A Mixed-Methods Approach to Assessing Diversity, Equity, and Inclusion in Library Collections: Educating and Empowering a Diverse Student Body

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INTRODUCTION

The Texas Tech University (TTU) Libraries participated in an ARL pilot project on how the library contributes to equitable student outcomes and an inclusive environment. The researchers sought ways of identifying and quantifying TTU Libraries' impact on students' academic achievements in ways that could be communicated to university administration and the larger community.

There was no previous research into how library resources supported and enabled these campus efforts. Inspired by one of TTU's strategic priorities, "Educate and empower a diverse student body," the research team focused on student success and creating methods to assess collections and services to determine the TTU Libraries' impact on diversity, equity, and inclusion (DEI) research.

The researchers completed the project in two phases: Phase 1 consisted of assessments of the TTU Libraries' collections to determine whether necessary resources were provided to fulfill the curricular needs of courses offered on DEI topics, and Phase 2 studied the user experience of searching for and evaluating library resources related to DEI topics.

LITERATURE REVIEW

While academic libraries have been addressing DEI issues through collection development, instruction, and services, DEI's widening scope and importance in higher education requires increased scrutiny and critical interrogation. Published research on DEI in academic settings is becoming more plentiful; however, there is still a shortage of research related to libraries' collections assessment and student success outcomes.

Researchers have examined the importance of multicultural or DEI-related courses as a requirement within the curriculum. At Texas Tech University, student learning outcomes require graduating students to demonstrate awareness and knowledge of distinctive cultures or subcultures.[1] Beyond mere learning aspirations, research on DEI-related courses has shown substantial benefits for students. The completion of the ethnic studies curriculum benefits students academically[2] and increases timely graduate rates, regardless of their racial/ethnic composition (Sleeter, 2011; Sueyoshi and Sujitparapitaya, 2020).[3]

DEI efforts in academic libraries focus predominately on outreach and services, often omitting assessment studies of existing collections. Koury et al. documented and concluded that academic libraries' initiatives fell into three categories: creation/enhancement of collections, recruitment, and collaboration with other campus units.[4] However, none of the research surveyed discussed assessments of current collections to meet DEI goals. Frederiksen created an annotated bibliography of resources on diversity in libraries with an emphasis on collections.[5] The complicated nature of DEI and its concepts often explains the lack of assessment research in any part of the library's collection, as DEI is interdisciplinary. Due to these challenges, many research initiatives have mixed success in meeting assessment goals. Ciszek and Young surveyed research on assessing diverse and multicultural collections in a large academic library through quantitative and qualitative methods.[6] The quantitative methods included WorldCat Collection Analysis, comparison with bibliographies, using diversity codes in acquisitions, circulation and use of statistics, and diversity collections statements. Qualitative methods included focus groups, interviews, and surveys. While these discussed methods could accomplish some of the aims of collection assessment by identifying deficits, the authors assert that novel approaches are needed to be more proactive in continuous collections assessment.

Collection assessment research typically concentrates on a specific discipline, which enables reviewing a specific call number range or otherwise designated collections in a space such as a branch library. Multidisciplinary topics can require alternate approaches and experimentation. Beals[7] assessed the strength of African art collections at three large academic libraries using White's[8] brief test methodology. The findings showed that the method worked where the subject area lay in a well-defined Library of Congress classification area. However, it did not measure user satisfaction with the collection or whether it was appropriate. Graziano approached assessing LGBTQ collections by looking at library ownership of materials cited by master's students.[9] His approach was suitable for tackling a multidisciplinary field in determining the strengths and weaknesses of a collection of cited works. The author found the ownership percentage inconclusive because it only sampled the total LGBTQ collection and did not address user satisfaction. Kristick created a list of diversity literary awards to assess her academic libraries' collection against peer institutions, tracking the groups represented in the titles and how the titles were published.[10] This method effectively identified strengths and weaknesses in DEI literature titles and could be applied to other subject areas but did not cover patron interactions with these materials.

