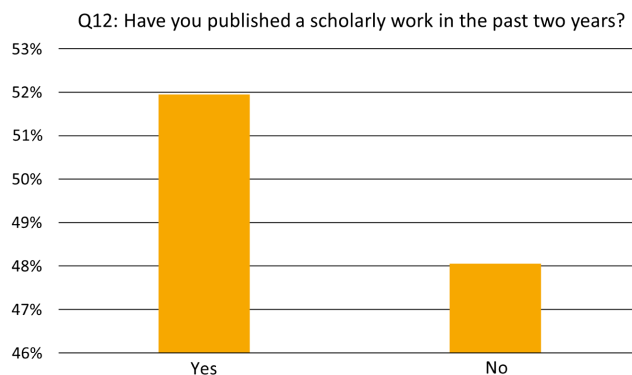
Figure 6. Survey Responses to Question 12

Type	Total No. of Downloads	%
Archives	44,894	7.72%
Faculty Monographs	17,922	3.08%
Faculty Publications	7,161	1.23%
OERs	20,240	3.48%
Other	539	0.09%
Other Student Work	15,872	2.73%
Peer-Review Journals	342,960	58.94%
Theses	132,261	22.73%
Total	**581,849**	**100.00%**

Table 2. Full-Text Downloads.

While the percentage of faculty-contributed content is on par with what has been reported by other scholars, the FHSU Scholars Repository tends to host fewer student-created materials and more archival materials than other similar schools. (Figure 7)

Repository usage

Although archival materials make up the bulk of the content of the FHSU Scholars Repository, peer-reviewed journals hosted by the repository drive the most usage, with 59% of all full-text downloads coming from those journals. Masters theses comes in second, with 23% of all full-text downloads. Faculty publications constitute 4% of all downloads. Even though OERs constitute only 0.9% of deposits, they account for 3.5% of downloads. All other materials, including archival materials and other student works, contribute 10.5% of full-text downloads from the repository. (Table 2) This demonstrates
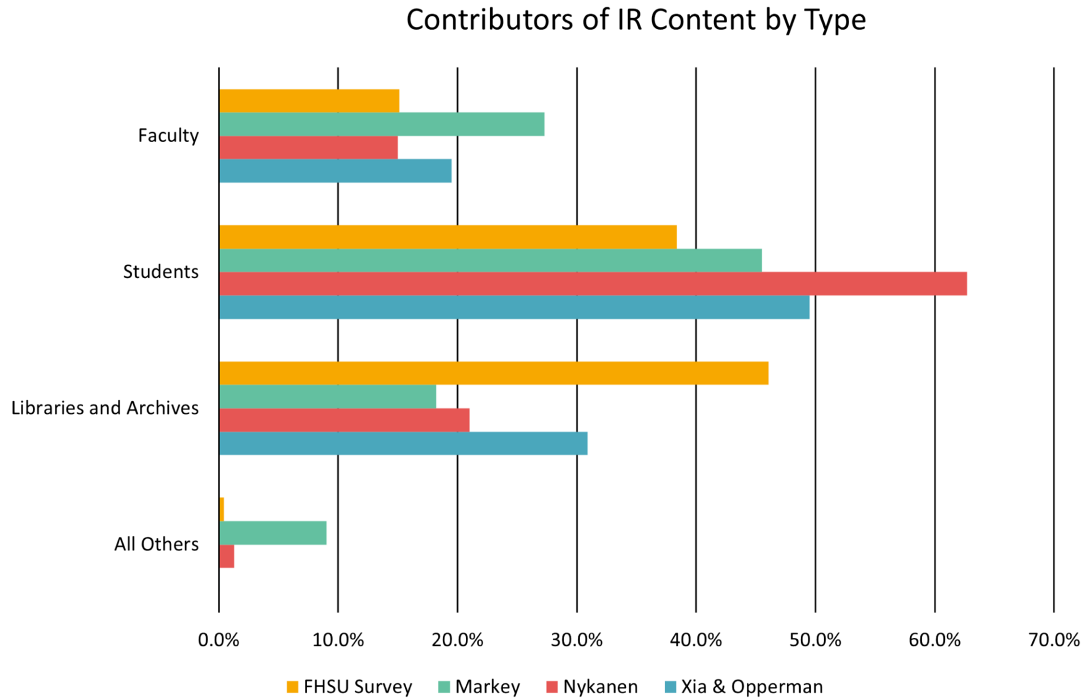
Contributors of IR Content by Type

Figure 7. Contributors of IR Content by Type.

that faculty publications are not a major content area, nor do they receive significant numbers of downloads despite the initial planning for the IR and the outreach efforts of IR managers.

