

[Accepted Manuscript]

This is an Accepted Manuscript of an article published by Taylor & Francis in New Review of

Academic Librarianship on Apr 26, 2019, available online:

<https://www.tandfonline.com/doi/full/10.1080/13614533.2019.1587483>

Institutional repository promotion: Current practices and opinions in Texas academia

Soo-yeon Hwang <syhwang@shsu.edu>

Susan Elkins <selkins@shsu.edu>

Michael Hanson <hansonm@shsu.edu>

Trent Shotwell <stshotwell@shsu.edu>

Molly Thompson <mmt001@shsu.edu>

*Sam Houston State University*

Corresponding author's contact information:

Soo-yeon Hwang <syhwang@shsu.edu>

Sam Houston State University, Box 2179, Huntsville TX 77341

## **Abstract**

Promoting an institutional repository (IR) to both faculty and end-users can be challenging. We surveyed academic libraries with an IR in Texas, and asked both library administrators and IR managers about their efforts to promote and grow their IR in both size and downloads. In addition, we studied the websites of Association of Research Libraries and Texas academic libraries to see how other institutions place links to their IRs on the websites and name them in different ways to draw attention. We probed and discuss findings regarding active marketing to faculty in order to grow the IR size, and passive promotion efforts such as linking on the library website, custom branding to help people find and remember the IR, and so on. We found that most marketing was geared towards faculty, and little active marketing efforts were made to the end-users.

**Keywords:** Institutional repository; marketing; outreach; promotion; Texas academic libraries; Association of Research Libraries

## **Introduction**

Institutional repositories (IRs) are an integral part of many academic institutions. These repositories are sets of services that create an open access digital archive filled with the institution's scholarly work and communication created by the faculty, administration, and students.

Most institutions house their IRs within their libraries (Henry & Neville, 2017; Xia & Opperman, 2010; Jantz & Wilson, 2008). Our institution is the twelfth largest university in Texas with more than 21,000 students, and the Carnegie Commission on Higher Education classifies us as a Doctoral Research University. The Library established our IR in 2016 with the initial purpose of storing electronic theses and dissertations (ETDs) and collecting faculty research.

In an effort to promote the new IR, we had many questions about what our peer institutions in Texas were doing. Hence, we conducted this study to learn what those in the field think about various IR promotion methods, and what has worked well for them and what has not. In addition, we surveyed two different populations, library administrators and IR managers, to listen to their perspectives on IR promotion efforts from different point of views.

## **Literature Review**

Numerous factors affect the adoption and success of IRs. Cullen and Chawner (2010) examined many factors from the point of view of the library managers who established them. The study found that an IR's success was not easily measured. Managers frequently measured success of their IRs by the comprehensiveness of the repository along with its growth and usage. Institutional buy-in is essential. Upon an examination of the literature, we categorized the types of promotion practices described as active and passive outreach.

### **Active Outreach: Marketing**

One of the most difficult yet essential aspects of marketing an IR is convincing potential contributors that depositing materials in the IR can meet their needs. Much has been written about faculty's apathy and reluctance to contribute their scholarship to the IRs and the ways librarians work to overcome these hurdles. Appeals for more open access to research, fiscal savings, and showcasing an institution's scholarly output have not necessarily motivated faculty to self-archive (Cullen & Chawner, 2010). Faculty found self-archiving in the IRs inconvenient and unnecessary to meet their tenure and scholarly goals (Foster & Gibbons, 2005; Giesecke, 2011; Fortier & Laws, 2014).

Faculties want increased dispersal of their research in furtherance of their academic and career goals (Foster & Gibbons, 2005; Giesecke, 2011; Fortier & Laws, 2014). IR managers can demonstrate this through usage statistics on repository downloads (Giesecke, 2011; Schlangen, 2015). Institutions have tried to increase faculty content deposits by establishing open access mandates which require authors to publish in open access journals or deposit articles into the IRs (Xia et al., 2012; Zhang et al., 2015; Borrego, 2016). They have also moved the responsibility of depositing research from the faculty to mediated models, where library staffs track faculty publications, secure the rights and permissions to deposit an iteration of a work, and archive the works (Giesecke, 2011; Armstrong, 2014; Schlangen, 2015). Performing outreach to university community members besides faculty helps to make IRs comprehensive. Many IRs have included theses and dissertations, instructional materials, student projects, prize-winning student papers, institutional archives, academic journals, conference materials, reports for inter-institutional projects, reports from student learning, and university/governmental collaborations (Bates et al., 2007; Yiotis, 2008; Xia & Opperman, 2010; Fortier & Laws, 2014; Bull & Eden, 2014; Ghinazzi & Hanson, 2018).

Collecting materials for the IR may require additional methods of outreach and collaboration with the institution's administrators, staff, and students as well as the faculty. Face to face outreach is generally seen as the most effective way to recruit content. IR promoters need to network and create as many personal connections as they can (Schlangen, 2015). Marketing events such as workshops, attending department meetings and faculty governance councils, and meeting with university administration and service units are common (Fortier & Laws, 2014). Utilizing fliers, personal letters, mass emails, brochures, and notices placed on notice boards are other ways to market the IRs (Schlangen 2015; Thompson et al., 2016). For an IR to remain relevant over time, IR managers must perpetually convince content producers to deposit their new work. (Fortier & Laws, 2014; Cullen & Chawner, 2010).

### **Passive Outreach: Branding and Library Website Links**

In addition to the active marketing of the repository with the purpose of content acquisition, it is important to incorporate passive marketing strategies through the design of the repository's web presence. An obvious form of passive marketing is the naming or branding of an IR and using that branding in the webpage links. However, the branding of an IR is a fraught question. From early on, IR administrators recognized that both depositors and end-users do not understand what the term "institutional repository" means (Foster & Gibbons, 2005; Gaffney, 2008). For example, a user looking for an electronic thesis or dissertation does not readily understand that they need to look in an institutional repository for these resources (St. Jean et al., 2011). At the same time, IRs branded with creative names also do not communicate to depositors and users what an IR is and what is stored there. In the case of Carnegie Mellon University's IR, Research Showcase, users did not realize it was a repository (Covey, 2011).

A major area of interest to the researchers is the inclusion and location of links to the IRs on the libraries' websites, specifically which page the link is on. Jantz and Wilson (2008) "believe that the location and ease of use of a navigational path to an IR site from a library Web site are good indicators of effective marketing" (p. 190). After assessing Association of Research Libraries (ARL) institutions' websites for navigational paths to IRs, they found that there were nine common link paths to IRs: scholarly communication page, for faculty, collections and resources, home page, services, news and events, about, digital projects and finding information. Their results show that only 40 out of 63 ARL intuitions at the time had links to their IRs somewhere on the library website. Out of the 40, most were linked on the scholarly communication page and only 4 had a direct link on their home page. Mercer and others' research (2011) included a similar observational study on ARL libraries' webpages and IRs, and concluded that "most institutional repositories are two to four links from the home page" (p. 335). Henry and Neville (2017) analyzed Carnegie-designated master's institutions' IR for findability through search engines and directories, charted the navigational paths on the libraries' websites, and documented types of content. Following Jantz and Wilson's method, Henry and Neville found that 62% of libraries out of their population had links to their IR directly on the library homepage, followed closely by digital projects/collections page (60%) and scholarly communication page (58%).