Beyond possessing sufficient resources for studying DEI topics, academic libraries are also concerned with the discoverability of materials and support for patrons using library collections. Clarke and Schoonmaker surveyed popular metadata schemas used in libraries for the ability to document diversity effectively. They found the arrangement of key indicators of diversity into grouped metadata elements "may limit a

seeker's ability to hone their search by specific descriptors of identity."[11] They were also concerned that the vagueness of terms for indigeneity and disability could hinder access points to those materials. Edge (2019) summarizes the literature about LGBTQ cataloging, noting terms, when applied, are often outdated or lacking in specificity, exasperating patrons attempting to find information.[12] Howard and Knowlton (2018) looked at the Library of Congress Classification and Subject Headings for African American and LGBTQIA Studies. They noted that the topics classified throughout the library caused patrons difficulty trying to shelf-browse. They also expressed concern that LCSH "often employ language and pre-coordinated strings that serve to 'other' historically marginalized people."[13] Herrera (2016) studied gender and racial differences in undergraduate library collections. Her study concentrated on diversity and found the collection served women and minority groups equally as a control group. She acknowledged the study should be expanded to include other areas such as "disability, sexual orientation, economic status, age, and geographic affiliation."[14]

Many librarians are concerned with the diversity of academic library collections and whether those collections support research in inclusive and equitable ways. They often fall short in assessments due to the complexity of cataloging and locating DEI materials in collections. Additional research studies are necessary to continue the critical investigation into whether academic libraries effectively support DEI research and inquiry through their collections and services.

PHASE 1: COLLECTION ASSESSMENT

Methods

The research team employed multiple methods for assessing the library's collection and usage for resources on DEI-related topics. They used online survey methods directed to instructors teaching DEI courses and faculty chairs. They created lists of resources based on course syllabi and special awards given by organizations for DEI materials, and documented collection print and digital holdings as well as discoverability. The researchers gathered usage reports, faculty request reports, and catalog records, using the collected information and earlier findings to identify collection gaps, strengths, and discoverability.

Findings

Phase 1 of the project consisted of four parts, which sought to gauge the ability of the collection to support current student curricular needs in DEI-identified courses and, more broadly, faculty research and instructional needs. Researchers experienced difficulties with faculty participation in syllabi scans and surveys; thus, we could not confirm our hypothesis. However, potential issues with resource discovery and awareness of TTU Libraries' resources were identified. Faculty requests and e-book usage highlighted specific disciplines that were actively researching DEI issues and might be potential collaborators for future collection development and outreach.

Lastly, an assessment of books receiving awards tagged for DEI or given by groups and organizations dedicated to advocating for historically underrepresented groups provided targeted data. The researchers used the targeted list to examine the completeness of catalog records as potential impediments to discovery, an area that would benefit from future research.

Syllabi Scan

In spring 2019, researchers identified courses related to DEI. They identified 93 courses across most of the colleges at TTU. Of the 93 courses, only 33 met the criteria of having a publicly accessible syllabus, no more than two years old, including assigned textbooks or readings. The researchers categorized and documented 169 total resources within the TTU Libraries' holdings. Duplicate titles were removed, but multiple editions were treated as separate resources. The format categories included books (67), book chapters (19), articles (53), media (21), and other formats (9), such as equipment, databases, and websites. Table 1 shows the availability of the identified materials in the libraries' collection in physical or electronic format. Seventy percent of identified resources existed in TTU Libraries' digital or physical collections, with some available in both formats.

Table 1: Availability of the DEI course syllabi identified resources at TTU Libraries

	Total	Physical	Electronic	Not in the Collection
Books	67	38	14	23
Book Chapters	19	6	7	7
Articles	53	8	40	6
Media	21	6	8	9
Other	9	1	3	5
Total (Percentage)	169	59 (35%)	72 (43%)	50 (30%)

The discoverability of libraries' materials is a key metric. Researchers did basic keyword searches for titles in OneSearch, or Primo discovery service. Only 32% of the identified materials in the collection appeared on the first page of the results (39 of 119). Students might miss almost 68% of the resources if results other than the initial ten are not loaded or filters or advanced search features are not used. The small percentage of usable courses and pool of identified information resources impacted the effectiveness of the syllabi study for assessing our hypothesis. However, the issue with

discoverability prompted additional questions that researchers used to adjust research questions in later aspects of Phase 1 and into Phase 2.

