

Centering Accessibility in Technical Communication Pedagogy

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by

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ABSTRACT

CENTERING ACCESSIBILITY IN TECHNICAL COMMUNICATION PEDAGOGY

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Technical and Professional Communication scholarship indicates that creating accessible texts should be an essential component of the discipline in order to meet the diverse needs of users, yet we have thus far failed to securely place accessibility as a primary feature in our pedagogy. In order to position accessibility as central to TPC, we must investigate the best methods of integration into our pedagogy in order to prepare students to be user advocates and to create more accessible documents. This study was conducted to investigate how and to what extent current curriculum positions accessibility as a core tenet of TPC and what practices can be implemented to better integrate accessibility as a central feature within the curriculum. A content analysis was performed on the syllabi of four required courses in the George Mason University (GMU) Professional and Technical Writing (PTW) master's program to identify existing areas of accessibility in the curriculum and to consider options for enhancement. A "digital toolkit" was then constructed to act as a repository of accessibility resources in order to determine if the

usage of this resource would benefit the GMU PTW faculty in centering accessibility in the program. Surveys and interviews were conducted with current faculty and students of the PTW master's program, and findings indicate that they believe, despite existing barriers, that accessibility should be placed more centrally within curriculum, with a particular focus on practical resources. The need for centering accessibility in pedagogy to better prepare TPC practitioners for the industry is discussed, as well as implications for future research.

BACKGROUND

The U.S. Census Bureau has reported that 27.2% of Americans, or 85.3 million people, are living with disabilities as of 2014 (Taylor, 2018). The Americans with Disabilities Act (ADA), a civil rights law passed in 1990 to provide federal protection to those with disabilities, defines an individual with a disability as someone who “has a physical or mental impairment that substantially limits one or more major life activities, has a history or record of such an impairment...or is perceived by others as having such an impairment” (ADA.gov., n.d., “The ADA Protects” section). With such a high number of people that fall under this definition, it is imperative that we incorporate information and awareness of disability and accessibility into the curriculum for technical and professional communication (TPC) in order to prepare our students to meet the diverse needs of users.

The TPC field has long understood the importance of positioning accessibility as a central facet of our discipline. As a humanistic field focused on end users and their needs, it is essential that we be cognizant of the factors that might impact how users interact with our texts at every step of the design process. Not only is this a valiant cause in our roles as advocates for end users, but it is also a growing demand of the industry. In their research of the Accessibility Skills Hiring Toolkit, a tool designed in conjunction with industry partners, Sonka et al. (2022) describe how the “market need is not only

about hiring accessibility-specific professionals, but also how industry is trying to bring in employees to all job openings that have even a basic understanding of accessibility” (p. 267). While public sector businesses strive to increase their accessibility capabilities in order to meet customer needs, the public sector is driven by key accessibility laws. In addition to the ADA, the Rehabilitation Act of 1973 enforces accessibility requirements for federally run and/or funded programs and activities, with additional requirements found in Section 508 for the accessibility of electronic information and technology (U.S. Access Board, n.d.). The demand for practitioners of both the public and private sectors to fill not only accessibility-focused roles but also other positions that require basic accessibility skills has never been greater, and preparing students with the skills to meet these demands should be a focus of any TPC higher education program. While research has been done to determine the needs of users with disabilities and different design and production processes that may be used meet those needs (Agboka, 2022; Dolmage, 2018; Haas, 2012; Jones 2016; Zdenek, 2018), this research has primarily lingered in industry and scholarship, while remaining largely unincorporated as a central feature in our pedagogy. One vital step toward incorporating accessibility as a pillar of TPC pedagogy is to ensure it is centrally positioned within the curriculum we teach.

This thesis explores one such possibility for better centering accessibility in TPC curriculum through a two-phase study. In the first phase, the existing syllabi of a university master’s program were explored to determine places where accessibility was already located in the curriculum as well as where it could be added or enhanced. In the second phase, a digital toolkit was designed to act as an information repository for

accessibility knowledge in an effort to create a resource that might supplement faculty understanding and utilization of accessibility topics and assist in the process of centering them within the program's curriculum. During this phase, survey responses and interview transcripts of program faculty and students were analyzed to determine emerging themes around the desire for centering accessibility in the program curriculum and the viability of such a tool to do so. From these findings, it became clear that students and faculty concur that there are several barriers that make it difficult to center accessibility within the PTW program such as time and resource constraints, yet nonetheless they believe that this is a vital process to prepare students to be better practitioners in the field of TPC. Recommendations for integrating accessibility into the GMU PTW program are discussed as well as ideas for further research to expand these findings into the larger sphere of TPC pedagogy.

LITERATURE REVIEW

In this Literature Review, I will first discuss the definition of “accessibility” and the existing laws and regulations that provide guidance in making content accessible. I will then explore accessibility in relation to TPC and how it currently exists as an add-on or afterthought to our discipline, which is being challenged by a theory-based shift toward universal design of content that aims to place users of all abilities at the forefront of our practices. Finally, I will investigate how existing research has thus far failed to find the best way of incorporating accessibility into TPC pedagogy and how this inconsistency in program structure and curriculum is preventing the shift toward a more accessibility-central discipline that is needed to meet to growing demand from industry.