### **End-User Promotion**

Promotion of a repository to end-users may fall into either active or passive outreach. Many researchers have concluded that most IR traffic comes from search engines (Mercer et al., 2011; Wesolek, 2013; Coates, 2014; Koler-Povh et al., 2014; Sterman, 2014; Tay, 2017) which might lead one to think that IR link placement is not important with regards to end-user access.

St. Jean and others (2011) interviewed 20 IR end-users, and discovered that most found the IR through a link on the library's homepage, followed by a Google search. Henry and Neville (2017) think "good metadata and navigational links allow users from any location to find IR content," and their research "indicates that IRs are more visible when links are provided on a variety of library webpages" (p. 129). Coates (2014) used Google analytics to study where and how users of Auburn University's electronic theses and dissertations found the repository. She found that the majority (70%) of out of state users (which is also the majority of total users) discovered the ETDs through a search engine. As for marketing to end-users, research has shown that due to the nature of the content in IRs, the promotion that is done for other library resources is not effective (Perrin et. al., 2017). According to Perrin and others, marketing has been proven successful when librarians have identified communities that have already expressed interest in a topic and then marketed a digital collection to them. One creative example of marketing in this way was when Purdue University librarians manned a booth at the state fair where they highlighted Purdue's IR having documents from their extension services in their IR that could help fair attendees improve their crop yields (Schlangen, 2015). Another was when Texas Tech provided an index of photos of sailing ships deposited in their IR by a faculty member to Shipindex.org website and saw a sustained use of the resource (Perrin et. al., 2017).

### **Research Questions**

As discussed above, the literature review found two types of IR promotion methods: active and passive. We have research questions in both aspects. As for the active marketing efforts, we found that various methods have been used to promote faculty deposits into an IR. In this regard, our question is:

RQ1: What do those in the field think about the various methods to encourage more faculty deposits? What has worked, and what has not?

RQ1-1: Does open access mandate increase the IR size?

For the passive promotion efforts, we found examples of branding and website link placement. Our questions are:

RQ2: Does custom naming (branding) make a difference in the IR usage (deposits and downloads)?

RQ3: Is there any relationship between the website link placement (link depth) and the IR usage?

Our final research question has to do with end-user promotion. From the literature review, it was not clear whether this fell into the active or the passive promotion category. The fact that most traffic comes from search engines makes it sound like this is more a passive effort, but we wanted to learn if there was any additional active efforts in this area.

RQ4: What do those in the field do in terms of end-user promotion? Are the efforts active or passive?

## **Methods**

To probe into our research questions, we designed a survey as well as conducted content analysis of various academic library websites. Our primary population was Texas academic libraries as they are our peer institutions in the same state: libraries in the Texas Council of State University Libraries (TCSUL) and the Texas Independent College and University Libraries (TICUL). Two surveys were constructed: one for the library administrators and another for those in charge of IRs (IR managers) as these groups might have different viewpoints and opinions on the same matters.

For the survey, we collected the contact information of TCSUL and TICUL library administrators (37 total) and IR managers (35 total; one institution did not have a dedicated IR manager and the other used the system from another Texas university); we considered only the institutions with an IR. We constructed the survey questions based on our research questions, along with some demographic questions about their IR on the IR managers' survey side.

We also reviewed various academic library websites to learn their link depths to the IR and their link texts/labels. This was an effort to update the findings of the literature on link depths with latest data, as well as to learn their branding efforts. In addition to the TCSUL and the TICUL library websites, we also studied Association of Research Libraries (ARL) websites. ARL members are not exactly our peers but aspirational institutions, and we were curious of their practices. For this, we visited each academic institution's library website, and gathered the following data:

- Whether the IR exists
- Number of clicks (and link paths) to the IR from the library homepage
- Link text (label)

## **Results**

The response rates of the surveys were 8 out of 37 (24%) for library administrators, and 17 out of 35 (49%) for IR managers.

Our library website reviews also found that for the Association of Research Libraries (ARL) member institutions, 105 out of 113 academic libraries (93%) had an IR. (We excluded non-academic libraries from the analysis.) As for the Texas TCSUL (Texas Council of State University Libraries) member institutions, 27 out of 54 institutions (50%) had an IR. For the Texas TICUL (Texas Independent College and University Libraries) member institutions, only 10 out of 38 institutions (26%) had an IR.

## **IR Demographics**

We asked IR managers some details about their repository holdings. Our surveys targeted institutions with IRs that varied in size from a hundred items to up to more than 77,000. We were interested in knowing if and how they collected usage statistics. Some said they do not have access to the number of downloads or do not collect such statistics, but most used at least the built-in statistics module that is part of the IR system (DSpace or Digital Commons). A few places also mentioned Google Analytics.

When asked what kinds of materials are housed in the IR, the managers reported a wide variety of item types. The most common were theses and dissertations. Other materials included faculty publications, student publications, digitized university archive materials, and datasets. Some managers reported less common items such as videos of campus events, newsletters, open-access journals, and state agency publications. This shows the wide diversity of materials in IRs and stresses the issue of trying to promote and brand an IR for maximum understanding and use.

<Figure 1 goes here>

## **Active Promotion Efforts**

RQ1: What do those in the field think about the various methods to encourage more faculty deposits? What has worked, and what has not?

The majority of the time, effort, and work in promoting the IR seems to be directed at the faculty. IR managers, liaison librarians and the Scholarly Communication offices are promoting the IR to the faculty as both users and depositors. The goal is to show, explain, and get buy-in from the faculty. As for the promotion method, 38% of the IR managers reported meeting with the faculty in small groups or one-on-one basis, which was the most popular method. Other methods included attending faculty events such as socials, orientations, and faculty senate;

contacting faculty when they publish articles to remind them to submit to the IR; sending out emails or writing articles for campus newsletter; and holding workshops. The least popular method was using the library website links, which was mentioned by 8% of IR managers. Most managers took active steps to contact faculty and promote the IR services.

On the other hand, the views of the administrators differed from those of IR managers. On the topic of promoting/marketing the IR to the faculty, administrators were almost equally split between personal meetings with faculty, utilizing the Scholarly Communications office, and the institutional website. Also mentioned, but the least popular, was workshops.

100% of the library administrators answered that they looked to other universities for ideas or inspiration when they began promoting their IR, whereas only 80% of the IR managers did the same.