Faculty Requests and e-Book Usage

Researchers reviewed all faculty purchase requests from FY 2019 to identify titles covering DEI topics and gauge weaknesses in the collection. They analyzed book titles and subject headings and found 33 resources (11%) linked to DEI subjects out of 300 requests. While this was a small dataset, it implies a faculty interest in expanding collections to better support research in Women's and Gender Studies (WGS) and Mexican American and Latino/a Studies (MALS). To see how requests correlated with usage data, researchers reviewed e-book usage for the same period on EBSCO eBooks. An analysis of title keywords and subject headings revealed 88 titles related to WGS and 48 titles associated with MALS out of 2,117. Comparing the faculty requests and a subset of e-book usage data with course enrollments indicated a more significant research interest in WGS and MALS than course-related data might indicate (Table 3). The WGS and MALS programs are relatively small interdisciplinary programs with faculty based in multiple colleges that offer an undergraduate minor. The nature of these programs makes it more challenging to gauge collection needs and provide outreach regarding library collections and services. While collectively representing around 0.5% of all course enrollments at TTU for FY 2019, selected data points indicate an outsized usage of TTU Libraries holdings and an interest in expanding the collections in WGS and MALS. Findings indicate a strong engagement in these areas positioning TTU Libraries to cultivate better, stronger relationships with and support for affiliated faculty and students.

Table 3: Women's and Gender Studies (WGS) and Mexican American and Latino/a Studies (MALS) data points for TTU library research and course enrollment FY2019.

	Purchase Requests	Accessed EBSCO E-book	Courses Offered	Course Enrollment
TTU Total	300	2,117	3,964	348,753
WGS	8 (2.7%)	88 (4.2 %)	49 (1.2%)	1,052 (0.3%)
MALS	6 (2%)	48 (2.3%)	23 (0.6%)	575 (0.2%)

Award Books

The researchers compiled a list of titles that received awards between 2014–2019 for DEI content from 38 different professional organizations, non-profit foundations, and cultural institutions. These awards recognize titles and authors that highlight underrepresented communities in fiction and nonfiction and for various age ranges in audiences. The team removed 222 duplicate titles, leaving 2,034. In spring 2020, TTU Libraries held 455 (22.3%) of the books in print or electronic format (see Table 4) and had above 50% of the titles for 14 entities and over 25% for 28 entities. A closer look at

the titles showed that TTU Libraries did not hold many of the titles classified within children's and young adult books categories, accounting for the low holdings for entities like ALA's Rainbow Round Table (Stonewall Book Awards) and Empowering Latino Futures (International Latino Book Awards). Kristick (2020) completed a study (published after the researchers' study) that tracked 2,408 titles from 20 awarding entities, which features some overlaps with the researchers' list. Kristick identified that Oregon State University had 21.7% of the identified list, and eight peer institutions held between 23.55% and 39.08% of the list. While the researchers' list of award book titles only shares an overlap of 12 awarding entities with Kristick's, it is reasonable to compare TTU Libraries' holdings percentage at the low end of the range identified. The percentage of titles not held by TTU is large enough to warrant discussions about collection development practices and workflows that might be implemented to increase acquisitions of DEI award titles.

Table 4: TTU Libraries Collection Data of DEI Awards books organized by awarding Association/Entity

Awarding Entity	Total Titles	TTU Libraries Holdings		Print	Electronic
(AAS) Assoc. for Asian Studies	79	34	43%	4	31
(AfAA) Assoc. for Afric. Anthro.	12	8	66.7%	0	8
(AHA) Amer. Hist. Assoc.	37	23	62.2%	5	18
(AILA) Amer. Indian Lib. Assoc.	23	2	8.7%	2	0
(ALA RRT) Amer. Lib. Assoc. Rainbow Round Table	24	3	12.5%	2	1
(ALAA) Assoc. Latin Amer. Art	13	6	46.2%	2	5
(AMS) Amer. Music. Society	8	5	62.5%	2	4
(APAA) Asian Pac. Amer. Lib. Assoc.	60	15	25%	11	4
(APSA) Amer. Poli. Sci. Assoc.	5	2	40%	0	2
(ASA) Afric. Studies Assoc.	10	4	40%	1	3
(ASA) Amer. Studies Assoc.	5	2	40%	1	1
(ASA) Australian Soc. Of Authors	4	0	0%	0	0
(AWSS) Assoc. Women in Slavic Studies	21	15	71.4%	9	9
(BCALA) Black Caucus- Amer. Lib. Assoc.	84	40	47.6%	31	9
The Cleveland Foundation	21	14	66.7%	13	1
Empowering Latino Futures	1140	97	8.5%	69	32
Gilder Lehrman Center for Study of Slavery, Resistance, and Abolition	11	7	63.6%	5	2
Hindu Literary Review	32	4	12.5%	4	0
Hurston/Wright Foundation	6	0	0%	0	0
Jewish Book Council	90	29	32.2%	14	15
Kibble Literary	25	5	20%	5	0
Karachi Lit. Festival	21	6	28.6%	2	4
Lambda Literary Foundation	147	33	22.4%	28	5