UNDERSTANDING “ACCESSIBILITY”

In order to understand how to make accessibility a central feature of TPC pedagogy, it is first vital that we understand what accessibility means in this context. As previously discussed, the ADA provides certain civil protections for individuals with disabilities. Protected disabilities—some of which are more visible than others—cover a wide scope which includes deafness, blindness, mobility disabilities, intellectual disabilities, and many more; this protection extends into many facets of life in which individuals with disabilities may require them such as employment, government, businesses open to the public, transportation, and telecommunication (ADA.gov, n.d.).

The ADA defines something as “accessible” if it is “easy to approach, enter, operate, participate in, and/or use safely and with dignity by a person with a disability”

(District of Columbia ODR, n.d.). In terms of TPC artifacts, incorporating accessible features in the design of texts and tools can come in many forms; for example, designing a tactile map to enable readers with visual impairments to find their way around a site by touch, or incorporating multimodal information dissemination techniques into public transport such as through visual maps that light up as the route progresses, written indicators that flash the name of each stop, and audio cues via automated or manual announcement systems. Section 508 of the Rehabilitation Act extends protections for access into the federal electronic and information technology sector, to ensure that both employees and public users with disabilities “have access to and use of information and data that is comparable to the access to and use of the information and data by [Federal employees/members of the public] who are not individuals with disabilities” (U.S. Access Board, n.d., “Section 508” (1)(A) section). This can take many forms, such as ensuring that a government webpage can be accessed by a screen reader meant to assist those with visual impairments, or adding captions to a video to assist individuals with hearing impairments or difficulties with auditory processing.

Also in place are national and international standards for accessibility, one of the most prominent of which comes from the World Wide Web Consortium’s (W3C) Web Accessibility Initiative (WAI), which was formed in order to set an international standard for making web content more accessible (WAI, 2020). The WAI (2020) designs and updates the Web Content Accessibility Guidelines (WCAG), which provide direction for web content creators to make more accessible content including code, text, images, sound, and more. For example, when following the WCAG, a content creator would

consider factors such as providing alternative text for images and other non-text based elements on a website so that users with visual impairments can use a screen reader to determine what these elements are meant to depict. They might also consider how to organize a webpage with clear headers and navigation tools so that users are able to easily find and access information. Following WCAG standards is a good way to ensure that online content is complying with laws, and revised Section 508 standards even incorporate WCAG 2.0 criteria (GSA, 2018). All the aforementioned laws, regulations, and guidelines are available to guide TPC practitioners as we design print and web content to be more accessible to all users.

TPC AND ACCESSIBILITY ON THE PERIPHERY

Current practices in TPC may limit the role accessibility plays in the design of our texts and web content. Lack of integrating accessibility in meaningful ways in our practice and pedagogy can result in instruction that simply focuses on fulfilling the bare minimum legal requirements such as those found in the ADA and Section 508 of the Rehabilitation Act (Sonka et al., 2021; Zdenek, 2018; Huntsman et al., 2018; Hitt, 2018). While these laws are important and afford individuals with disabilities certain protections, they are not all encompassing. For example, even though Section 508 incorporates the WCAG standards into its compliance, it only requires compliance with Level A and Level AA criteria, whereas the most stringent accessibility standards of WCAG are Level AAA (GSA, 2018; WAI, 2020). When access is treated this way—as an afterthought simply meant to be “good enough” to check legal boxes—technical and professional communicators cannot succeed in our goal of positioning accessibility as a

core tenet of our field (Zdenek, 2018; Huntsman et al., 2018; Hitt, 2018; Dolmage, 2018). Positioning accessibility as an add-on that falls on the periphery of TPC practice also leads to the perpetuation of “false binaries” (Zdenek, 2018, p. 6) between “normal” and “assistive” technical communication. We, as professional communicators, should be focused on design methods that support all of our diverse users, rather than splitting them into isolating factions and approaching them as different problems. One such method used to combat this false binary in TPC accessibility practices is the idea of Universal Design (UD). Universal Design “positions accessible design for disabled users as accessible design for all users” (Hitt, 2018, p. 52), and although this concept started out as a design principle for physical spaces, it has quickly spread throughout the theoretical and practical spheres of TPC. Rather than treating disability and accessibility in isolation—identifying it as something separate or additional—this notion of UD positions accessibility as something we must do in all of our design practices (Hitt, 2018). This in turn will ensure content that is more readily accessible to all our users regardless of their various embodied experiences.

On the opposing side of accessibility, we must recognize that because the physical body influences how we interact with communication, this means there are methods of communicating that lead to the exclusion of certain bodies while privileging others (Dolmage, 2018; Swacha, 2018). Theorists and practitioners of TPC understand the importance of considering the bodily influences that may affect how users interact with our texts. The theory of embodiment “recognizes that we interact with the world in physical bodies and material contexts, which influences how we communicate and are

communicated to” (Swacha, 2018, p. 262). This is how we have come to understand the need for disability and accessibility scholarship in this field, as any influencing factors that may impact our users’ bodies also have the potential to impact the level of access they have to the texts and technology we produce. As it is now, the “default user is implicitly able-bodied” (Zdenek, 2018, p. 5), leading to an inadequacy in our ability as professional communicators to meet the needs of diverse users. It should be one of our primary goals to “compose for the full range of bodies” (Dolmage, 2018, p. 268) that might access a text or digital resource.