DISCUSSION

The FHSU Scholars Repository faculty survey revealed many of the same trends found in previous studies. For example, even though faculty may report being aware of the IR, that does not always translate to more deposits. However, when compared with other institutions, more FHSU faculty with an awareness of the repository deposit their work than those at other schools. This suggests that even though faculty deposits remain low overall at FHSU, for faculty who are aware of the IR, the majority ultimately deposit works. The Watson (2007) study is the only study to report a higher rate of aware faculty who also deposit than FHSU. (Table 3)

For the FHSU Scholars Repository team, this survey confirms that small, faculty-focused events and messaging are producing desired results. Previous outreach efforts were initiated without consideration for where faculty were in the publishing process. It may be worthwhile to tie future outreach activities to faculty output by engaging with authors at the time of

Study	Percentage of Faculty Aware of IR	Percentage of Faculty Depositing in IR	Percentage of Aware Faculty Who Deposit
Yang & Li	27%	7%	26%
Watson	57%	43%	75%
Kim	40%	16%	40%
Hahn & Wyatt	31%	15%	48%
FHSU Survey	**68%**	**40%**	**59%**

Table 3. Comparison of Faculty Awareness and Participation in IRs.

publication. So far, outreach efforts have been library-centric. Collaborating with other departments focused on the scholarly communication life cycle may be another means of increasing faculty awareness of and participation in the IR. Although the survey did not address the submission process, it may be valuable to explore whether a streamlined approach to faculty deposit or CV analysis will increase participation in the IR.

The survey was intended to collect information regarding the period 2016-2019. Although deployment of the instrument was delayed because of the emergence of COVID-19, the authors made the conscious decision not to alter the survey in response given the unknowns of the future. Any discussion regarding the impact of the COVID-19 pandemic on the IR is outside of the scope of this article. Although the timing of the survey may have had an impact on the response rate, it is not inconsistent with the response rate of other library-administered surveys at this institution. The fall 2020 semester was complicated by the COVID-19 pandemic and a move to remote teaching. Because of this, fewer faculty may have been motivated to participate. It may be worthwhile to revisit the survey at a time when all faculty are on campus.

CONCLUSION

The faculty survey combined with information regarding repository usage demonstrates that the FHSU Scholars Repository serves a different purpose for both faculty and users than designers envisioned. However, the makeup of the repository remains comparable to the experience of other similar institutions. The findings of this survey help build the case that IRs at MBIs are distinct from their research institution counterparts, which supports the argument that an IR at a teaching institution meets a different need than one at a research-focused institution.

In terms of awareness, IR staff efforts have been largely successful at FHSU. Outreach activities have produced a relatively high level of awareness among faculty, which has increased faculty deposits to the IR as compared with other institutions. Future planning for repository growth must include an acknowledgement of the unique character of a teaching-focused MBI. Efforts to

force the IR to resemble that of a research institution may be misplaced. Further research on the content makeup of IRs at MBIs is needed to establish commonalities among smaller institutions.

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APPENDIX A. SURVEY

1. Have you heard of the FHSU Scholars Repository?

    a. Yes

    b. No

2. Has anyone ever communicated the purpose of the FHSU Scholars Repository to you?

    a. Yes

    b. No

3. Have you ever deposited a scholarly work into the FHSU Scholars Repository?

    a. Yes

    b. no

4. Are you aware that all currently serving faculty members are eligible to deposit some or all of their published scholarly works in the FHSU Scholars Repository?

    a. Yes

    b. No

5. Do you know who to contact if you would like to submit works to the FHSU Scholars Repository?

    a. Yes

    b. No

6. Have you ever used the FHSU Scholars Repository for something other than depositing a faculty scholarly work?

    a. Yes

    b. No

7. If yes, what did you use it for?

   a. Accessing faculty research
   b. Accessing or submitting to a hosted journal like *Teacher Scholar*
   c. Accessing or depositing a Master's Thesis or Master of Fine Arts Catalog
   d. Accessing archival materials like the Reveille Yearbooks
   e. Accessing administrative materials like Faculty Senate Minutes or the Tiger Daily Archive
   f. Accessing undergraduate work like the SACAD winning entries
   g. Accessing video-based materials like the Times Talk Archive or Tiger Tales.
   h. Other
   i. Long form

8. Which best describes your faculty appointment status?

   a. Tenure track faculty
   b. Non-tenure track faculty
   c. Adjunct Faculty
   d. Program Specialist
   e. I am not on a faculty appointment

9. How long have you been faculty at FHSU?

   a. 0-2 years
   b. 3-5 years
   c. 6-10 years
   d. 11+ years

10. Are you tenured?

   a. Yes
   b. No

11. Have you published in the past two years?

    a.   Yes

    b.   No

12. What field are you associated with?

    a.   Humanities

    b.   Social Sciences

    c.   STEM