An Equity Audit for DEI Data in an Academic Library

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I. Introduction and Context

Rowan University is a large, Carnegie R2 research university in southern New Jersey, with approximately 20,000 students. The university is served by a library system known as Rowan University Libraries (RUL), which comprises three individual libraries: Campbell Library, serving undergraduate, professional, and graduate (including doctoral) students on the main campus, located in Glassboro; the library at the Cooper Medical School of Rowan University, located in Camden; and the library at the Rowan University School of Osteopathic Medicine, located in Stratford. Though geographically separate, RUL works as a collaborative unit in many respects, helping to best serve community members across each part of the university.

Beginning in late 2019, a DEI Committee formed across all three libraries, dedicated to improving the climate for diversity, equity, and inclusion (DEI) at RUL. This committee formed amidst a university-wide DEI strategic planning process initiated by Rowan's then-new Division of Diversity, Equity, and Inclusion, and was able to align itself to that process and use it as a springboard for developing initial goals and action items. One tool that was provided by the Division of DEI to guide the strategic planning process was a self-assessment instrument for campus departments to use in evaluating their strengths and weaknesses around DEI, and the DEI Committee at RUL used this tool for self-evaluation with assistance from library administrators and staff.

From our self-assessment, the DEI Committee determined that an area of weakness for RUL was in our information-gathering about our perceived climate of equity and inclusion for our users, and in what areas we might need to improve. It became apparent that an important first step for the committee, especially in terms of shaping its goals and priorities for the future, would be assessing the strengths and weaknesses of our resources and services for diverse users. As we set our initial strategic goals, we committed to conducting an equity audit with our Rowan-affiliated user population, as a means of collecting this information.

II. The Equity Audit

II.1 Definitions

While it may be unfamiliar to many library workers, the term *equity audit* is by now a familiar one in K-12 schooling. An equity audit is an accountability process for an organization's performance with regard to civil rights, frequently employed by school districts to assess their compliance with federal regulations. In the modern form initially delineated by Skrla et al., which has continued to evolve and transform throughout the early 21st century, educational equity audits take the form of systematically collecting and analyzing data about the school, district, or other organization, to reveal patterns of equity and inequity. This process demonstrates how poorer outcomes in marginalized communities result from lack of resources and support, and combats entrenched, biased deficit narratives of student achievement. Skrla et al. proposed a set of indicators for evaluation of K-12 education in three main areas,² which were expanded upon by Skrla, McKenzie, and Scheurich in 2009³: teacher quality equity, programmatic equity, and achievement equity. While these areas are not directly applicable to our work in an academic library, we found that it would be a simple enough matter to adopt the larger mindset and framework of the equity audit, while replacing the traditional K-12 areas for assessment with our own, more relevant topics.

Furthermore, Green expands on the traditional equity audit model by describing a framework for community-based equity audits, which adapt the approach to be more flexible and responsive to the issues in a specific educational context, and position educational leaders not as its top-down arbiters but as advocates for the broader needs of the educational community. With a basis in Freire's concept of dialogue, which encompasses love, humility, faith, hope, and critical thinking as fundamental components, Green draws on work from other fields to describe the key principles of this type of audit: prioritizing what the community deems most important, not what the auditors value; demonstrating cultural humility and recognizing the strengths of the community rather than its perceived deficits; and engaging in genuine dialogue with community members themselves. Khalifa, Gooden, and Davis, in their review of the literature on practices of culturally responsive educational leadership, also recognize similar elements in its most effective expressions, particularly in the form of critical self-reflection and community advocacy. These were also principles that very much influenced our approach to the equity audit.

II.2 Why an Equity Audit?

A tool most common in K–12 schooling may seem a peculiar choice of assessment method for a university library, but we found the framing that it provided to be useful for our purposes in several respects. Firstly, while the specific data points of the typical equity audit were not suitable for our organization, we found the overall conceptual framework to be more useful for our purposes than other potential tools of evaluating

DEI performance, such as a climate survey. We were most interested in revealing patterns of equity and inequity in the practical experiences and outcomes that users with different identities experienced in using our resources and services, rather than exploring their feelings and attitudes about the atmosphere of the library for DEI. An equity audit seemed to us to be more suited to this purpose in its approach, and we could easily replace the measures a school district might use with others that would be more meaningful in RUL's context.