Awarding Entity	Total Titles	TTU Libraries Holdings		Print	Electronic
(LAWCHA) Labor and Working-Class Hist. Assoc.	8	6	75%	3	4
Man Group	6	4	66.7%	4	0
(MESA) Middle East Studies Assoc.	18	4	22.2%	1	4
(MLA) Modern Language Assoc.	23	10	43.5%	4	8
Nat. Academy of Letters, India	5	2	40%	2	0
(NAACP) Nat. Assoc. for the Adv. Of Colored Ppl.	168	54	32.1%	46	9
(NACCS) Nat. Assoc. Chicana and Chicano Studies	6	4	66.7%	2	4
(NAISA) Native Amer. and Indigenous Studies Assoc.	6	4	66.7%	1	3
(NWSA) Nat. Women's Studies Assoc.	31	12	38.8%	3	9
(OAH) Org. of Amer. Hist.	12	10	83.3%	4	9
(OMC) Ontario Ministry of Cult.	20	7	35%	4	3
Publishing Triangle	19	6	56.3%	2	4
South African Literary Awards	44	7	15.9%	1	6
(WHA) West. Hist. Assoc.	8	7	87.5%	2	6
Women's Prize Trust	6	2	33.3%	1	1

Because the researchers had identified potential issues with searching DEI materials during the syllabi scan, where 68% of records were not retrieved on the first page of results, they hypothesized that catalog records for DEI materials might not be robust enough for discoverability. Analysis of the catalog records for these award books showed most records have sufficient subject headings and that most print records met cataloging standards. However, the inclusion of a Table of Contents and Abstract/Summary fields was sporadic and could potentially limit the discoverability and evaluation of materials within the library catalog. Tabulating subject headings in the records for all print and electronic award titles held by TTU Libraries, Table 5 shows that 81.3% of the catalog records had at least three subject headings. Looking at records for print holdings only, the researchers evaluated a subject heading's depth by looking at the number of subheadings included for each subject heading. Table 6 shows that 78.5% of subject headings included at least one subheading, with 36.4% having at least two subheadings. Overall, subject headings seem sufficiently applied in number and depth to aid discovery. Looking at the Table of Contents (505 fields) and Abstract/Summary (520 fields), Table 7 shows that only 48.1% of records included a Table of Contents and only 64.4% of records included an Abstract or Summary, with 36.5% of records having both the Table of Contents and Abstract/Summary. Print and electronic records were similar in percentage that contained both fields, with print records more likely to include an Abstract or Summary and electronic records more likely to have a Table of Contents. Looking at cataloging standards indicated in the

MARC Leader 17 encoding field, 250 records (93.6%) were identified as full level. However, there are 199 records at Full Level, fifty at Full level cataloging input by OCLC participating library, and one at Full level, material not examined. The remaining seventeen records either had unknown levels of cataloging or were at less-than-full or prepublication levels. When looking at circulation statistics for print titles acquired until 2020, 170 (63.7%) print items had been checked out, with 133 (49.8%) having multiple checkouts, indicating that cataloging deficiencies do not seem to be affecting print circulation.

Table 5: Catalog Records arranged by Number of Subject Headings

# of Subject headings	# of Catalog Records
0	7
1	29
2	49
3	56
4	90
5	60
6	62
7	46
8	22
9	10
10	10
11	9
12	1
13	1
14	1
18	1
19	1

Table 6: Catalog Record depth as shown by number of subheadings

Subject Depth	# of Subject Headings	Example
Main Headings	1,345	African Americans
>=1 subheadings	1,056	African Americans—Suffrage
>=2 subheadings	489	African Americans—Suffrage—Alabama
>=3 subheadings	193	African Americans—Suffrage—Alabama—Selma
>=4 subheadings	38	African Americans—Suffrage—Alabama—Selma—History
>=5 subheadings	5	African Americans—Suffrage—Alabama—Selma—History—20th century
6 subheadings	2	African Americans—Suffrage—Alabama—Selma—History—20th century—Juvenile literature

