Georgia Tech Faculties Attitude and Knowledge Regarding Accessibility in the Classroom

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Abstract – **This paper presents the results of an initial survey conducted by the AccessCORPS Vertically Integrated Project (VIP) at the Georgia Institute of Technology. The goal of this survey was to assess the current level of disability inclusion and accessibility accommodations by Georgia Tech faculty across a wide variety of disciplines. The results identified existing knowledge and awareness gaps, as well as faculty communication preferences. The Georgia Tech faculty were shown to be supportive of our goals to increase accessibility at Georgia Tech, but often lack the knowledge and/or the time to make these changes on their own. Those who have made attempts to improve their courses often used basic tools available through canvas that often do not resolve all the issues present. These tools however serve as a useful start to educate the Georgia Tech faculty on accessible course design These findings serve as a valuable foundation for further AccessCORPS efforts to promote course accessibility and inclusiveness at Georgia Tech.**

Introduction

AccessCORPS is a Vertically Integrated Project (VIP) at the Georgia Institute of Technology comprised of Students and Faculty seeking to bridge the accessibility gap between students and achieving a higher education. AccessCORPS focuses on evaluating, remediating and research Georgia Tech courses to make learning more inclusive and accessible to all students, including those with disabilities. Founded in the Fall of 2022, this program has since outlined its operational infrastructure to facilitate accommodation support and internally developed a matrix of human diversity that include bodily, sensory, social, cognitive, emotional, experiential, and environmental factors.

With a desire to better understand the state of accessibility awareness at a faculty level at Georgia Tech, the AccessCORPS team conducted an initial survey to assess the current level of awareness and understanding of disability inclusion and accessibility accommodations by Georgia Tech faculty across a variety of disciplines. This report presents the results and analysis of this survey, which will be used to better align AccessCORPS efforts into expanding higher educational accessibility at Georgia Tech.

Background

The Rehabilitation Act of 1973 prohibits discrimination based on disability for institutions that receive federal funding. Title 2 further supports this by stating that local and state governments - including public universities such as Georgia Tech - cannot discriminate against those with disabilities. The Office of Disability Services (ODS) at Georgia Tech works hard to protect these rights as well as to coordinate accommodations for students. However, ODS is severely resource-limited, so ODS accommodations are only available in reaction to those with their disability documented and registered with ODS, which equates to approximately 3% of the current student body (Office of Disability Services, 2023). Further, ODS based accommodations are limited in scope (often including little more than extra time on exams) and typically only applied to the specific courses (in a specific semester) that the particular student is registered for. Clearly the lack of scope and scalability in the ODS based efforts limits the potential reach and impact of any improvements to course accessibility. The is a significant gap between the 3% of GT students accessing ODS based services, and the likely amounts of GT students that are living (and learning) with a disability: in 2015 19% of undergraduate students in the United States reported having a disability that impacts their education (National Center for Education Statistics, 2023), with this number most likely increasing in the past decade. It is likely that most Georgia Tech students do not self-report their disability due to stigmatization fears, or perhaps due to the belief that Georgia Tech (like many top-tier research universities) is simply not going to provide accommodating and accessible education. Regardless, proactively making all Georgia Tech courses accessible will improve the overall educational experience and quality at Georgia Tech, as well as creating a more inclusive learning environmental for everyone in the same stroke.

Scope of AccessCORPS GT Faculty Survey

This survey was targeted towards faculty at the Georgia Institute of Technology. Survey questions included identifying their academic department, their level of interest in improving the accessibility of their course, and their willingness for further course evaluation by a member of AccessCORPS. Professors were also asked about their preferred interaction level of evaluation such as a one-on-one session or a training seminar. Additionally, the survey identified potential candidates for a more in-depth interview regarding their responses.

Results and Discussion

This survey was administered via Qualtrics and was distributed by an invitation/request to participate being sent to each of the school chairs, which was then shared with their faculty. During the Spring semester of 2023, the survey was completed by ninety-eight faculty members at the Georgia Institute of Technology (7.5% of the approximate 1300 faculty at Georgia Tech). All six of Georgia Tech's colleges participated, and the College of Sciences (CoS) had the highest participation rate (Figure 1 at the bottom of this document). Looking at specific academic units, the schools with the most respondents were Mathematics (CoS) and Modern Languages (Ivan Allen College), each making up 13% of the total responses. Respondents were asked what course sizes they taught, and the majority teach courses with fewer than thirty-five students and 84% teach courses with fewer than one hundred and fifty students (Figure 2). Note that due to on-campus room size limitations, relatively few courses at GT have more than 150 students.