Many IR managers mentioned obstacles in promoting/marketing the IR. The biggest obstacle at 62% was the faculty and staff attitude and knowledge: Trying to educate the faculty and staff about what an IR is and how it can help them. Moreover, one manager said:

The biggest obstacle is that there is not a culture of public sharing; the area of grants is quite competitive, the pressure to publish immense, and so authors would rather hang onto a conference poster or some other work rather than risk any conflict with a publisher, even in cases where the publisher allows for institutional repository deposits, or when the publisher does not regard some IR content (such as theses) to be a type of “previously published” conflict.

At the same time, IR managers needed to be knowledgeable about scholarly communications, copyright, and open access in order to answer any questions that may come up.

All of these can be very time consuming, so it is not a surprise that 29% of IR managers said that time and ability to do outreach were notable obstacles in the promotion and success of the IR.

Library administrators also mentioned some obstacles in promoting the IR, which could come from both inside and outside the library. Understanding what an IR is, why it is important and why it would be beneficial, was once again the most common obstacle (67%). Gaining faculty interest and buy-in was seen as an ongoing struggle. Copyright and educating the faculty about copyright (34%) and the time and capacity to perform outreach (17%) were mentioned as obstacles as well. Administrators also mentioned that education about the IR to the library staff was necessary.

RQ1-1: Does open access mandate increase the IR size?

We inquired in the survey about open access mandates. We asked both administrators and IR managers whether they have an open access mandate, and asked IR managers if they saw an increase in the submission rate because of it. Only 1 out of 8 administrators said they have open access mandate, and 20% (n=3 out of 15) of the IR managers indicated the same. Of those three IR managers with open access policy, two (66%) answered that they saw an increase in the submission rate for IR after the mandate. One answered that they do not have “reliable, readily available information about increase in submission rates.”

We also compared the group average IR size of those with open access mandate and those without. To answer the question of if the group with open access mandate and the group without differ with regard to their average IR size, we conducted an independent samples T test. The table shows that having an open access mandate does not present a statistically significant difference in the IR size ( $p = .372$ ).

<Table 1 goes here>

## Passive Promotion Efforts

RQ2: Does custom naming (branding) make a difference in the IR usage (deposits and downloads)?

We asked both the administrators and the IR managers whether they gave a custom name to their IR. Six out of seven administrators answered yes to that question. As for IR managers, nine out of 14 answered yes.

The majority (about 75%) of custom names came from a library committee or library director. The IRs were most commonly named after a campus feature (e.g. oak trees) or the software used (e.g. Digital Commons).

To answer RQ2, we conducted an independent samples T tests on the IR size and the IR downloads variables, grouped by the variable of whether the IR had a custom name or not. That is, we investigated the IR usage in two ways: one in terms of how many items were deposited in the IR, and two in terms of how many downloads there were per item per month. For the numbers, we relied on the statistics reported by the IR managers in the survey. The tables show that giving custom names to the IR does not present a statistically significant difference in either the IR size ( $p = .078$ ) or the IR download counts ( $p = .329$ ).

<Table 2 goes here>

<Table 3 goes here>

We also asked what those in the field think about custom branding. When asked if they think the custom brand name helps finding the IR, the administrators were unanimously affirmative. They said “uniqueness of the name gives it accessibility” and “it is the first hit when you do a search on the university’s website.” However, the IR managers were more ambivalent about it; roughly 75% of the IR managers did not believe that the custom name helps people find

the IR or explain what the IR does. One manager said “it gives it a more user friendly name to faculty, but students still don’t know what it means.” Another manager said “I think it probably helps for those who already know about it. Not sure it helps for someone who is unaware of it’s [sic] existence.” This is an area where further research would help in clarifying best practices.

We also reviewed ARL and Texas academic library websites for IR labels, shown via link texts. What was interesting was that creative names were the most popular among the ARL IRs. The next popular with ARL was the names ending with “repository,” which was the most popular category among Texas academic libraries. Names ending with “commons” were also popular which may stem from the Bepress’ Digital Commons repository platform.

<Figure 2 goes here>

<Figure 3 goes here>

RQ3: Is there any relationship between the website link placement (link depth) and the IR usage?

As in RQ2, we investigated the IR usage in two ways: deposits (size) and downloads. We created two scatterplots, one each with the IR usage measures. With the scatterplots, we studied correlation to measure how strongly two variables were related.

Note that correlation shows the strength of the relationship between two variables, not causation: a correlation does not mean that one thing causes another. In addition, we opted for correlation, not linear regression, because we are not trying to make a prediction and we could not account for all the other variables that may affect such a prediction such as the IR’s age, institutional support, and so on.

The first scatterplot is of the following two variables: the number of clicks to the IR on the library homepage, and the number of items in the IR (i.e. usage measured in terms of how

many items were deposited). The scatterplot shows that the two variables are only weakly correlated; the points do not fit the linear regression line very well at  $r^2 = .137$  and  $r = .37$ . Note that in this scatterplot we also fit a cubic (two bend) curve as well as a linear line. The cubic curve seems to fit the points better at  $r^2 = .153$ . In this case, the linear assumption would be violated and a Pearson correlation may not be the most appropriate statistic because a Pearson correlation is typically used to describe the strength of the linear relationship between two variables. Therefore, we did not calculate the Pearson correlation statistic. Due to the weak correlation, we can conclude that there is little relationship between the number of clicks to the IR on the library website and the IR size.

<Figure 4 goes here>

We created another scatterplot chart with the number of clicks to the IR on the library homepage and the monthly download counts (i.e. usage measured in terms of item downloads). The  $n$  is smaller (14 vs. 8) because not all places had this statistics available to them. This time, the correlation was better at  $r^2 = .474$  and  $r = -.69$ . We also fit a quadratic (one bend) curve in addition to the linear line, and the quadratic curve fit the points much better at  $r^2 = .632$ . Since the linear assumption was violated again, we did not calculate the Pearson correlation statistic. But the strong correlation coefficient ( $r$ ) suggests that there is a strong negative relationship between the distance from the library homepage and the item downloads (i.e. the farther away the less downloaded).

<Figure 5 goes here>

Speaking of link depths, we reviewed ARL and Texas academic libraries (TCSUL and TICUL) for the link depths of their IR from the library homepage. As for ARL, their IRs were on average 2.09 clicks away from the homepage (Range: 1-6). There were two cases where there

was no navigational path to the institutional repository from the homepage; only a search could find it (marked as N/A in Figure 6).

<Figure 6 goes here>

As for Texas TCSUL, their IRs were on average 2 clicks away from the homepage (Range: 1-4). For Texas TICUL, their IRs were on average 1.8 clicks away from the homepage (Range: 1-4).

<Figure 7 goes here>

RQ4: What do those in the field do in terms of end-user promotion? Are the efforts active or passive?