Secondly, we were compelled by Green's concept of the community-based equity audit, and the Freirean principles on which it is founded. As a university library system, RUL exists to serve our academic community, and we wanted to approach our investigation in the spirit of uncovering the genuine priorities of that community and its most marginalized members, rather than imposing our own ideas about how the Libraries should improve. Green's model helped us craft our approach to data collection and analysis from a position of humility, compassion, and curiosity, from the beginning of the process to its end.

Thirdly and finally, an equity audit framework helped provide us with a framing for the context of collecting our data. As alluded to above, in a school or school district setting, the equity audit itself generally does not include the process of data collection itself; the data used for the process, as indicated by Skrla et al., are those that are already routinely collected and available in K–12 educational institutions. The equity audit itself, as Skrla et al. describe it, consists of gathering stakeholders from within and around the institution to examine, analyze, and assess that data, and discuss solutions to problem areas as they reveal themselves. In effect, our equity audit reversed the work requirements of this process: we already had a committee of stakeholders gathered in the form of the DEI Committee itself, and needed to collect the data about our users' experiences to be used by this group. Once the data was collected and analyzed, we would be ready to immediately identify patterns and discuss potential solutions, both within our committee and with stakeholders from the rest of RUL, as in any other audit.

III. Implementation

III.1 Data Collection Approach

We decided to employ a mixed-methods approach to collecting data for our audit, using instruments of our own design. While RUL already collects assessment data about users' experiences by other means, such as headcounts and the LibQUAL survey instrument, we felt that crafting our own questions rather than using these data would allow us to target the areas of most interest. Initially, the DEI Committee planned for the data collection to proceed in two phases: a primarily quantitative online survey, followed by a set of semi-structured individual and small group interviews. This approach seemed to us most effective in capturing both a broad set of quantitative

responses to analyze for patterns of equity and inequity, and more direct and personal narratives of library experiences that would help to humanize and contextualize the survey data.

The design approach to our survey instrument was also informed by the equity audit framework. Equity audits in schools examine a broad range of student experiences and outcomes, which they then compare across different demographics within a school and across different schools within a district to identify where some students are underserved relative to others. Similarly, we chose to avoid pointed questioning about users' impressions of the DEI climate of the library or specific incidents of bias, which users might feel ill-equipped to answer, or worry that their answers would be taken as punitive, confrontational, or accusatory. We instead focused on crafting questions on our users' general experiences with and awareness of various types of library resources and services, their impressions of our collections, and their levels of satisfaction. At the same time, although the survey was anonymous, we also concluded it with a section of relatively robust and detailed demographic questions. Our intention was to crossanalyze users' library experiences with their demographic categories, to reveal any patterns that might exist in how users with different identities appeared to experience library services. The qualitative responses in the survey and interviews could then give us real-world examples of how those positive and negative experiences with the library might play out for individual users.

III.2 Survey 1: Spring 2021

Unfortunately, however, the DEI Committee had not yet begun to develop the survey instrument when the COVID-19 pandemic forced nearly all classes and university operations to proceed remotely. Rather than postpone our data collection indefinitely, we decided to temporarily pivot to designing a survey that focused only on the Libraries' services and resources that were available online. This would at least afford us the opportunity to begin collecting and analyzing some data toward our ultimate goals for the equity audit, and in the short term would also provide some insight into what was and was not working well for users online in this emergency situation.

Our plan and questions for the first survey were developed over the remainder of 2020, alongside the DEI Committee's other initial projects. In March through April of 2021, the survey was made available online using the university's Qualtrics platform, and distributed to Rowan community members via the university's daily email news digest, as well as on the Campbell Library website and social media.

Though the survey remained open for over a month and our promotional push was repeated several times, however, we only received about 43 responses, in which users from marginalized communities seemed underrepresented demographically. Stress and fatigue from online interaction were still high at that point in the pandemic, from our observations, and we determined that the timing was not ideal for substantial

participation from our community, particularly not from marginalized members who might be particularly adversely impacted. Although we felt we could draw some preliminary conclusions from analysis of our responses to date, ultimately it became clear that it would be best to regroup and attempt a broader survey again in the following academic year, when it was planned that campus would be open again and we hoped that conditions around COVID-19 might have begun to stabilize. Over the summer and fall of 2021, we revised our questions to focus on in-person services and resources as well as those delivered online, and brainstormed new ideas for how better to promote the second iteration of the survey to our target audiences.