Georgia Tech's Center for Inclusive Design and Innovation (CIDI) offers a course on accessible academic course design. Only 21% of respondents have heard of the course, and of those, only 14% of them have completed the course (or fewer than 3% of respondents). There is however an interest shown in inclusive design, with 16% of respondents requesting more information (Figure 3). 96% of respondents have provided an accommodation for a student taking their course, indicating that most Georgia Tech faculty members have at least some experience with providing accessible education (Figure 4), though see discussions of ODS-based accommodations above. As anticipated, the most commonly provided accommodation is extra time for exams, for in-class activities or for homework (Figure 5). 38% of respondents have evaluated the accessibility of their courses, with the most commonly used tools being Canvas ally tools, Microsoft application accessibility checker and the Canvas accessibility report (Figures 6 & 7). While these were the most-used tools for course evaluation, some of the respondents reported using various websites that evaluate PDF documents and color-blind simulators to check the contrast of images used during lectures. To improve accessibility in their courses, some respondents reported using online textbooks that are certified accessible, and sending out start-of-semester surveys for all students to report any accommodations they may need, even if the student is not registered with ODS. Faculty respondents were then asked to evaluate the accessibility of their course(s) without providing accommodations, using their own knowledge of inclusive design. Only 34% of respondents believed that students with disabilities would be able to take their course(s) with the same level of ease as any other student. 42% believed that students with disabilities may have some difficulties completing their course without accommodations, and the remainder (24%) were unsure of how disabled students would perform in their courses (Figure 8). When evaluating the accessibility of a course, not only does the instructional material need to be evaluated, but if the course is in person, then the accessibility of the physical location must also be considered. When asked to evaluate the accessibility of the location of their courses, 42% of respondents reported that students with disabilities may have some difficulty reaching the location of their course, with 7% of them believing that it would be impossible for the student to reach the course location (Figure 9). Several courses offered at Georgia Tech have accompanying labs and/or studios. Respondents were also asked to evaluate these labs and studios, and although 67% of respondents teach courses without attached labs or studios, 19% of respondents believed that disabled students would have some level of difficulty completing the labs or studios accompanying their course without accommodations (Figure 10).

For the next section of the survey, respondents were asked how much they agreed with four statements. The first statement was, "I am interested in improving the accessibility of my course(s)." 89% of respondents agreed with this statement (Figure 11). The next statement asked the respondents if they felt they were qualified to make changes to their course to make it more accessible. 50% of respondents slightly agreed with this statement, and 30% disagreed (Figure 12). The third statement asked respondents if they had the time to make these changes, regardless of whether they believed they were qualified. 60% of respondents disagreed with this statement (Figure 13). From the above statements, it is clear that respondents do want to make changes to improve the accessibility of their course(s) but lack the knowledge and/or time to make these improvements themselves. Respondents were then asked if they would be willing to work with a member of the AccessCORPS team to make these changes. 79% of respondents agreed with this statement, indicating an overall interest in inclusive education among Georgia Tech faculty (Figure 14). AccessCORPS hopes to provide a helping hand in improving the knowledge of Georgia Tech faculty regarding inclusive course design, and so respondents were asked how they would like to work with AccessCORPS personnel. 61% of respondents would prefer group training seminars for inclusive design training instead of one-on-one consultations to evaluate and improve their course(s) (Figure 15).

Respondents were asked to determine if they had the time to evaluate the accessibility of their course, regardless of their knowledge regarding inclusive design. When the responses to this question was crosschecked against the responses to the statement "I feel qualified to make changes to improve the accessibility of my course(s)," a pattern becomes clear, showing that those who feel qualified to make these changes also believe that they have the time to make these changes (Figure 16). Clearly, those who are knowledgeable about inclusive design in education believe that this is a manageable task. A comparison was also completed regarding the two statements, "I feel qualified to make changes to make my course(s) more accessible" and "I am interested in improving the accessibility of my course(s)." Respondents who are interested in improving the accessibility of their course(s) also feel qualified to make changes to improve the accessibility of their course(s) (Figure 17). The responses to the statements asking respondents how accessible their course(s) are and how qualified they feel to make their course(s) accessible were also crosschecked, and surprisingly, even those who responded

that they felt they had the skills to make their course accessible were not more likely to rate their course(s) accessible (Figure 18). Taking this into account with the information from figure 16, which details that those who feel they are qualified to make their course more accessible often feel they have the time, it is not really evident why these changes have not been made to their course. Perhaps the respondents feel that they need a starting push to make changes, and AccessCORPS is willing to help them start the process. When the respondents rating of their course(s) accessibility are divided by subject area, there is no clear subject that is more inclusive than the other (Figure 19). Clearly, the movement to increase academic accessibility at Georgia Tech will need to be campus wide.

Conclusion

Despite the vast availability of both external and internal resources aimed at improving course accessibility for students with disabilities, faculty are not necessarily aware of them. This pain point highlights the necessary role of AccessCORPS to increase education and awareness among faculty about the available resources and best practices for creating accessible course content.