We found that end-user promotion was a mixture of both active and passive endeavors, albeit limited in scope. When asked about promoting their IR to end-users, both IR managers and administrators indicated that there is limited promotion of the IR to the end-users. IR managers depended on links on library website 42% of the time and social media 21% of the time. Other methods mentioned were campus email, plans for LibGuides, workshops, and no plans to market to end-users. One manager talked about having “complete metadata” for the items as a way to promote the IR. Administrators answered that they depend on library website links 37% of the time and the subject liaisons 25% of the time. Administrators also mentioned physical signs, emails, having not yet set up a plan to promote to end-users. It is interesting that both administrators and IR managers agree that promoting through the website was not very successful overall, but they still mostly depend on library website links for end-user promotion.

We also asked how users found our survey respondents’ IRs, and the answer was varied (see Figure 8) but the two most popular (tied) were Google and other search engines as well as library website links.

<Figure 8 goes here>

### **Discussion**

The literature and our study show that most active IR marketing efforts are made to content providers rather than to end-users. Our findings followed the literature in that the biggest challenge in starting an IR is getting faculty buy-in to provide content. Our study also agreed with the literature that meetings with individual faculty or with small groups are the most effective active marketing method to acquire content. Conversely, relying on passive website links for ingestion of IR content was the least mentioned method in the survey. Few would dispute that librarians making personal contact with faculty is the most effective way to gather content.

Our survey did not show an equal interest on the librarians' part to actively market to end-users. We received a variety of answers from the IR managers on how they had or were thinking about actively marketing to end-users. The lack of much mention of active marketing to end-users in the literature search also agrees with our findings. Perhaps it is time to try more active marketing to end-users and see if that increases download counts. Clearly much more attention has been paid to passive marketing to the end-users.

One of the passive marketing efforts that we identified was custom branding. When it comes to branding an IR with a creative name, the majority of administrators and IR managers we surveyed reported that their IR had a custom name. Statistical tests showed that the custom naming did not make a significant difference in the IR usage, though. It is interesting that IR managers did not think that custom branding assisted users in finding the IR and describing what it is, while all of the administrators thought it did. The literature review found that other researchers were equally ambivalent as the IR managers about the effectiveness of branding an

IR in assisting information seekers. Perhaps the library administrators prefer branded names as they may be more memorable to the users; and yet IR managers who have to explain the branding might be less convinced. It could be that the library community just has not found a good way to name an IR so that non-specialists can find and understand it.

Regardless, if branding of the IR does not help people find it or explain what it is, efforts should be focused on other ways to increase the visibility of the material in the IR, such as search engine optimization (SEO). This study confirmed the literature findings that search engines are the most frequently used method to find the IRs. From this, a best practice is to focus less on a clever name and more on quality metadata that will increase findability through SEO.

Another passive marketing efforts was through the library website links. So, in addition to the survey, we studied ARL and Texas academic libraries' websites for this aspect. Based on our review of ARL websites and the similar past research, ARL institutions are steadily creating IRs to house scholarly works. Jantz and Wilson (2008) reported that 63 ARL institutions had an IR, Mercer and others (2011) reported 72 (although these numbers are based on different definitions of IRs because Mercer only counted IRs with faculty deposits), and this study found 105.

Mercer and others (2011) also reported that most IRs are 2 to 4 clicks from the library homepage. This study found that 92% of ARL IRs are 1 to 3 clicks from the homepage. It seems that more ARL libraries are linking their IRs directly from the library homepage with shallower link depth. This could be an effort to increase the visibility of IRs or the application of better information architecture principles resulting in shallower link depth for all elements in the library websites. An area for future study would be why this has happened: Is the placement determined by the principles of better information architecture on the website, or does it depend on the

importance of the IR in the mission of the library? This is an important point of consideration as our research found that the number of items downloaded from the IRs correlated with the link depth negatively.

In cases where the IR was not directly linked from the library homepage, we discovered some instances where it was virtually impossible to navigate without knowing exactly where to go. We found during the data collection process that some navigational paths were only discoverable through the A-Z databases list. The interesting point is that the A-Z list is a showcase of valuable resources that the university often pays for and provides to the patrons. So putting the IR link in the A-Z list acknowledges that its value is at the same level as the other databases. However, to find it, users would need to know the exact name of the IR and go looking for it in the A-Z list. This makes it much more difficult for those who are browsing for information on the library homepage to find the IR. We also found two cases where there was no navigational path to the IR from the library homepage. A further research question would be why the link path was designed that way: was it an oversight, or was it an intentional design choice?

This reliance on passive marketing means that libraries ought to be thoughtful about where and how they design website pathways to their IRs. The lack of active marketing to end-users also indicates a reliance on search engines to make the IR content discoverable. In our survey, several IR managers commented that they put importance on building good metadata into the resource records to improve the chance for a search engine to find the content. It is very clear that those building the IRs need to invest in personnel and workflows to build quality metadata.

A limitation of the survey part of this study was that we began with a small total population size. We limited the survey to the state of Texas because we set out to study the practices of our peer institutions in the nearby geographical region. Texas institutions are also

unique in that they get support from the Texas Digital Library consortium. Hence, we wanted to learn the best practices from the places where there were similar level of support and resources.

Another limitation was the lack of public access to the usage counts, other than the ones reported by the survey respondents. So we could not use our link depth and IR label/name study data and correlate the variables with usage data, which would have resulted in a more substantial sample size. This study could have been enhanced by being able to measure the volume of users moving through the link paths to the IR.

### **Conclusion**

We conducted the survey with the hope of learning what Texas library administrators and IR managers think about their current IR promotion practices. We found that most active promotion efforts are geared towards faculty in order to increase the IR size. Many libraries have accepted that items in the IR are found through search engines, and less marketing efforts were made for the end-users. Therefore, greater focus needs to be placed on quality metadata and search engine optimization. Even though 30% of ARL libraries use creative names for their IRs, those in Texas think that the branding does not necessarily help users find or understand what an IR is. Our institution has the link to the IR on the front page of the library website, and our analysis shows that it was the right decision to make.

As for growing the size of the IR, one constant struggle is receiving faculty cooperation. In order to deal with faculty attitudes about submitting their works, we are investigating alternative workflow for submissions that are not dependent on faculty participation. In addition, we are looking to acquire a wider variety of content types, together with faculty publications and ETDs, as found as the trend with peer institutions.

A lesson we learned on open access mandate was that the IR size was not statistically different between those who had mandates and those who did not. Therefore, efforts to establish an open access mandate seem less important than perhaps expanding active outreach towards content depositors beyond faculty and students. We may want to target other kinds of content donors in order to increase both the size and the depth of our IR.