III.3 Survey 2: Early Spring 2022

In February through March of 2022, we launched the new survey with a plan to gather quantitative and qualitative data. Our goal was to gain additional insights into marginalized communities' experiences of the library, as well as information about the resources available to them and the resources that represent them in our collections. Through the committee's partnerships across campus, we were able to target specific groups and listservs to ensure our population was diverse. Our connections with the Office of Accessibility Services proved to be especially important to gathering responses, as did university-level email tools for reaching students in various demographic groups. There was also a marketing push with general emails through the university's email updates.

We received 540 total responses to our survey, from students, faculty, and staff, representing first generation students, LGBTQ+ students, students with disabilities, and students from diverse backgrounds. The respondents represented the university's three different campuses, highlighting perspectives from a variety of viewpoints.

III.4 Interviews: Late Spring 2022

All respondents were asked if they would like to be contacted for a follow-up interview, through a post-questionnaire that preserved the anonymity of responses and also served as an opt-in for a gift card drawing. Of those who indicated they would like to be contacted, we randomly selected 40 students to extend an invitation for an interview. The opportunity to interview was also advertised on all-student mailing lists for both medical school campuses, as the survey had focused more on Campbell Library and we wanted to ensure that we were able to collect data from all three campuses. There were seven students that participated in the interviews, in exchange for a \$20 gift card. These interviews were conducted via Zoom, with only audio recordings retained for transcription purposes. Two DEI Committee members led each interview, one taking detailed notes while the other engaged with the student. Most of the interviewees were from our medical schools, which gave us the opportunity to collect data on a population previously underrepresented in the responses we received.

III.5 Analysis and Coding: Summer 2022

After the interviews, the chair of the DEI Committee undertook the work of cross-analyzing the quantitative survey data with respondent demographics. For each survey question, response distributions were separated out for each demographic category that was collected from respondents: race/ethnicity, gender and gender identity, LGBTQ+ status, disability status, first-generation student status, and native English speaker status. Chi-squared tests were conducted on the response distributions for each category comparison (e.g., how respondents who identified as LGBTQ+ responded versus those who did not), to test for statistical significance in the differences in how responses were distributed. All questions where different demographics appeared to be correlated to different patterns of responses were noted. While an imperfect method, particularly in cases where respondents from a specific demographic were few, this strategy seemed to us sufficient to reveal sites were certain communities' experiences seemed to differ from the norm, so that we could investigate the specific issues at work more precisely in the future.

At the same time, a four-member subcommittee was formed to code all of the qualitative data. The subcommittee began their exploration by coding the qualitative responses to the five open-ended questions in the survey, first independently and then coming together to compare the themes that they had identified. Each subcommittee member was provided a spreadsheet of all of the responses, with a separate sheet for each question. Question by question, each member identified categories from the responses, and sorted each response into an appropriate category. Due to the relatively straightforward nature and small number of the responses, the use of software for analysis was not deemed necessary. Once all of the responses had been sorted, members then compared and discussed their selected categories, both to agree on and validate these categories and to examine larger patterns across multiple questions. Based on these discussions, the subcommittee sorted all of the patterns that they observed in the responses into a set of categories and subcategories of responses, which was then summarized in a narrative report for future reference. A largely identical process was also used for coding the responses to the questions in the interviews, although in this case the most commonly recurring categories were separated out between Campbell Library and the two medical libraries, with most of the data focused on the medical libraries.

IV. Findings and Onward

IV.1 Quantitative Patterns

Overall, the results of the audit were encouraging about equity in the Libraries to date. Substantially more positive than negative experiences with library resources and services were reported overall, and few areas were identified where any one demographic group appeared to be significantly correlated to more negative experiences than other users. There were, however, a few areas where quantitative

responses appeared to indicate inequitable experiences for a specific demographic group or groups. We organized these sites of concern into four categories: library collections, spaces, services and website/discovery.