As is true in most facets of life, making something more accessible for one individual does not inhibit another individual's experience. Making courses accessible for disabled students will not impact the education of non-disabled students, and it could improve the educational experience of all individuals involved. By partnering with the Georgia Tech faculty, we in the AccessCORPS team believe that we can make lasting changes at Georgia Tech for the benefit of everyone. We understand the limited time that Georgia Tech faculty have, but for a matter as important as accessible education for all, these changes need to be made. Whether it be holding seminars teaching the faculty how to design accessible curriculum or our team or us making the changes ourselves after being given access to a course's instructional materials, we hope to make these changes ensuring convenience of the faculty members.

Next Steps

Moving forward, the AccessCORPS team is working on another survey, this time focused on current Georgia tech students with disabilities. This survey aims to help the team determine what curriculum related struggle these students face, and what changes we could make for their benefit. We will be asking questions such as "What accessible documents do you prefer in a classroom setting" as well as specific questions regarding how the student's disability effect their day-to-day academic activities, such as requiring a screen reader to complete homework. We hope that by identifying the specific barriers students face and how they would solutions to be made, that we can create a better environment for disabled students at Georgia Tech.

Our team also has many other projects that will be running concurrent with this second survey. We are creating a virtual library of different accessibility tools for any type of electronic format. Our media and outreach team are also working on adding this information to our team's website in easy-to-follow videos. We are also in the process of contacting certain professors about working with us one-on-one to make accessibility changes to their curriculum. Altogether, our team hopes to create an environment at Georgia Tech where we can help answer any accessibility questions and make educational better for all.

References

"Disability Discrimination." *Home*, US Department of Education (ED), 19 July 2022, https://www2.ed.gov/about/offices/list/ocr/frontpage/faq/disability.html#:~:text=Title%20II%20of%20the%20Americans,discriminating%20against%20persons%20with%20disabilities.

"What Are a Public or Private College-University's Responsibilities To." *ADA National Network*, 27 Mar. 2023, https://adata.org/faq/what-are-public-or-private-college-universitys-responsibilities-students-disabilities.

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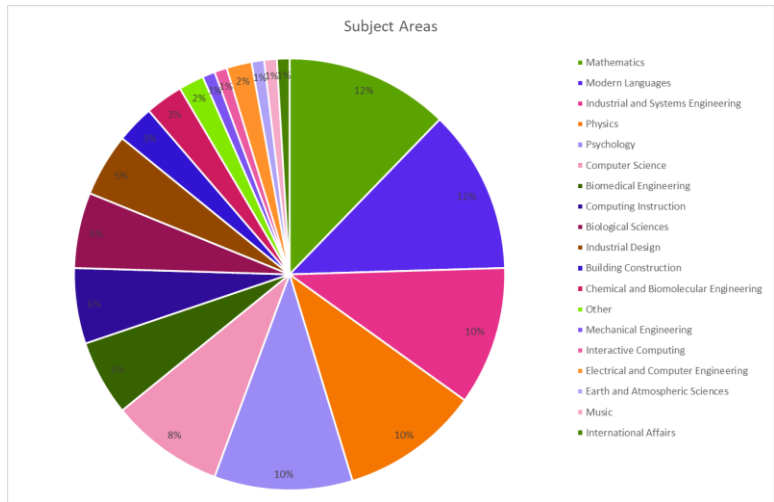
Charts and Figures

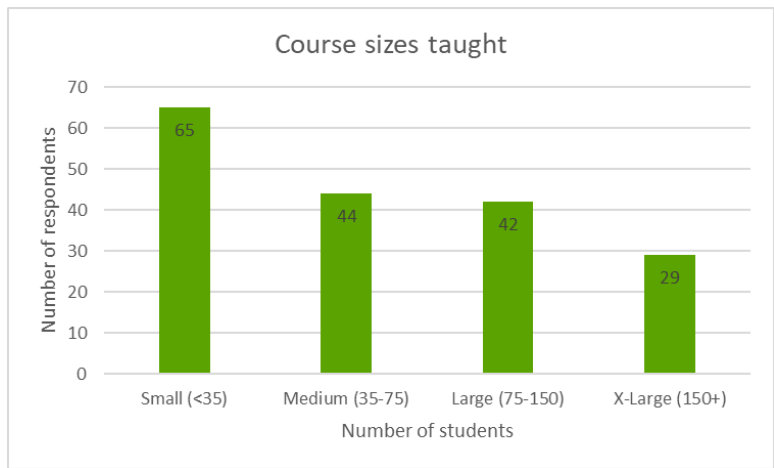**Figure 1.** Subject areas taught by respondents