BRIDGING THE GAPS: A CALL TO INCORPORATE ACCESSIBILITY IN TPC PEDAGOGY

The field of TPC often struggles to integrate best practices simultaneously in our scholarship, pedagogy, and industry; we find it difficult at times to ensure our best theories are informing our best practices, and vice versa. In order to accommodate a growing population of users with disabilities and the industry demand for practitioners who can meet these needs, we need to train students of TPC to understand accessibility as central to their work. Indeed, the industry is already aware of the importance of accessibility and has recognized the skill gap in the current workforce (Sonka et al., 2021). Beyond change in pedagogy and industry, this transformation into an accessibility-focused discipline has the potential to cast waves across society as well. The current default user is able-bodied, which is a product of societal norms. However, if we enable our students to broaden their understanding of users and their bodily experiences and provide students with the necessary skills to meet those needs, we can push back against a culture that perpetuates ableist values and instead move toward one that

endorses Universal Design practices as design for all (Dolmage, 2018). Now that TPC scholarship has demonstrated the necessity of centering accessibility in our discipline, it is time to position that theory into the construction of our pedagogy and eventually out into the industry as our students join the workforce (Sonka et al., 2021; Hitt, 2018).

By placing accessibility in a central position within our pedagogy, we can 1) build empathy among our students, 2) introduce them to topics of social justice, and 3) prepare them to be advocates for marginalized groups. “Focusing on disability...at the curricular level encourages ethical and inclusive professional communication practices” (Hitt, 2018, p. 54), which in turn can lead to a discipline-wide shift. Values such as empathy, ethics, and justice are central to a humanistic field such as TPC and are not treated as some sort of add-on at the end of the design process (Huntsman et al., 2018; Sonka et al., 2021). For example, our focus on audience and user-centered design practices places the human experience first and foremost. It can be difficult to build empathy organically into a curriculum, but existing research has found that “facilitating students’ awareness of disability can serve as a productive entry point for helping students recognize the relevance of social justice to the work of communication design” (Colton & Walton, 2015, para. 21). Accessibility studies can instill in students the necessity of empathy in TPC work and act as a gateway to other topics of social justice (Colton & Walton, 2015; Hitt, 2018; Sonka et al., 2021). Disability studies and social justice work can also help students to recognize the social and cultural influences on communication practices, and the ways in which marginalized groups, such as those with disabilities, may be pushed to the margins. This will help to position students to become practitioners who act as

advocates for marginalized groups (Swacha, 2018). In this way, we can utilize the core tenet of accessibility as a steppingstone for students to become more ethical and empathetic communicators.

Existing research has already begun exploring how we might incorporate accessibility and related topics into the pedagogy of higher education TPC programs. One possibility for this involves implementing service-learning opportunities through partnerships within one's university (Huntsman et al., 2018; Hitt, 2018); with local communities (Swacha, 2018; Colton & Walton, 2015); and with industry (Sonka et al., 2021). Service-learning activities involve real-world application such as captioning videos and redesigning texts and websites to be more accessible (Huntsman et al., 2018; Colton & Walton, 2015; Hitt, 2018). By working with real people, students can better humanize end users, leading to increased empathy and a recognition of their role as advocates. However, research on service-learning is still divided over the degree to which this practice should play in curriculum, and concerns about the ethical standpoint of using student work to meet the needs of real community members who are part of a marginalized group leaves uncertainty over the role that service-learning can or should play in TPC pedagogy. Service-learning is not the only method available to incorporate accessibility in curriculum, and researchers have experimented with various ways in integrating accessibility into various TPC programs in recent years. These experiments range from the addition of a single class assignment that integrates accessibility principles (Swacha, 2018; Huntsman et al., 2018) to the redesign of a semester-long course that centers around concepts of disability and accessibility (Colton & Walton,

2015; Hitt, 2018) to the restructuring of an entire undergraduate program in order to better focus on accessibility and inclusion through human-centered experiences (Sonka et al., 2021). While each new study allows us to gain insight into how we might place accessibility as a core tenet in our pedagogy, we still have yet to conceptualize the best scope and application of these practices. Studies into the curriculum of higher education have been too few and far between to have generated a consensus on the most effective methods of integrating accessibility at its core. Until such steps can be taken to move toward a unified approach to teaching accessibility, we will continue to fail to generalize and implement effective pedagogical practices as a field. In order to position accessibility as central to TPC, we must investigate the best methods to integrate it into TPC pedagogy in order to prepare our students to create a more accessible world.

For this study, the aforementioned research was reviewed and utilized in order to survey the existing pedagogical practices of George Mason University's Professional and Technical Writing master's program and to determine possible best practices for centering accessibility within that program. In order to continue the search for an effective and replicable method of integrating accessibility as a core tenet of TPC pedagogy, this study was conducted with two primary research questions in mind:

- RQ1: How and to what extent does current curriculum position accessibility as a core tenet of technical and professional communication?
- RQ2: What pedagogical practices can be implemented to better integrate accessibility as a central feature within the curriculum?