### References

- Armstrong, M. (2014). Institutional repository management models that support faculty research dissemination. *OCLC Systems & Services: International Digital Library Perspectives*, 30(1), 43–51. <https://doi.org/10.1108/OCLC-07-2013-0028>
- Bates, M., Loddington, S., Manuel, S., & Oppenheim, C. (2007). Attitudes to the rights and rewards for author contributions to repositories for teaching and learning. *ALT-J*, 15(1), 67–82. <https://doi.org/10.1080/09687760600837066>
- Borrego, Á. (2016). Measuring compliance with a Spanish government open access mandate. *Journal of the Association for Information Science and Technology*, 67(4), 757–764. <https://doi.org/10.1002/asi.23422>
- Bull, J., & Eden, B. L. (2014). Successful scholarly communication at a small university: Integration of education, services, and an institutional repository at Valparaíso University. *College & Undergraduate Libraries*, 21(3–4), 263–278. <https://doi.org/10.1080/10691316.2014.932264>
- Coates, M. (2014). Electronic theses and dissertations: Differences in behavior for local and non-local users. *Library Hi Tech*, 32(2), 285–299. <https://doi.org/10.1108/LHT-08-2013-0102>

- Covey, D. T. (2011). Recruiting content for the institutional repository: The barriers exceed the benefits. *Journal of Digital Information*, 12(3). Retrieved from <https://journals.tdl.org/jodi/index.php/jodi/article/view/2068>
- Cullen, R., & Chawner, B. (2010). Institutional repositories: Assessing their value to the academic community. *Performance Measurement & Metrics*, 11(2), 131-147. DOI: 10.1108/14678041011064052
- Fortier, R., & Laws, E. (2014) Marketing an established institutional repository: Marquette Libraries' research stewardship survey. *Library Hi Tech News*, 31(6), 12-15. <https://doi.org/10.1108/LHTN-05-2014-0038>
- Foster, N. F., & Gibbons, S. (2005). Understanding faculty to improve content recruitment for institutional repositories. *D-Lib Magazine*, 11(1). DOI:10.1045/january2005-foster
- Gaffney, M. (2008). Involving the library and campus community in institutional repository projects. *The Serials Librarian*, 55(4), 568–576. <https://doi.org/10.1080/03615260802380411>
- Ghinazzi, C., & Hanson, M. (2018). Communication is key: Positioning the repository as a cornerstone of campus collaboration. *The Serials Librarian*, 74(1-4), 170-175. <https://doi.org/10.1080/0361526X.2018.1427980>
- Giesecke, J. (2011). Institutional repositories: Keys to success. *Journal of Library Administration*, 51(5–6), 529–542. <https://doi.org/10.1080/01930826.2011.589340>
- Henry, D. B., & Neville, T. M. (2017). Repositories at master's institutions: a census and analysis. *Library Resources & Technical Services*, 61(3), 124-133. <http://dx.doi.org/10.5860/lrts.61n3.124>

- Jantz, R. C., & Wilson, M. C. (2008). Institutional repositories: Faculty deposits, marketing, and the reform of scholarly communication. *The Journal of Academic Librarianship*, 34(3), 186-195. <https://doi.org/10.1016/j.acalib.2008.03.014>
- Koler-Povh, T., Mikoš, M., & Turk, G. (2014) Institutional repository as an important part of scholarly communication. *Library Hi Tech*, 32(3), 423-434. <https://doi.org/10.1108/LHT-10-2013-0146>
- Mercer, H., Koenig, J., McGeachin, R. B., & Tucker, S. L. (2011). Structure, features, and faculty content in ARL member repositories. *The Journal of Academic Librarianship*, 37(4), 333-342. <https://doi.org/10.1016/j.acalib.2011.04.008>
- Perrin, J., Winkler, H., Daniel, K., Barba, S., & Yang, L. (2017). Know your crowd: A case study in digital collection marketing. *The Reference Librarian*, 58(3), 190-201. <https://doi.org/10.1080/02763877.2016.1271758>
- Schlangen, M. (2015). Content, credibility, and readership: Putting your institutional repository on the map. *Public Services Quarterly*, 11(3), 217–224. <https://doi.org/10.1080/15228959.2015.1060148>
- Sterman, L. (2014). Institutional repositories: An analysis of trends and a proposed collaborative future. *College & Undergraduate Libraries*, 21(3/4), 360-376. <http://dx.doi.org/10.1080/10691316.2014.943919>
- St. Jean, B., Rieh, S., Yakel, E., & Markey, K. (2011). Unheard voices: Institutional repository end-users. *College & Research Libraries*, 72(1), 21-42. <https://doi.org/10.5860/crl-71r1>
- Tay, A. (2017). Rethinking institutional repositories. *Online Searcher*, 41(2), 10-15.
- Thompson, E. S., Akeriwe, M. L., & Aikins, A. A. (2016). Communicating the value of an institutional repository: Experiences at Ghana's university for development studies. *New*

*Review of Academic Librarianship*, 22(2–3), 325–336.

<https://doi.org/10.1080/13614533.2016.1183135>

Wesolek, A. (2013). Who uses this stuff, anyway? An investigation of who uses the DigitalCommons@USU. *The Serials Librarian*, 64(1-4), 299-306.

<http://dx.doi.org/10.1080/0361526X.2013.760298>

Xia, J., & Opperman, D. d. (2010). Current trends in institutional repositories for institutions offering master's and baccalaureate degrees. *The Serials Review*, 36(1), 10-18.

Xia, J., Gilchrist, S. B., Smith, N. X. P., Kingery, J. A., Radecki, J. R., Wilhelm, M. L., ... Mahn, A. J. (2012). A review of open access self-archiving mandate policies. *Portal: Libraries and the Academy*, 12(1), 85–102. <https://doi.org/10.1353/pla.2012.0000>