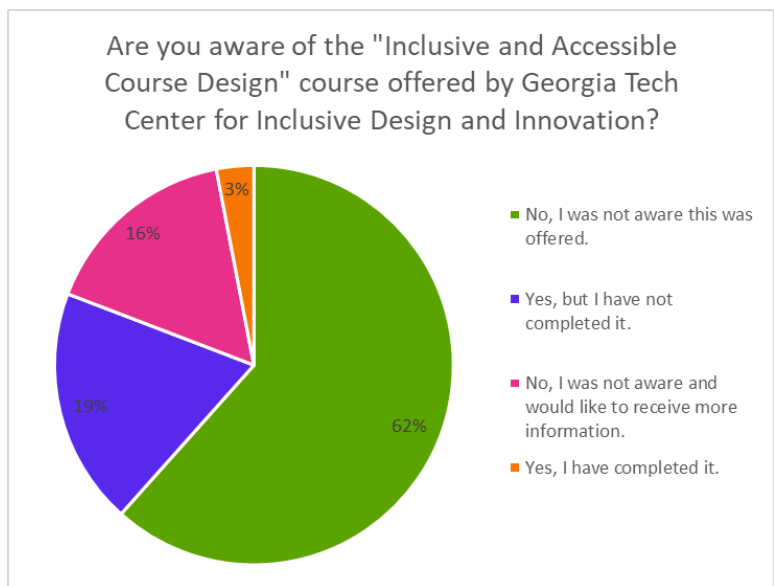**Figure 2.** Course size(s) taught by respondents

Figure 3. Respondents' awareness of Georgia Tech's inclusive design course
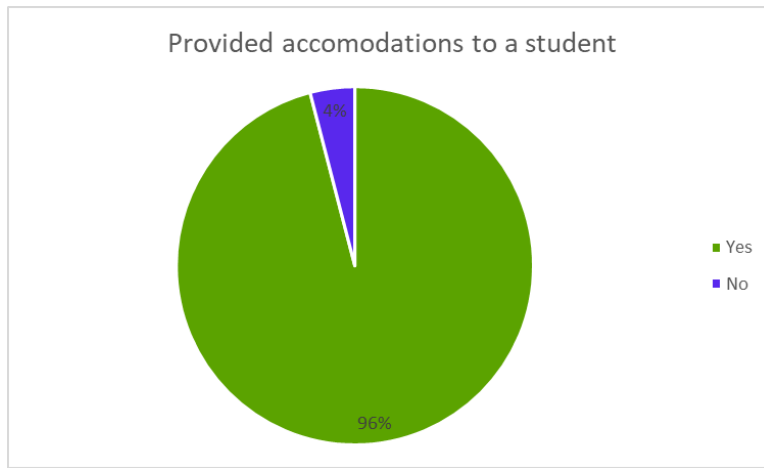
Figure 4. Whether or not the respondents have had to provide accommodations for their course(s)
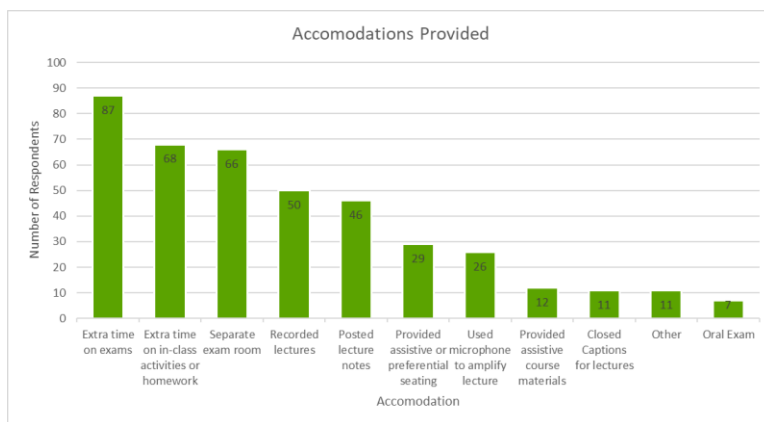

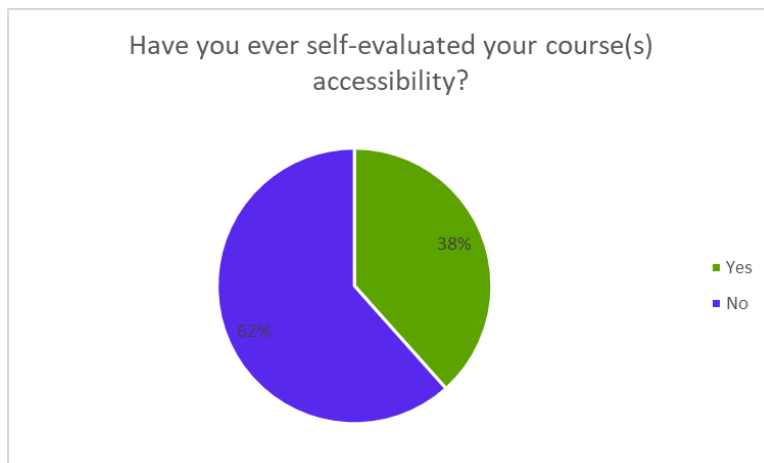Figure 5. Accommodations provided by respondents for their course(s)