Together these research questions help to paint a picture of the current state of TPC pedagogy and a potential method of placing accessibility at its core in the future. This study was designed to test these ideas through the lens of a real-world TPC program in higher education. By understanding how we currently incorporate accessibility in our curriculum, and how we might move accessibility into a more central position within that curriculum, we can start the process of integrating what we have learned in TPC scholarship and what we desire in TPC industry into what we teach in TPC education.

RESEARCH METHODOLOGY

This study focused on the George Mason University (GMU) Professional and Technical Writing (PTW) master's program. In particular, this study concentrated on the program's four core courses that are required to earn the degree. A description of these courses taken from the George Mason University (2022) Course Catalog is provided below:

- **English 501: Introduction to Professional and Technical Writing.** “Provides historical and theoretical background in professional writing and editing in a seminar format. Explores professional writing's emergence as a field of scholarship and practice, emphasizes the relationships between rhetorical theories and practice, and introduces students to bibliographic research in the field.”
- **English 502: Research Methods in Professional and Technical Writing.** “Introduces theory, methods, and ethics of conducting research in rhetoric and professional writing. Students learn to conduct and evaluate research that may include rhetorical analysis, discourse analysis, historical methods, ethnography, user-centered design, document and usability testing, and others.”
- **English 503: Theory and Practice of Editing.** “Instruction in revising, editing, and preparing specialized writing for printing. Emphasizes methods of achieving clarity, accuracy, and completeness. Lecture and discussion on editing and printing techniques; practical exercise in revision, layout, and production.”

- **English 505: Document Design.** “Theory and practice of using computer programs to design and produce publications including brochures, fliers, newsletters, and small magazines. Includes readings, writing papers, and producing and editing copies and original publications.”

The four core courses—ENGH 501, ENGH 502, ENGH 503, and ENGH 505—were selected for this study because of their central position in the GMU PTW master’s program. Due to the fact that all students who wish to complete this degree must take these courses, it is clear that if accessibility is to have a central place in the program’s curriculum, it should exist somewhere among these courses.

The study was conducted in two primary phases: the first phase consisting of a content analysis of the syllabi of the program’s four core courses, and the second phase involving the creation of a prototypical “digital toolkit” and subsequent document-guided interviews of current program faculty and students regarding that resource. Phase One addressed RQ1 regarding where and to what extent existing curriculum positions topics related to accessibility as central to the program. It addressed RQ2 by identifying areas where additional materials and topics could be added to better center accessibility in the curriculum of these courses. Phase Two further attempted to address RQ2 by determining if the use of a digital toolkit could be implemented to better integrate accessibility as a central feature to the PTW curriculum.

PHASE ONE

In Phase One of this study, the syllabi of the program’s four core courses were collected and a content analysis was performed on each. The syllabi were obtained from

George Mason University faculty members who had taught one or more of the four core courses. These professors were asked to provide the latest versions of their syllabi for any of the four core courses in the program that they had taught within the last five years. A total of seven syllabi were utilized for this study: three for ENGH 501, two for ENGH 502, one for ENGH 503, and one for ENGH 505.

The next step was to perform a content analysis of each syllabus. The goal of content analysis is to make an objective and systematic description of a text by using a coding scheme made up of the coding categories—topics and/or themes—found in a document (Franzosi, 2010). In this case, content analysis was used to discover if themes of accessibility and related terms such as usability, social justice, and human-centered design emerged from these syllabi. This form of qualitative data collection was fitting to observe the wide range in content that could be found in each syllabus and the nuances between topics that may be related to accessibility. To better facilitate this process, a heuristic was employed to guide the content analysis through a set of questions designed to first consider the existing inclusion of accessibility and related topics in a course syllabus, and then consider where accessibility could be added into the course. In addition, each set of questions was further divided so that the common features found in the majority of course syllabi could be analyzed one at a time, including the course description, goals, and objectives; the course readings and resources; the class discussions and weekly topics; and any major projects or assignments detailed in the syllabi (see Table 1).

Table 1 Content Analysis Heuristic

	Section of Course Syllabus			
Question 1: Where is accessibility? How does it currently fit into the course?	Course Description/Goals /Objectives? (Y/N)	Readings/ Resources? (Y/N)	Class Discussions/ Weekly Topics? (Y/N)	Projects/ Assignments? (Y/N)
Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course?	Course Description/Goals /Objectives? (Y/N)	Readings/ Resources? (Y/N)	Class Discussions/ Weekly Topics? (Y/N)	Projects/ Assignments? (Y/N)

Y(es)/N(o) (If Y – how? If N – why?)

The results of this content analysis, both the identification of existing accessibility content and suggestions for supplementary materials, guided the development of the digital toolkit in Phase Two.

PHASE TWO

The second phase of this study involved the creation of a prototypical digital toolkit that took the form of a website acting as an information repository for accessibility-related resources. This was followed by a mix of qualitative and quantitative data collection via an online survey and document-guided interviews with current faculty and students of the GMU PTW program. The design of the website is discussed in more detail in the Results section, as it is a direct correlation to the findings of the Phase One content analysis.