In the area of collections, we asked users whether they felt the library had sufficient resources relevant to them and their needs, and whether they felt the library had sufficient resources representing marginalized communities. Our general impression from the responses was that most users either were satisfied with our collections in these respects, or did not feel they had sufficient knowledge to comment. We did find, however, that satisfaction with our collections in these areas was significantly more likely to be lower for non-native English speakers, LGBTQ+ users, and users with disabilities. This indicated to us that our collections are not serving all users equitably, and we should review them with a particular eye for representation and relevance for the minoritized users who reported lower satisfaction.

In the area of our spaces, we asked users how easy or difficult they found it to access physical resources in the library building. Similarly, for the most part, the distribution of users' responses was similar across different demographics. The one exception was that users with some types of disabilities reported significantly more difficulty than nondisabled users. This indicated to us that there may be accessibility issues in library spaces that are creating inequitable experiences in navigating the building and retrieving physical items, and these should be investigated further.

In the area of our services, we asked users how comfortable they were asking library staff for help and using library services, and to rate their overall satisfaction with library services. While we found no patterns of inequity with regard to comfort with asking for help, we did find that nonbinary and/or transgender respondents rated their comfort with using library services in general significantly lower than did others, and LGBTQ+ users and non-native English speakers reported significantly lower levels of overall satisfaction with library services. This indicated to us that there is inequity in how some minoritized users are experiencing our services, and that we should investigate more deeply what these users are most likely to need at Rowan University and in general, and how our services might better address these needs.

Finally, in the area of our website and discovery tools, we asked users how easy or difficult they found it to search for and use online resources, and to search for physical resources. For the most part, users' impressions of the ease of these tasks fell into similar patterns across different demographics. Neurodivergent users and some with racially minoritized identities, however, were significantly more likely to find it more difficult to use online resources and search for physical resources, indicating possible inequity in how these tools serve the needs of users from those communities. This warrants further investigation into particular needs and barriers for users from those

groups, and how these may interact with the digital information-seeking tools that we have available, as well as how we may be able to improve the experience.

IV.2 Qualitative Patterns

The patterns we observed in the qualitative survey responses fell into three categories: desired additional resources, perceived positives and negatives, and recommendations for improving library services. In the category of desired additional resources, there were generally relatively few responses: three questions were asked on this topic, each of which received between 10 and 30 responses. The most commonly recurring subcategories of response types in this area, in descending order of frequency, were: desire for more online subscriptions, resources, and access on particular subjects: desire for subscriptions to specific resources or types of resources; requests for resources the library already has available, but of which users did not seem to be aware; and requests for the library to collect course textbooks. The category of perceived positives and negatives about the library was derived from a single open-ended question on this topic, which received about 170 meaningful responses. The most commonly recurring subcategories of "positive" responses were: friendliness and helpfulness of library staff; the overall welcoming atmosphere and quiet of the library building; ease of finding resources, on the website and in the building; the resource types and content available; generically positive responses ("everything is great" and similar); and the library's study rooms. The most commonly recurring subcategories of "negative" responses were: users' lack of awareness of the library's resources and services; issues with accessing and using the building, e.g., navigational issues; noise and distraction: lack of or difficulty accessing desired resources and services: need for more staff availability and help; and issues with library technology. The category of recommendations for improvement, meanwhile, also derived from a single question on this topic, to which there were about 180 meaningful responses. The most commonly recurring subcategories in this area were: to improve awareness, promotion, and communication of existing services and resources; "nothing," "everything is great," or other indications of no need for improvement; to improve the website and available "how to" information online; to provide more or improved private study spaces; to provide better or more accessible technology equipment; to acquire more resources of particular types or on particular content; to provide more and better staff support throughout the library spaces; to offer better wayfinding in the building; and to offer more workshops and library education.