Table 7: TTU Libraries Award Title Records 505 and 530 field analyses

	505 Field	520 Field	Both 505 and 520 Fields
Print (267 titles)	114 (42.7%)	208 (77.9%)	100 (37.5%)
Electronic (211 titles)	123 (58.3%)	99 (46.9%)	79 (37.4%)
Total (455 titles)	219 (48.1%)	293 (64.4%)	166 (36.5%)

While the researchers could not prove our hypothesis about the lack of robustness in catalog records affecting discoverability of DEI resources, it is an area for further investigation. With the increasing practice of catalog records receiving little to no librarian intervention after ingestion from publishers or vendors, DEI resources could be at particular risk of negative impacts as often the DEI content might be a secondary or tertiary facet of the resource. Also, many researchers looking at DEI content are concerned with specific populations or locations that might be noted in tables of contents or abstracts/summaries rather than subject headings.

Taken together, the findings from Phase 1 highlight the difficulties in identifying DEI resources (even for some disciplinary faculty), the potential for partnering with Women's and Gender Studies (WGS) and Mexican American and Latino/a Studies, and the need for increased attention on DEI titles and their cataloging. Researchers also used Phase 1 findings to provide background, insights, and support when analyzing Phase 2 data.

PHASE 2: USER EXPERIENCE

Methods

In Phase 2, the research team wanted to understand user experience based on these research questions:

- How do students search for Diversity, Equity, and Inclusion resources in the library?
- Which resources do they search for?
- What terms do they use to find DEI resources?
- Do they adjust their search when they do not find what they want?
- Are they satisfied with the amount and quality of results they get in their search?
- How do they identify a DEI resource that fits their needs?

The usability test script instructed students to use the library website to search for up to three sources they could use to learn more about a topic related to diversity, equity, and inclusion in their field of study, including pre-and post-test questions. (Appendix III) Researchers recruited a mix of TTU undergraduate, graduate, faculty, and staff for 15–30-minute recorded sessions on Zoom. Participants received a $20 gift card for participation.

The researchers reviewed and transcribed videos capturing important comments. They logged what resources participants searched, the keywords searched, the number of searches conducted, which filters were used to refine results, and other relevant observations. Researchers used mixed methods to measure some variables qualitatively and others through quantitative analysis to identify findings and determine recommendations.

Findings

The participants in this phase were a mix of undergraduate and graduate students, with a few faculty and staff participants, as illustrated in Table 8. More than half the participants were doctoral students. The overrepresentation of advanced researchers in our participant pool is a limitation of our research. They reported more experience searching library resources, and doctoral students were more likely to search multiple resources other than the library's discovery service.

Table 8: Academic Status of Phase 2 Participants

Academic Status	Number of Participants
Sophomore	1
Junior	2
Senior	4
Master's	3
Doctoral	18
Faculty	2
Staff	2
Total	32

Twenty-nine out of 32 participants used OneSearch to search for Diversity, Equity, and Inclusion resources. Twenty of these participants only utilized OneSearch for all searches. The search choice was likely the "default" option because of its prominence on the libraries' homepage. Google Scholar was the second-most searched resource, with individual databases and research guides less popular.

Overall, users were satisfied with the amount and quality of results they obtained in their search. 26 of 32 participants stated they were satisfied with the amount and quality of results they received in their search. However, participants' reflections on the ease or difficulty of the search were mixed, as illustrated in Table 10. Eighteen participants said the process was easier than expected; seven were neutral; six said it was more difficult than expected, and one user did not answer.

Table 10: Participant reported ease or difficulty of the search

Participant reported ease or difficulty searching for resources	Number of Participants
Easier than expected	18
Neutral	7
More difficult than expected	6
Did not answer	1

Search strategies

Ten participants searched for their topic plus the keywords "diversity," "equity," or "inclusion." Those ten participants had various experience levels and classifications, with no clear correlations. Table 11 shows the most frequently used search terms by participants. The term "diversity" occurred most often in user searches, followed by "inclusion." The terms "communication" and "technical" were likely used more frequently because multiple participants were affiliated with the Technical Communication department.