In order to obtain feedback from core stakeholders of the PTW program, active faculty members and students of the GMU PTW master's program were contacted and asked to participate in one-on-one interviews. Eubanks & Abbott (2003) explain that "the persons most affected by something—a program, course, document, product, or service—ought to be consulted in planning and evaluating it" (p. 27); therefore, it was imperative that the core stakeholders of the program—the professors and students—should be consulted when considering the viability of any potential curriculum tools. Individual interviews were selected due to their "clear advantages...with regard to (a) the amount of control that the interviewer has and (b) the greater amount of information that each informant has time to share" (Morgan, 1997, p. 10). Due to the limited scope of this study, obtaining the greatest amount and depth of information from participants was essential.

Interview participants were recruited via their university-issued email accounts, with faculty contact information retrieved from the George Mason University digital directory, and student information obtained from existing contacts and networks maintained by the researcher. This stage of the research study was approved by the IRB [1931715-1] and appropriate precautions were taken to ensure participant recruitment and responses were kept confidential. Participants were selected if they met the criteria of 1) being over 18 years of age, and 2) being a current, active student or faculty member of the GMU PTW master's program. In total, eight individuals participated in this phase of the research: three professors and five students. The Interview Consent Form (see

Appendix B) was provided to each participant one week prior to their scheduled interview.

Additionally, participants were provided with a link to an optional online pre-interview Qualtrics survey which could be completed on their own prior to the interview or could be incorporated into the first few minutes of the interview if not completed ahead of time. The Qualtrics survey included general questions meant to gauge the participants' understanding of accessibility and previous knowledge and interactions with accessibility studies and practices both before and during their time at George Mason University (see Appendix C). The survey consisted of a mix of question types designed to generate both qualitative and quantitative data. Qualitative questions were included to capture numerical data regarding participants' comfort level and understanding of the topics of the study as well as to document their familiarity with the PTW program and its classes. These were structured in several ways including multiple choice type questions, checkbox questions in which participants could select all options that applied to them, and Likert Scale style questions in which participants specified their level of agreement to a statement as one of six options: (0) not at all; (1) not very; (2) neutral; (3) somewhat; (4) very; (5) extremely. Quantitative questions consisted of open prompts with areas for short-answer, and were included to better encapsulate the varying experiences of participants.

Interviews were scheduled for up to two-hour time blocks and occurred over Zoom to provide better flexibility for participants. At the start of each interview, participants were asked to verbally confirm their consent to participate and to the audio

and video recording of the session using the Zoom cloud recording feature, which was utilized to capture and create a transcript of each interview. These transcripts were later used to review participant feedback during the data analysis stage.

If participants had completed the pre-interview Qualtrics survey (Appendix C), the interview began by discussing the provided answers with the participant to gain more insight and allow the participant room to elaborate on their answers which may have been limited due to the nature of the survey. If participants had not completed the survey, they were asked the survey questions at the start of the interview and their answers were recorded both on the survey and through the Zoom recording. Next, participants were provided with a link to the prototype website and were questioned about their understanding and reactions to it. This portion of the interview involved performing a qualitative usability test of the site and questioning participants on their thoughts about ease of navigation as well as their general feelings toward the site and the usefulness of its resources (Appendix D). Kate Moran (2019) describes how a qualitative usability test “focuses on collecting insights, findings, and anecdotes about how people use the product or service. Qualitative usability testing is best for discovering problems in the user experience” (“Types of Usability Testing” section). During the interview, the usability test questions (Appendix D, Section II a) provided the interviewees with the chance to explore and familiarize themselves with the website in real time as the interviewer observed and collected information through the participants’ answers and comments, thus enabling a wider scope of data than what the interviewer may have originally anticipated.

After the interviews for Phase Two were completed, the videos and transcripts of each interview were stored using Zoom's Cloud Storage function. These transcripts, as well as additional notes taken by the researcher during each interview, were later reviewed using content analysis to document general observations and any overarching themes that emerged throughout the interviews. These themes and insights are discussed in detail in the next section.

RESULTS

The findings from Phase One and Phase Two of this study contributed to an understanding of the role accessibility currently plays in the curriculum of the GMU PTW master's program and positioned the research to test a method of better centering accessibility within that curriculum.

FROM CONTENT ANALYSIS TO A DIGITAL TOOLKIT

Phase One of this study was conducted on the GMU PTW master's program during the Fall Semester 2022 to determine the extent of accessible materials in the existing curriculum at the time. Five professors of the program submitted a total of seven syllabi, from courses that dated from Fall Semester 2019 to Fall Semester 2022. Below are the summarized results of the content analysis of these core course syllabi; the findings in full can be seen in Appendix A.

ENGH 501: Introduction to Professional and Technical Writing. From the three syllabi provided for this course, none had any specific mention of accessibility positioned in the Course Descriptions, Goals, or Objectives; the Readings and Resources; nor the Projects or Assignments. One syllabus (Course Syllabus A) did dedicate one week's Class Discussion to "Race, ethnicity, disability & Queer" topics. In general, the broad Descriptions and Goals included topics of social justice, resisting oppression, ethical and social duties, and similar concepts, though did not refer to accessibility specifically.