The most commonly recurring categories of responses in the interviews mostly concerned the medical library spaces. We most commonly heard responses that indicated that the students interviewed are frequent library users, and primarily use the library as a study space. Similarly, we found that these students highly valued private study spaces within the libraries, and desired more spaces of this type. The most frequently recurring complaints concerned comfort issues, such as HVAC,

lighting, noise, and so on, and the most frequently recurring desires they expressed were for comfort and rest resources, such as leisure reading, mindfulness spaces, nap rooms, more soft spaces, and similar. Students reported using physical resources little or not at all, but electronic resources very frequently and comfortably, with some indicating that they used open web resources for information-seeking as well. Some felt that more orientation and explanation of library resources would be helpful, however, perceiving a steep initial learning curve to their use. Overwhelmingly, students gave positive responses about library staff and times they had sought help in the libraries, but they also reported seeking help seldomly and being hesitant to approach staff for help, as well as not feeling staff were highly visible and not being sure of where to go for more assistance.

IV.3 Acting On the Findings

The patterns of inequity that we identified from the survey, along with qualitative insights from the survey's write-in responses and our interviews, form the foundation for our next steps to address inequities in the Libraries. To begin with, the summary of patterns from our collected data served as a basis for the DEI Committee's process of developing strategic goals for the next three-year period, as we had essentially completed the goals we initially set alongside the rest of the university, shortly after the committee was formed. This process took place over fall of 2022, with final goals readv to be submitted to the university dashboard at the end of the calendar year. We are not able to address all of the areas of concern immediately, owing to a number of converging factors: the Libraries have identified a need for a website redesign, which means that significant changes to the website and discovery cannot be addressed until we are ready for that process; Campbell Library on the Glassboro Campus is preparing for a major renovation, and increased accessibility for our spaces is already a component of the plans for that process, which we are still awaiting; and severe understaffing in relevant departments is currently limiting our capacity for a full collection analysis, which we believe would be a necessary first step for systematically identifying and addressing our collections' weaknesses. There will be more opportunity to make change in each of these areas in the near future. For the time being, however, the DEI Committee has identified three main goals for itself to address the other areas of concern that emerged from the results. These are: (1) to increase the promotion of library services and resources, especially to marginalized communities; (2) to investigate how to improve services for LGBTQ+ and disabled users, via user research strategies; and (3) to create spaces and offer materials that facilitate wellness and stress relief for users. Not every issue will be possible to address at once, and we believe that these represent the areas of highest priority where we can focus our attention in the near term and have the greatest influence.

Per the equity audit model, furthermore, it is equally important that we communicate these results and generate ideas with all of the Libraries' stakeholders. To do so, the

DEI Committee has worked with RUL leadership to present our findings to all staff across the Libraries, and then connect this information directly to brainstorming and early activities of RUL's currently ongoing strategic planning process. The Libraries' leadership team has made it clear that the results of the equity audit are expected to directly inform the strategic plan not only of the DEI Committee, but of RUL as a whole, with our goals and priorities to be set with consideration of how they address the areas of inequity and need that have been observed. The DEI Committee will support this goal in the coming year by dedicating a portion of the regular professional development meetings we host for all staff to discussion of the issues identified in the equity audit. With this continued consideration and extended time to delve into greater understanding of the problems and possible solutions, we hope to achieve saturation of the issues revealed by the equity audit into the awareness of all library workers at RUL, and make it a part of our shared understanding of our libraries' strengths and weaknesses and how we may work to improve.

V. Recommendations and Conclusions

Equity audits are a powerful tool to not only help us meet (and exceed) goals set by the university in the areas of DEI, but to continue to help our patrons and engage with them on meaningful levels. The gaps that revealed themselves in the audit will be used to build the library's new strategic plan. The data gathered from the survey impact each of our libraries in different ways, allowing for each group to use the data to lobby necessary constituencies.

If other libraries decide to take on this type of project, it is important to get buy-in from all the stakeholders and find champions across campus to help, especially in gathering the data. The difference between our first attempt and our second attempt at the survey highlights the need to engage beyond the minimum and to work with offices and staff in contact with the target demographics. The library often will put out one to two surveys a year in some capacity, so we timed our survey carefully so as not to compete with ourselves, which we fell partial victim to in the first attempt. Timing also was not on our side with the first survey, so finding a good window of opportunity is necessary. While part of the poor timing could not be helped due to Covid, part of it was the window at the end of the semester, which made it hard to get students and faculty who were already busy at that time to respond.