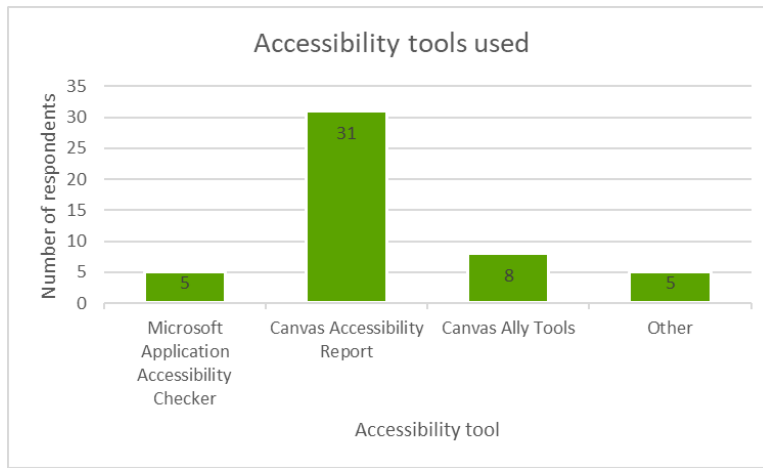Figure 6. Whether or not the respondents have evaluated the accessibility of their course(s)

Figure 7. Tools used to check course(s) accessibility by respondents
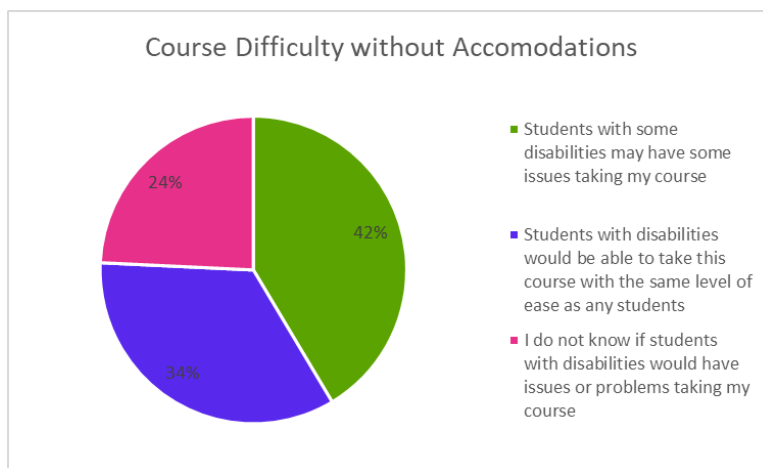
Figure 8. Respondents rating on the difficulty of their course(s) for disabled students without providing accommodations
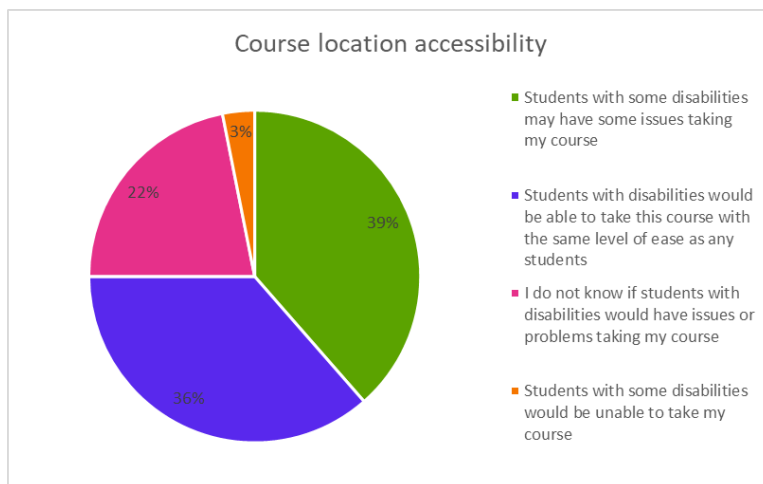