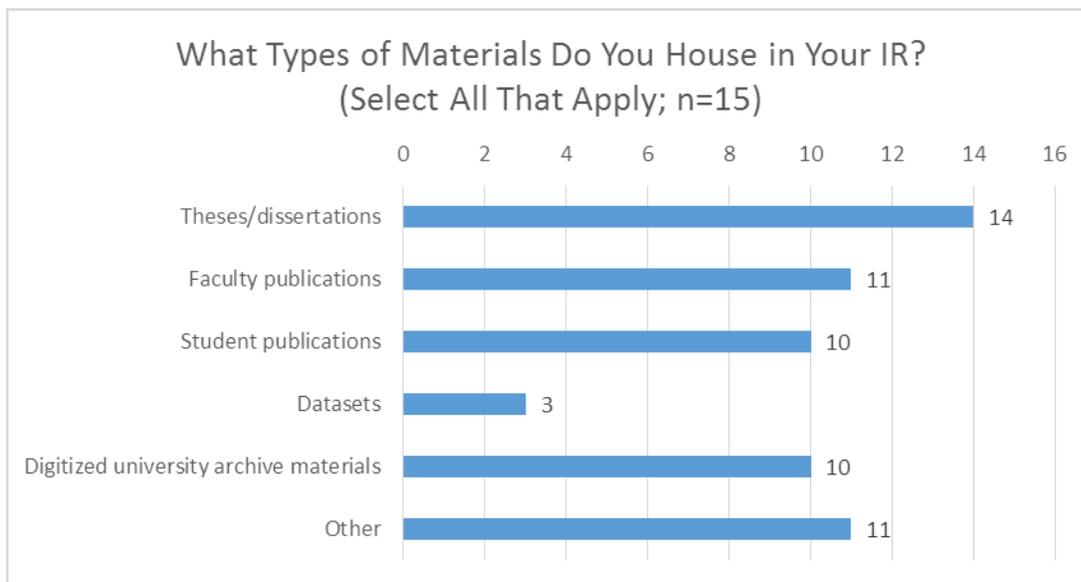
Yiotis, K. (2008). Electronic theses and dissertation (ETD) repositories: What are they? Where do they come from? How do they work? *OCLC Systems & Services: International Digital Library Perspectives*, 24(2), 101–115.

<https://doi.org/10.1108/10650750810875458>

Zhang, H., Boock, M., & Wirth, A. A. (2015). It takes more than a mandate: Factors that contribute to increased rates of article deposit to an institutional repository. *Journal of Librarianship and Scholarly Communication*, 3(1). [https://doi.org/10.7710/2162-](https://doi.org/10.7710/2162-3309.1208)

[3309.1208](https://doi.org/10.7710/2162-3309.1208)

### Tables and Figures



*Figure 1.* What types of materials are housed in the IR

Table 1

*Comparison of IR size depending on open access mandate (n = 3 Yes and 11 No)*

Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>	Cohen's <i>d</i>
Open access mandate			.928	12	.372	.57
Yes	28092.67	29958.13				
No	12394.36	25089.09				

Table 2

*Comparison of IR size (deposits) depending on custom naming (n = 9 Yes and 5 No)*

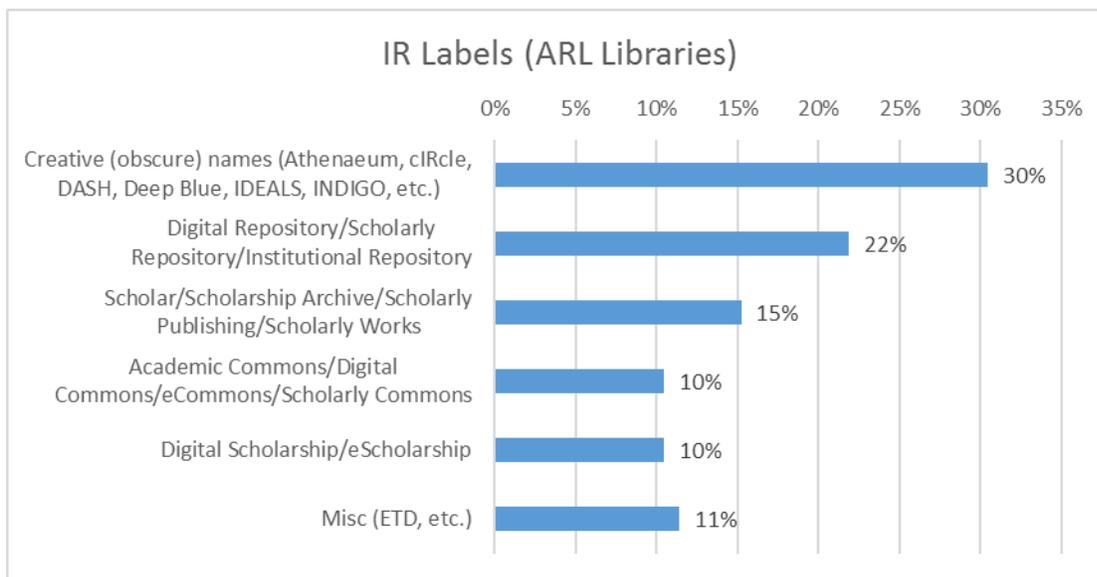
Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>P</i>	Cohen's <i>d</i>
Custom naming – IR size			2.014	8.182	.078	.95
Yes	23046.56	30225.41				
No	2639.40	2412.91				

\* The *t* and *df* were adjusted because variances were not equal.