Implicitly built into an equity audit is the message to your audience that you care and you are trying to do better. Libraries can use this to build and expand on the goodwill of any previous DEI activities that they are working working toward. Affording people the opportunity to ask for improvements or to give suggestions shows the library is taking DEI seriously and wants to be a welcoming environment for everyone, in person and virtually. We conducted our equity audit not only to gather data on marginalized communities but to express to them our desire to serve them better. It is our hope we

can highlight some of the changes to the spaces and the collections in response to the audit to continue to build trust, and to better our space not only for those in marginalized communities, but in turn for everyone who uses the library.

When considering a DEI audit, simple questions can be the best way to start. This gives respondents room to answer the questions as they see fit, and it can illuminate unanticipated questions or issues. Taking advantage of open-ended questions allows for this, as well as follow-up interviews. Making assumptions about the type of resources that are familiar to users may obscure issues; a perfect example of this is all of the respondents who requested resources the library already has access to. We now know the importance of marketing resources to specific groups of users. As with any survey, it is also important to be very careful with wording and even give other representative groups the opportunity to look over the survey for questions or concerns that might show up. Making sure that questions are not repetitious, in actuality or in appearance, is also critical. In some areas, our survey asked similarly-formatted questions about multiple types of resources, which appeared to lead to increased dropoffs and non-responses in these cases, likely because respondents failed to notice the subtle wording changes and thought that questions were being repeated. This was an important error to learn from to maximize responses, alongside the importance of taking care to avoid jargon or overly complicated questions.

Without the continued support of the administration not only in the library, but across the campus, we would not have had this success. The administration prioritizes DEI issues, allowing our committee and this equity audit to not only exist, but thrive. Knowing that there are mechanisms to keep track of DEI efforts and that DEI is built into our strategic plans and initiatives has bolstered our successes and allowed us to commit to loftier goals.

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Endnotes

- ¹ Linda Skrla et al., "Equity Audits: A Practical Leadership Tool for Developing Equitable and Excellent Schools." *Educational Administration Quarterly* 40, no. 1 (2004): 140–141.
- ² Skrla et al., "Equity Audits," 142.
- ³ Linda Skrla, Kathryn Bell McKenzie, and James Joseph Scheurich, *Using Equity Audits to Create Equitable and Excellent Schools* (Thousand Oaks, CA: Corwin, 2009), 31–55.
- ⁴ Terrance L. Green, "Community-Based Equity Audits: A Practical Approach for Educational Leaders to Support Equitable Community-School Improvements." *Educational Administration Quarterly* 53, no. 1 (2017): 9–10.
- ⁵ Paulo Freire, *Pedagogy of the Oppressed* (New York: Continuum, 1970), 81–92.
- ⁶ Green, 15–17.
- ⁷ Muhammad A. Khalifa, Mark Anthony Gooden, and James Earl Davis, "Culturally Responsive School Leadership: A Synthesis of the Literature." *Review of Educational Research* 86, no. 4 (2016): 1280–1282.

Bibliography

Freire, Paulo. Pedagogy of the Oppressed. New York: Continuum, 1970.

- Green, Terrance L. "Community-Based Equity Audits: A Practical Approach for Educational Leaders to Support Equitable Community-School Improvements." *Educational Administration Quarterly* 53, no. 1 (2017): 3–39. https://doi.org/10.1177/0013161X16672513.
- Khalifa, Muhammad A., Mark Anthony Gooden, and James Earl Davis, "Culturally Responsive School Leadership: A Synthesis of the Literature." *Review of Educational Research* 86, no. 4 (2016): 1272–1311. https://doi.org/10.3102/0034654316630383.
- Skrla, Linda, Kathryn Bell McKenzie, and James Joseph Scheurich. *Using Equity Audits to Create Equitable and Excellent Schools*. Thousand Oaks, CA: Corwin, 2009. https://doi.org/10.4135/9781452218953.
- Skrla, Linda, James Joseph Scheurich, Juanita Garcia, and Glenn Nolly. "Equity Audits: A Practical Leadership Tool for Developing Equitable and Excellent Schools." *Educational Administration Quarterly* 40, no. 1 (2004): 133–161. https://doi.org/10.1177/0013161X03259148.