Figure 9. Physical accessibility of the location of the course(s) meeting place
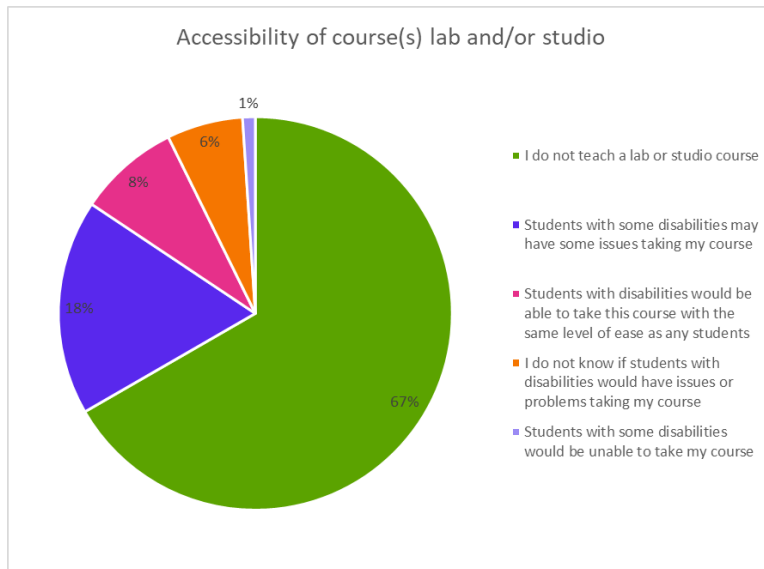
Figure 10. General accessibility of the attached lab or studio of the respondents' course(s)
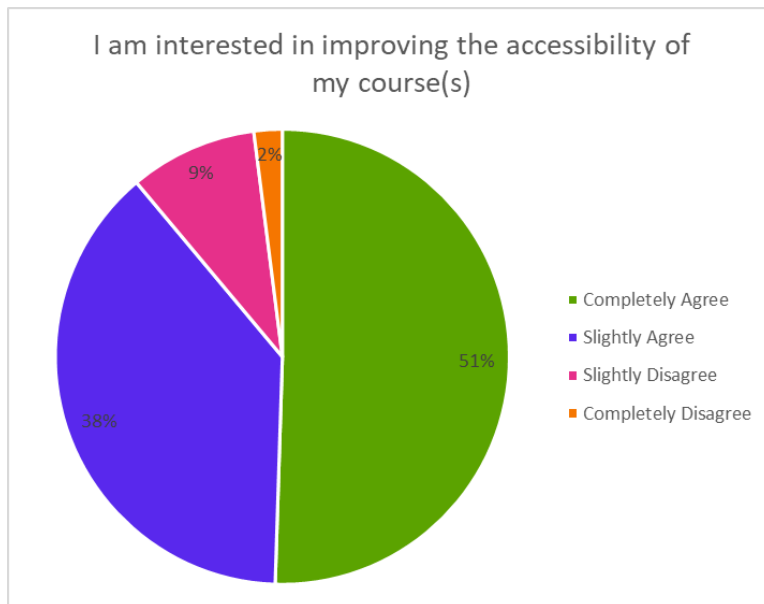
Figure 11. Respondents interest in improving course(s) accessibility
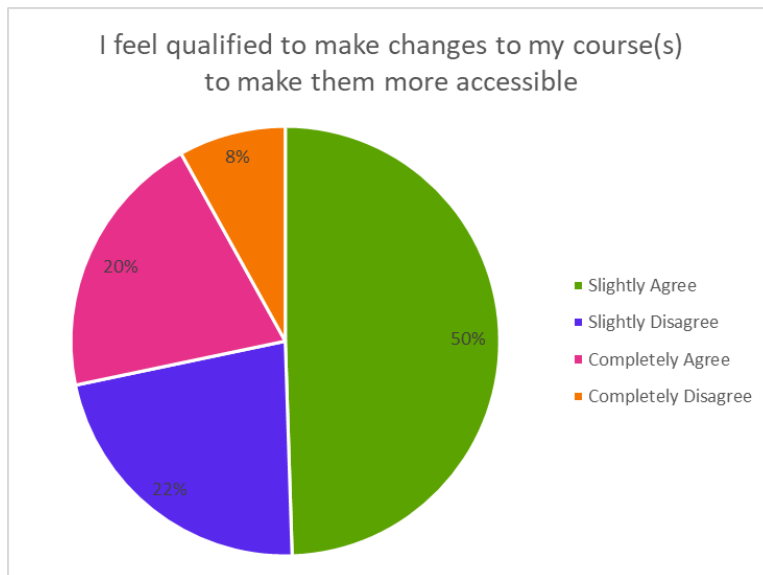