ENGH 502: Research Methods in Professional and Technical Writing. The two syllabi did not explicitly mention accessibility in their Course Descriptions, Goals, or Objectives; nor the Projects or Assignments. However, Syllabus E incorporated a Weekly Topic related to surveying participants including those with disabilities as well as a few Readings and Resources that mentioned topics related to disability and accessibility in passing; however, these were limited and none were focused primarily on accessibility.

ENGH 503: Theory and Practice of Editing. This syllabus was the most focused on accessibility in comparison to the other syllabi. In all categories except Projects and Assignments, it succeeded in integrating topics of accessibility and making “inclusive information design” (Syllabus F) a central focus of the course. It was also the only syllabus from this study to include the word “accessibility” at any point.

ENGH 505: Document Design. This syllabus did not explicitly state any categories in connection to accessibility. The Course Descriptions, Goals, and Objectives featured broad language that could indicate the inclusion of an accessibility focus despite no specific mention being made, while the Class Discussions/Weekly Topics and Projects/Assignments were quite short and limited in their descriptions, so while terms on accessibility were not found, this is not necessarily an indicator that these topics are not discussed in this course.

From the content analysis in Phase One of this study, it became clear that accessibility is not currently a central feature of existing syllabi for the four core courses of the GMU PTW master’s program. The next step was to create a digital toolkit, which would be used to conduct Phase Two.

Design of the Digital Toolkit

Resources related to accessibility and TPC were then developed into a digital toolkit—a website which acted as an information repository—which drove the Phase Two interviews. These interviews were designed to test the digital toolkit with current faculty and students to see its viability as a method of increasing the inclusion of accessibility materials and topics into future curriculum for the program. A webpage was designed using the Wix web design platform. The website’s navigation menu contained links to five main pages, which are discussed in brief below.

- **Homepage (Figure 1).** Provides an introduction to the purpose and use of the site as well as explanations and links for other pages.