Table 11: Frequency of search words chosen by participants

Search keyword	Occurrences
Diversity	14
Inclusion	5
Communication	5
Technical	5
Politics	4
Online	4
Writing	4
Teaching	3
Learning	3
Gender	3
Education	3
Feminism	3
Equity	3
Black	3
Search	3
American	3

Participants tended to conduct multiple keyword searches to find resources, with 21 of 32 conducting two or more searches. Participants also used filters as another option to narrow the results. This result indicates that most participants adjusted their search when they did not see what they wanted or expected on the first attempt.

Participant Recommendations

The researchers asked participants what would make it easier to find DEI resources. The results were grouped into eight main categories, as outlined in Table 13. The most common suggestions related to discovery search enhancements. Of eleven requests for changes to the discovery tool, eight participants suggested adding filters to refine results. That may have resulted from researchers asking the participants who used search filters whether the filters were helpful or not. Multiple participants wanted the ability to narrow the results to DEI subjects.

Table 13: Count of recommendations per category

Participant Recommendations	Count
Search enhancement	11
Library website	6
Research guides (LibGuides)	4
Better understanding of DEI	2
Librarian help	2
Catalog enhancement	2
Collection enhancement	2
Promote resources	2
Total	31

Another recurring theme was the recommendation to improve aspects of the library website. Participants suggested posting links or icons that provided a starting point and directed people to curated lists with featured resources. They expressed this would make it clear that supporting DEI efforts was a library and university priority. Participants asked for more librarian support through chat assistance, classroom training, and research. They recommended catalog records always include an abstract and indicate which databases have DEI-related content—this already occurs. DEI databases are tagged in MARC field 692 for Local Subject Added Entries.

Complementing the participants' recommendations, the researchers observed that searches would be more successful if students had a better understanding of DEI. Librarians could promote understanding by providing glossary definitions of key terms or tutorials and instruction on obtaining research on DEI topics. Other researcher recommendations included tutorials on library systems and displaying guides and channels to receive librarian assistance more prominently.

When asked what helped them identify valuable resources, users voiced common perspectives. Users frequently used item titles and descriptions or abstracts to determine how relevant a source would be. The format was also frequently cited as indicative of quality—peer-reviewed articles were the most sought-after publication type. A journal or author's reputation and how recently the source was published were important to some users. Few participants stated that they looked to see whether the item was available online or in print.

Table 14: How participants said they determined whether resources fit their needs.

Participants' considerations for determining the suitability of resources	# of participants who stated they would use
Description or abstract	17
Title(s)	13
Publication date	11
Keywords [did not specify where they viewed keywords]	7
Format (electronic or print)	5
Material type (peer-reviewed journal, newspaper, book, etc.)	5
Author	5
Publisher or journal	5
Works cited	3
Times cited	2
Material length	1
Subject headings	1
Reviews	1
Table of contents	1

The user experience interviews highlighted aspects of user behavior in searching and evaluating DEI library resources. Participants notably expressed confusion over DEI concepts. This project indicates that although the library's holdings provide DEI resources, users may not have the knowledge to begin their searches confidently. Challenges and areas for improvement were identified, including promoting collections materials, librarians as research specialists, and defining the Libraries' commitment to DEI.

LESSONS LEARNED

The team experienced difficulties in meeting the objectives outlined for the study's first phase. Assessing collections with topics other than DEI are more straightforward since those records often relate to specific Library of Congress call numbers, whereas DEI topics can be in various subject areas. A full collections audit by external auditors was too costly to perform. Instead, a smaller in-house audit, attribute sampling, was attempted—looking at specific sections of the library's collection considered as areas with good sources of data (e.g., Women's and Gender Studies literature). However, many of the records lacked substantial information that hindered searching, especially when utilizing the terms "diversity," "equity," and "inclusion." The team noted the use of MARC records within cataloging—where records are downloaded as-is, with no intention of obtaining records with enriched data. Because TTU adheres to Library of

Congress's policies and procedures, complete records' (those with abstracts or descriptions) subject term listings are not easy to officially change. A complete record for TTU Libraries' standards includes title, author, and publication date. It only includes summaries, abstracts, or extra subjects listed if they were already included in the downloadable record. The Libraries' cataloging department's work processes do not currently involve the manual enhancement of records. Items deemed DEI-related may not be found because there is no indication of relatable terminology within the records. Therefore, the team expects to continue efforts to research discoverability and DEI collections.