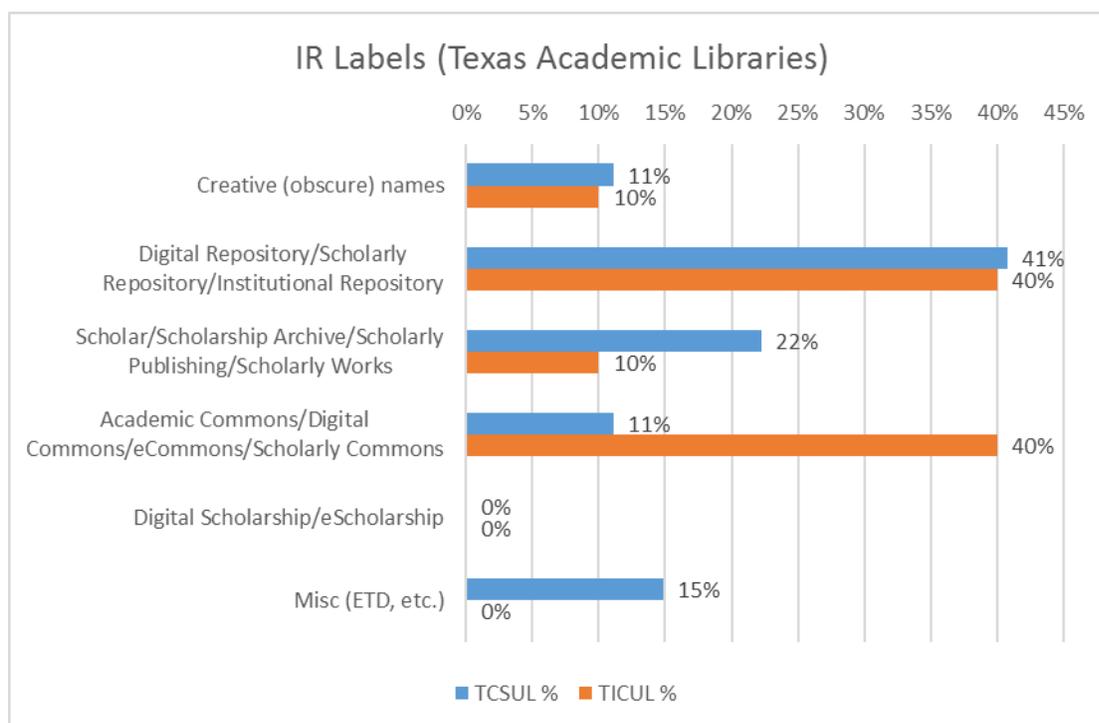
Table 3

*Comparison of IR downloads depending on custom naming (n = 6 Yes and 2 No)*

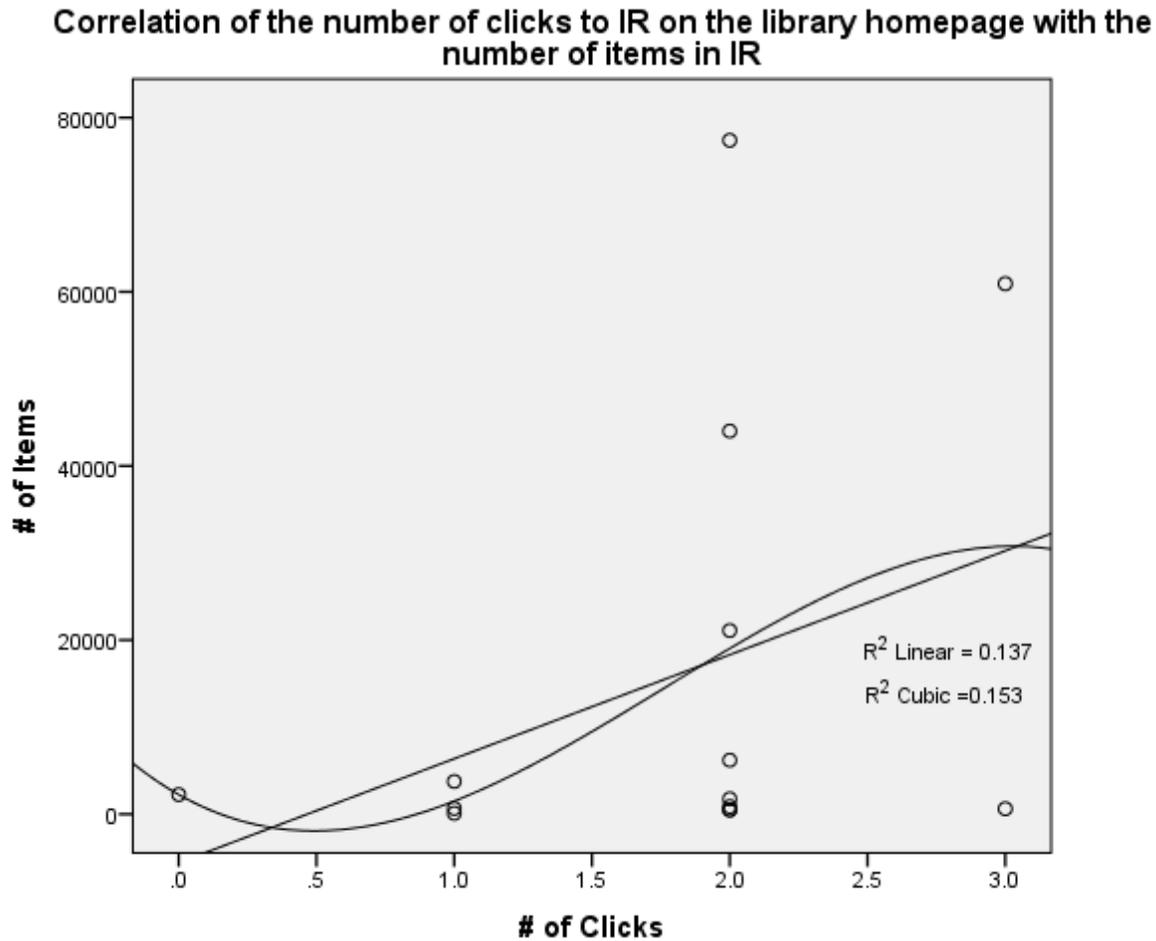
Variable	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>P</i>	Cohen's <i>d</i>
Custom naming – IR downloads			1.062	6	.329	1.12
Yes	2209.9	2774.69				
No	13.3	4.67				



*Figure 2.* IR labels (ARL libraries)



*Figure 3.* IR labels (Texas academic libraries)



*Figure 4.* Correlation chart of the number of clicks to the IR on the library homepage with the number of items in the IR (n = 14)

Correlation of the number of clicks to IR on the library homepage with the number of monthly item downloads

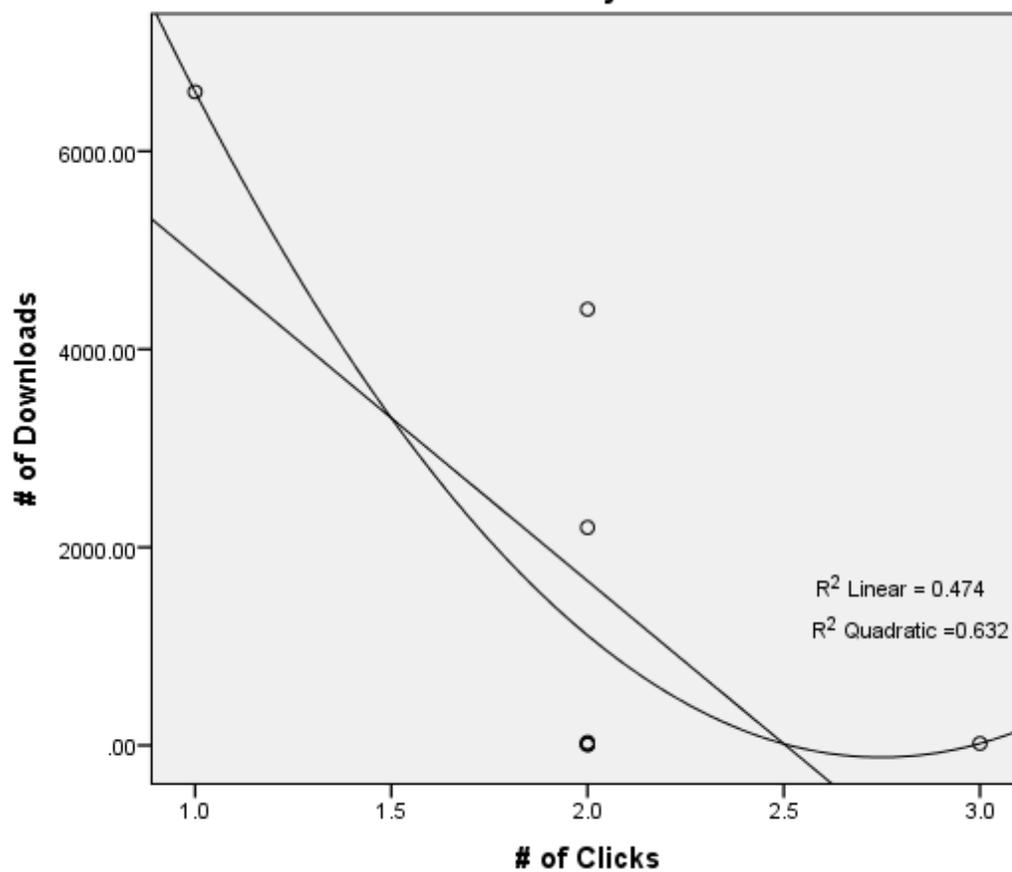
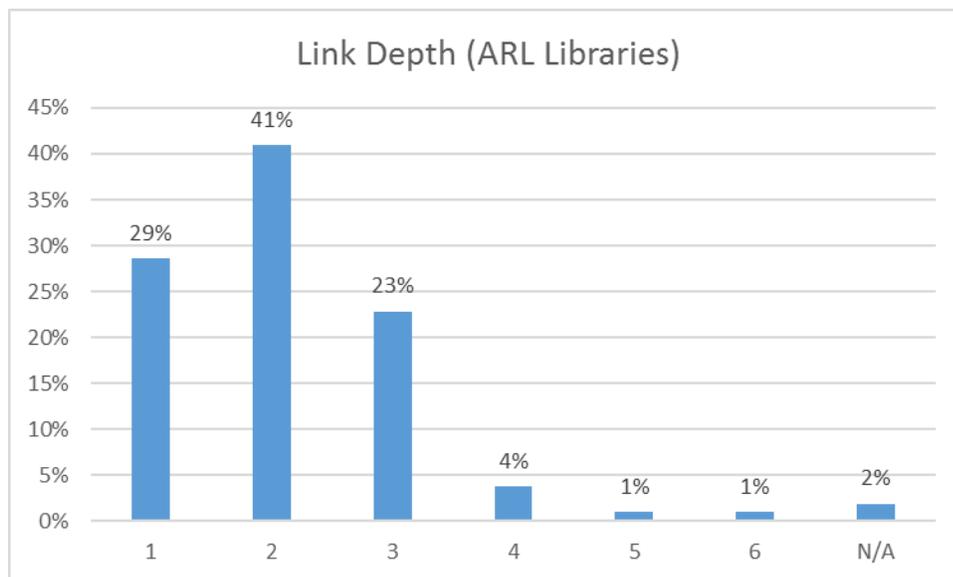