Figure 12. Whether or not respondents feel qualified to make changes to their course(s) to improve accessibility
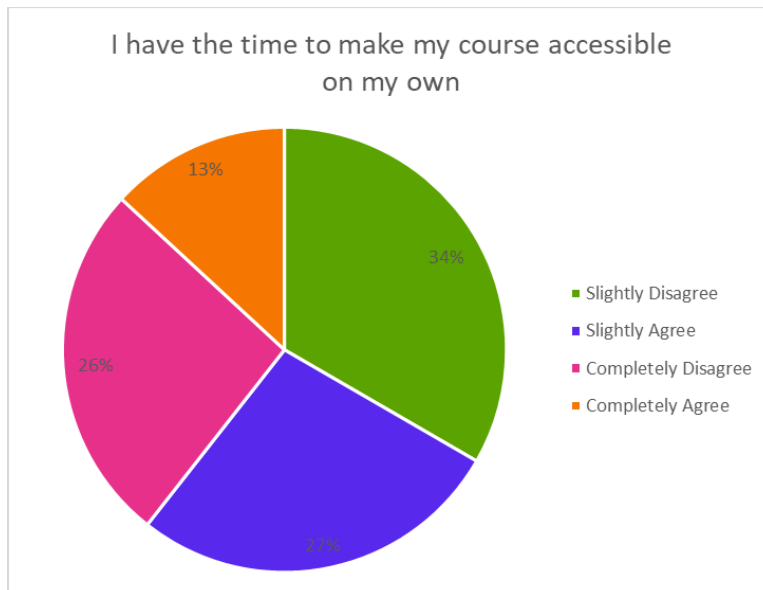
Figure 13. Whether or not respondents feel they have the time to make the necessary changes to their course(s)
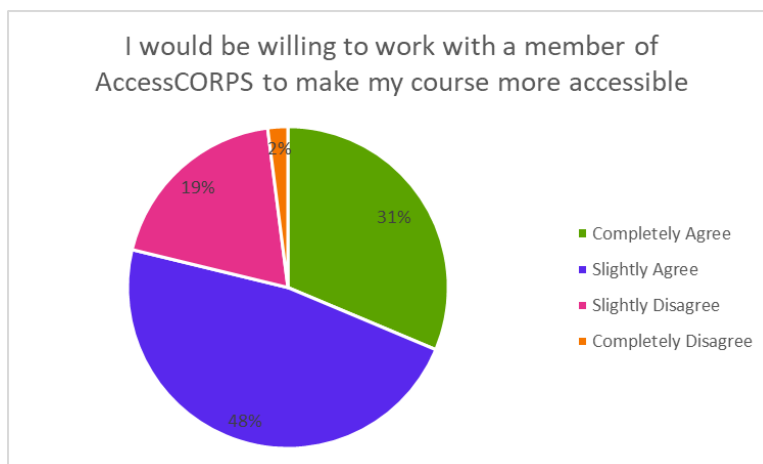
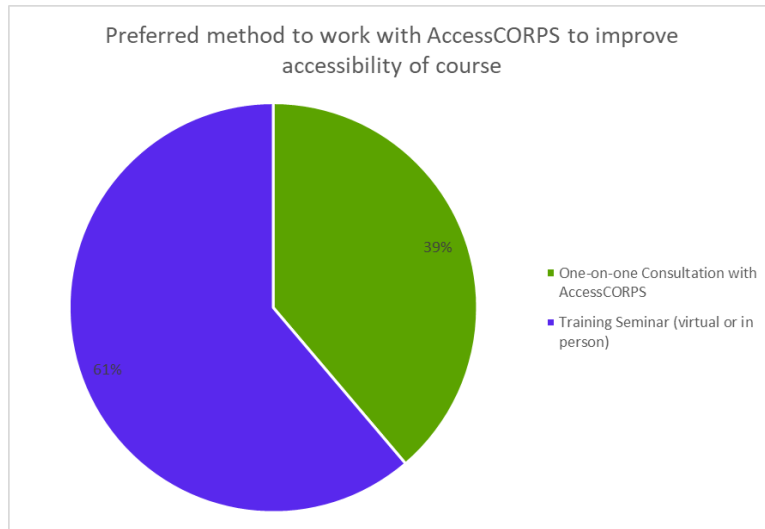**Figure 14.** Willingness of respondents to work with AccessCORPS to improve accessibility of their course(s)