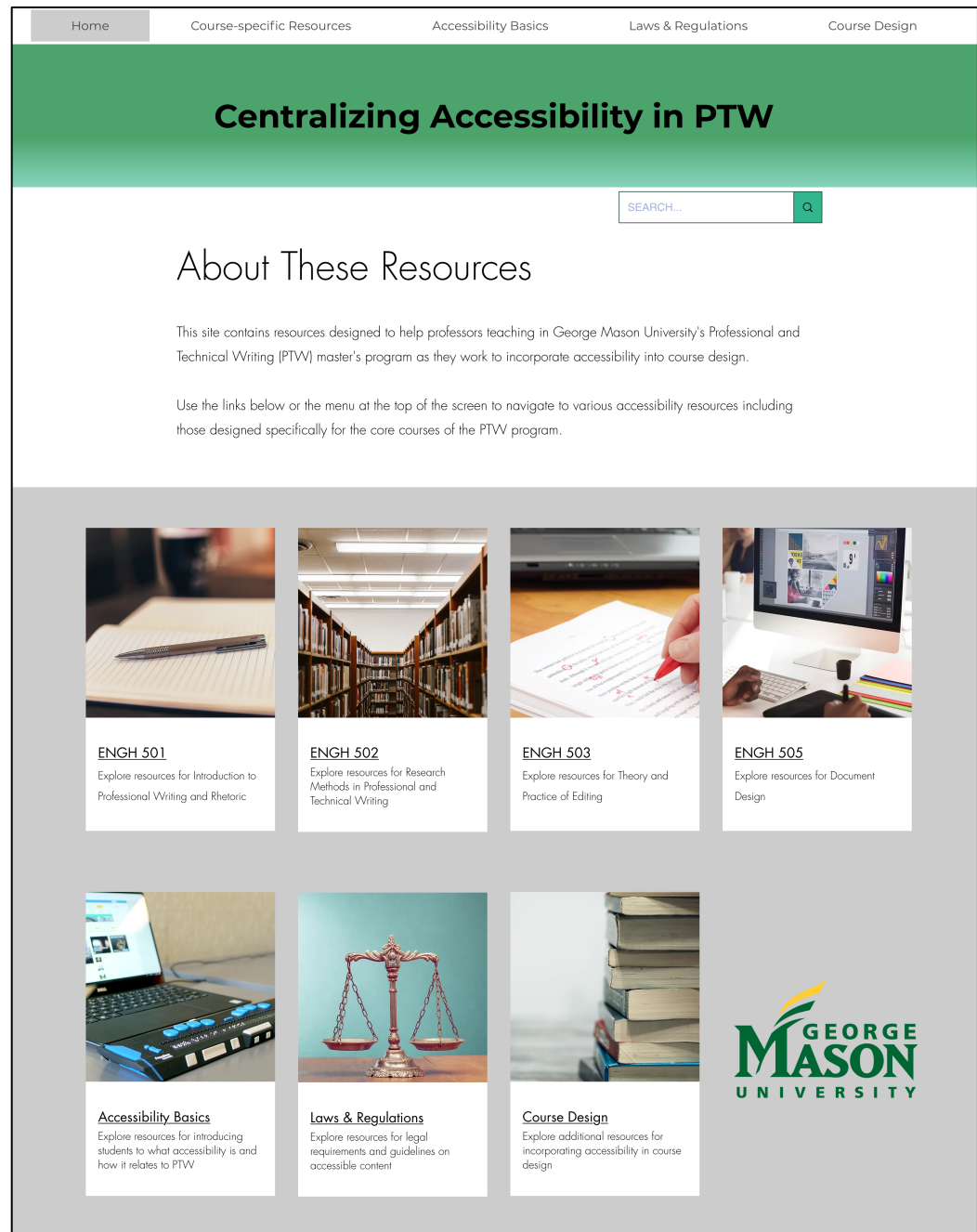


Figure 1 Homepage

- **Course-Specific Resources (Figure 2).** Includes separate pages for each of the core courses (English 501, 502, 503, and 505). Each course page includes accessibility-related resources identified during Phase One, such as texts, videos, and digital tools to assist professors in designing more accessibility-focused materials. Each resource includes the title, author/creator, hyperlink to the source, an abstract or short description, and key words.

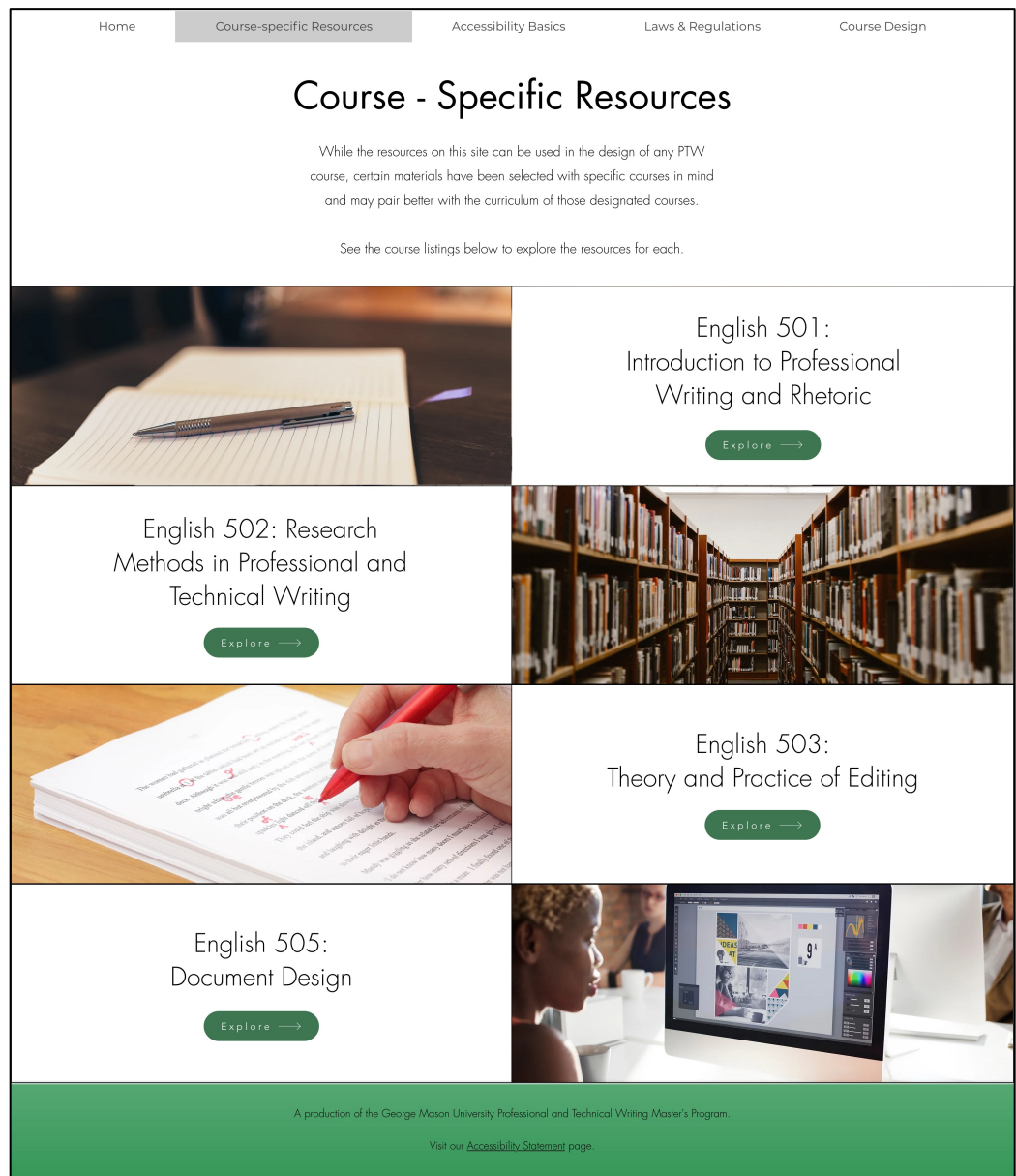
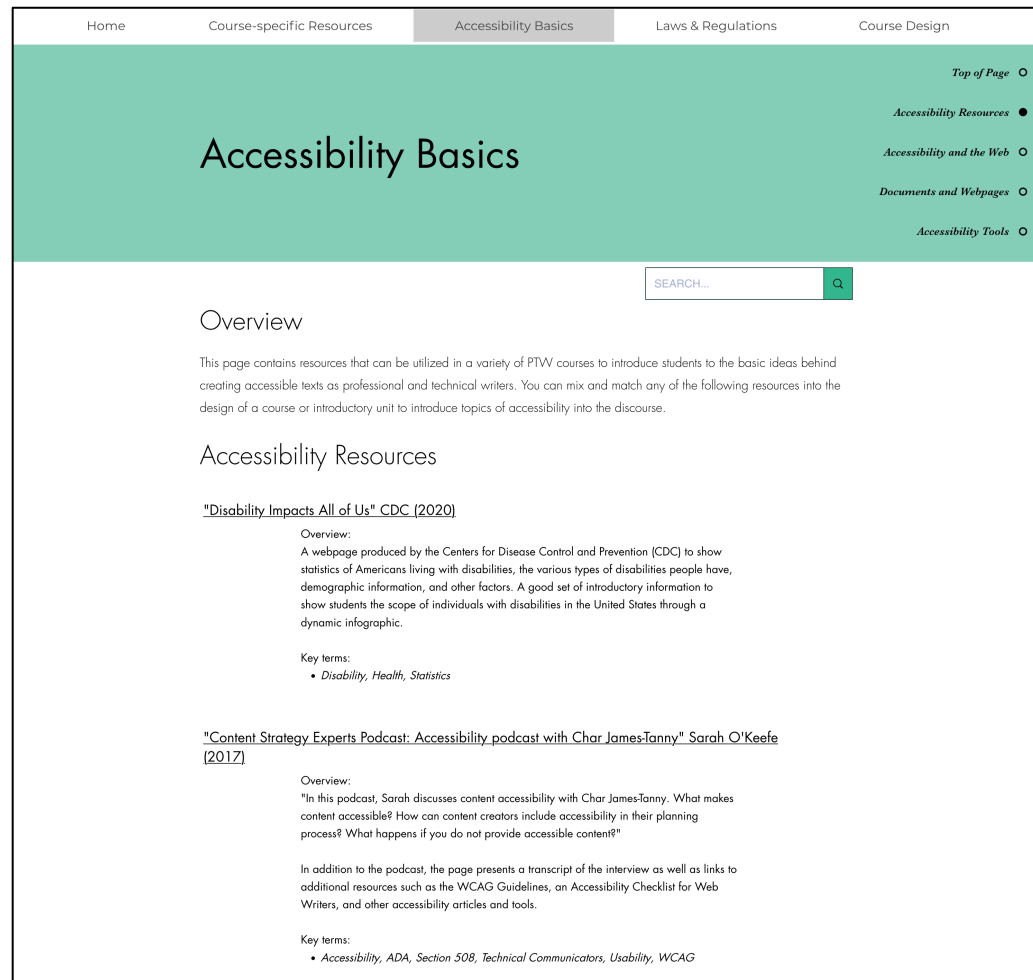