Concerns about the discoverability of DEI resources proved challenging regarding searching and evaluating records' cataloging and metadata. While researchers could not establish a link between the lack of robustness of catalog records and the discoverability of DEI resources, this question helped craft our research questions for Phase 2 and allowed us better to understand the remainder of the project's objectives.

The original intent of Phase 2 was to measure the success of library instruction on courses taught in the DEI areas. However, due to the Covid-19 pandemic, the team changed course. In March 2020, the university closed due to the pandemic, and classes moved to virtual or hybrid modalities. This limited what the team could access and impacted teaching faculty's willingness to partner with librarians in piloting new course-based research and instruction. As such, the team ventured towards non-course-based alternatives for the study.

Post-pandemic needs and the university's designation as a Hispanic-Serving Institution changed the campus with various teaching modalities and more participation in diversity efforts, and retrying some of the earlier methods in this new environment might achieve better results. For instance, the TTU Division of Diversity, Equity, and Inclusion restructured its vision and offices to better serve TTU's community. They might serve as a partner in future research. Consequently, the researchers might expect better participation across campus, especially with participants recruited specifically for DEI-related courses or topics taught. The team poses a continued effort to research discoverability and DEI collections.

Obstacles to our progress included learning the ins and outs of navigating the IRB (Institutional Review Board) process, learning campus policies and procedures, online systems, and the required CITI training. We also learned we should have included the User Experience Librarian from the beginning to help conduct an additional study regarding students' approaches to searching for DEI materials. As a plus, the team was able to utilize other outlets afforded to some member such as the campus' LEAD Fellows (Leaders Engaged in Advancing Diversity) and affiliations such as the Faculty Senate and Dean's Council.

However, throughout the process, the team approached problem(s) with different mindsets and tactics as obstacles arose with the research plan. The team varied approaches to raising participation and informally conducted audits. When methods were unsuccessful, the team began to identify areas that deserve further attention: for example, the need to enhance MARC records. The team also became aware that there was a need to be inclusive, not just within DEI, but inclusive of all majors, disciplines, and programs on campus, and still focus on the task at hand.

RECOMMENDATIONS

Researchers identified two common threads in the findings for both phases of the research study that present potential for future research. The first relates to the complexity of DEI and how it can hinder researchers because it manifests differently depending on intention and field of study. The second is how current cataloging practices impact DEI library resources' adequate access and discoverability.

DEI affects many aspects. Resources in different subject areas may contain useful information related to DEI. Additionally, diversity, equity, and inclusion as search terms are not consistently defined, which causes uncertainty, making concepts too broad. The findings of this study identified potential ways to address patron difficulty in narrowing down topics or searches.

One strategy included partnering with departmental faculty to identify research topics and questions in their field and setting up a partnership as an information-sharing collaboration. The partnership could translate faculty and student research interests into library collection development criteria, curated resource guides, and instructional strategies for searching and identifying relevant library resources. Librarian expertise in knowledge management and research could help faculty identify gaps in DEI research, improve student engagement with DEI topics, and implement targeted information and visual literacy instruction to attain student learning outcomes successfully.

Another strategy would be to address the TTU Libraries' web presence and outreach efforts and repeat Phase 2 user experience testing. This strategy would explore whether the recommendations improved patrons' ability to locate and evaluate library DEI resources. Recommended implementations include placing a prominent link to college-related DEI resources on the library's websites, promoting DEI resources via Communications and Marketing, and highlighting resources in OneSearch. Linking the resources from the website would provide a place where patrons could easily connect with librarians who can help them with their research needs. Communications and marketing could promote these resources through visuals and social media posts. Resources would be highlighted in OneSearch by cataloging them and linking or tagging them to specific key terms, allowing them to display near the top of the results list.

Cataloging and discoverability would be more challenging to address as many of the practices are outside many libraries' control. While the manual enhancement of library catalog records is feasible for smaller collections, the time commitment to tackle larger-scale cataloging projects would be difficult for most libraries to implement. Researching types of cataloging tweaks that would be most effective could help librarians advocate for large-scale changes that might involve collaborations between multiple libraries or vendors. Would universally including the abstract in article records or table of contents in book/e-book records significantly impact discoverability? Would additional cataloging information, such as studied population or author identity, vastly improve discoverability and user experience? Is there a way to implement these into the processes at the publisher, journal, or vendor level? Researching these cataloging and discoverability needs could potentially assist librarians as they try to help their patrons research DEI topics.

Endnotes

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