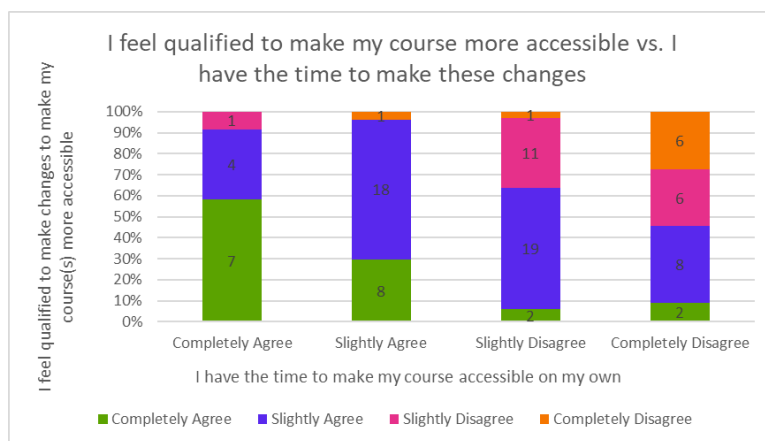**Figure 15.** Preferred method of training with AccessCORPS personnel

Figure 16. Cross comparison of respondents feeling qualified to make changes to improve accessibility of their course(s) crosscheck against them having the time to make these changes
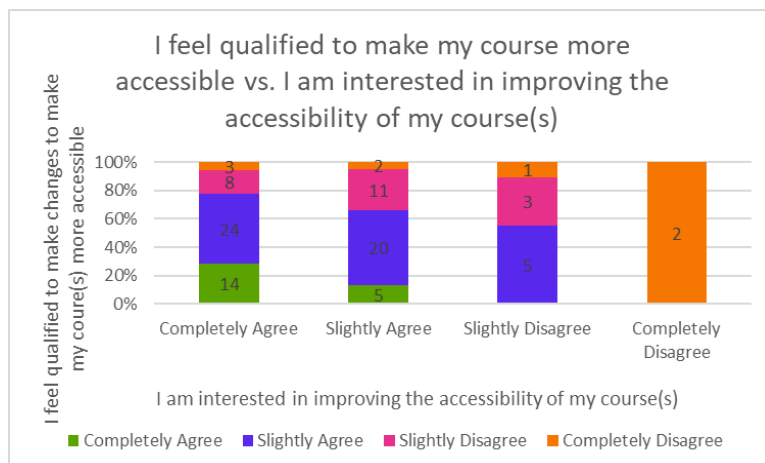

Figure 17. Cross comparison of respondents feeling qualified to make changes to improve accessibility of their course(s) crosschecked against them having the interest to make these changes
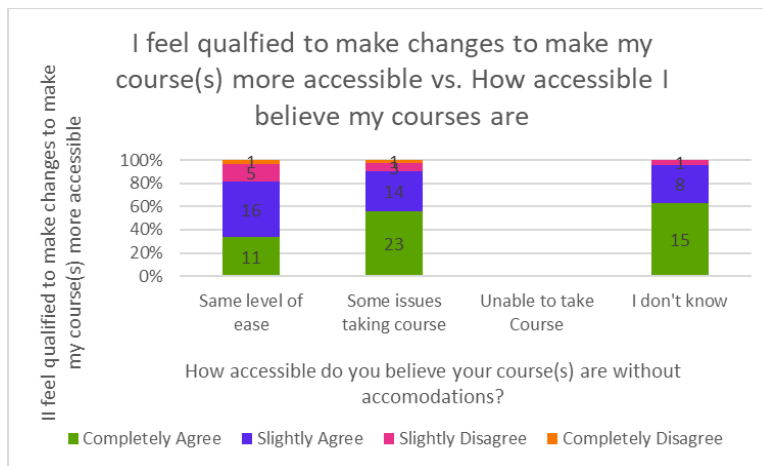
Figure 18. Cross comparison of respondents feeling qualified to make changes to improve accessibility of their course(s) crosschecked against how accessible the respondents rate their current course(s)
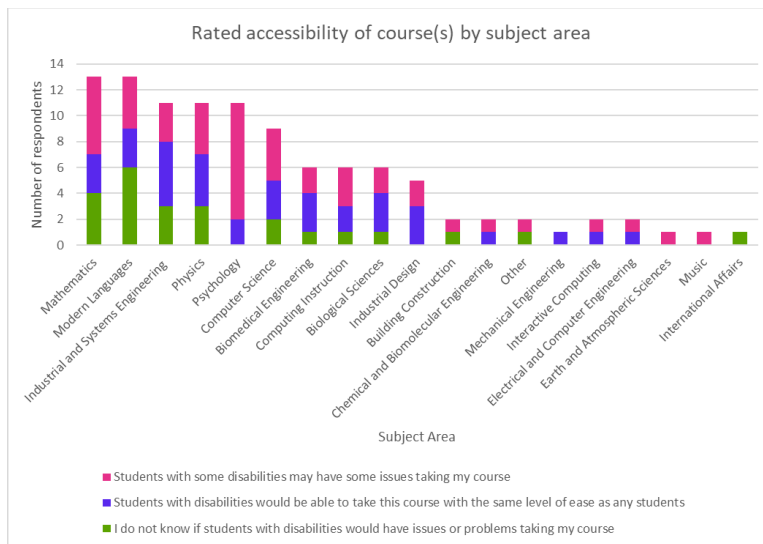

Figure 19. Rated accessibility of respondents' course(s) broken down into by which subject area(s) the respondents teach