Figure 5. Correlation chart of the number of clicks to the IR on the library homepage with the number of monthly item downloads (n = 8)



*Figure 6.* Link depth (ARL libraries)

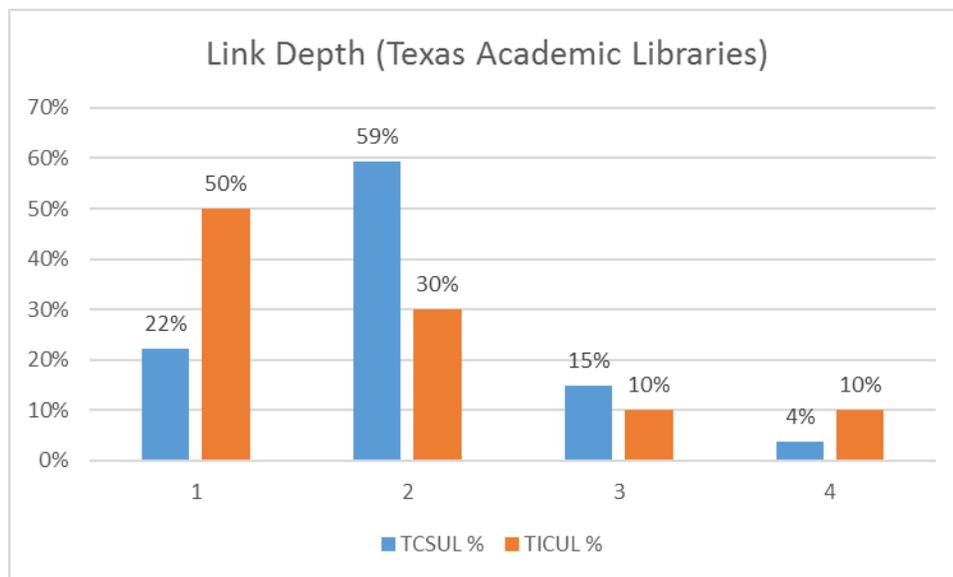


Figure 7. Link depth (Texas academic libraries)

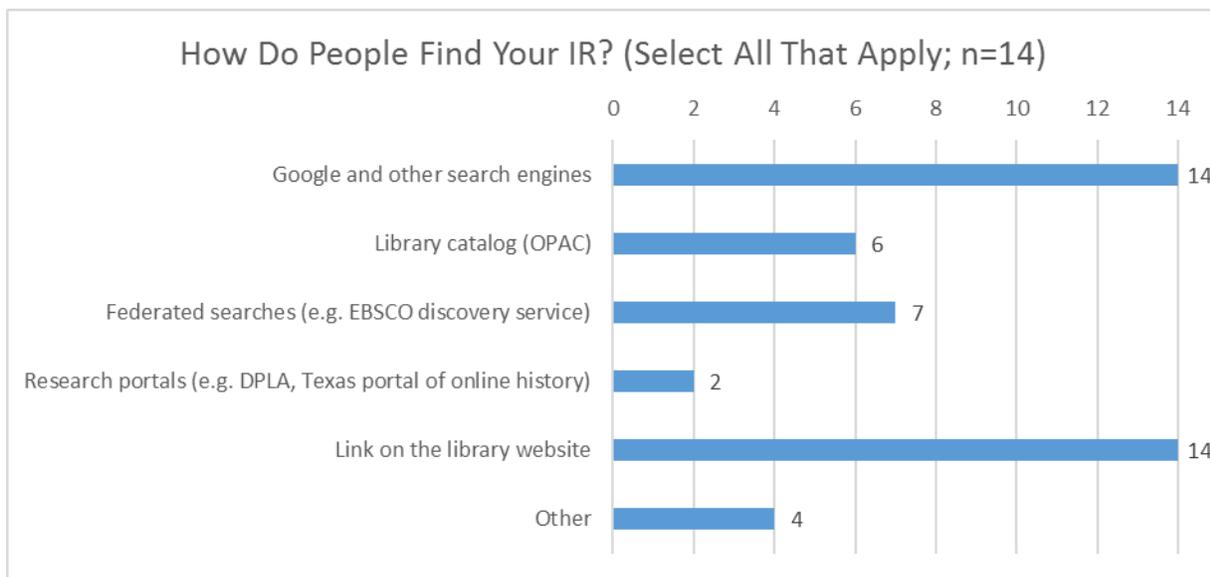


Figure 8. How people find the survey respondents' IR