Figure 2 Course-Specific Resources

- **Accessibility Basics (Figure 3).** Includes resources on the basics of why and how to create accessible texts such as information on disability statistics, accessibility guidelines in document and web design, and various accessibility checking tools.



Home Course-specific Resources **Accessibility Basics** Laws & Regulations Course Design

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Accessibility Resources ●

Accessibility and the Web ○

Documents and Webpages ○

Accessibility Tools ○

Accessibility Basics

SEARCH...

Overview

This page contains resources that can be utilized in a variety of PTW courses to introduce students to the basic ideas behind creating accessible texts as professional and technical writers. You can mix and match any of the following resources into the design of a course or introductory unit to introduce topics of accessibility into the discourse.

Accessibility Resources

"Disability Impacts All of Us" CDC (2020)

Overview:
A webpage produced by the Centers for Disease Control and Prevention (CDC) to show statistics of Americans living with disabilities, the various types of disabilities people have, demographic information, and other factors. A good set of introductory information to show students the scope of individuals with disabilities in the United States through a dynamic infographic.

Key terms:
• Disability, Health, Statistics

"Content Strategy Experts Podcast: Accessibility podcast with Char James-Tanny" Sarah O'Keefe (2017)

Overview:
"In this podcast, Sarah discusses content accessibility with Char James-Tanny. What makes content accessible? How can content creators include accessibility in their planning process? What happens if you do not provide accessible content?"

In addition to the podcast, the page presents a transcript of the interview as well as links to additional resources such as the WCAG Guidelines, an Accessibility Checklist for Web Writers, and other accessibility articles and tools.

Key terms:
• Accessibility, ADA, Section 508, Technical Communicators, Usability, WCAG

Figure 3 Accessibility Basics

- **Laws & Regulations (Figure 4).** Contains resources focused on the Americans with Disabilities Act (ADA), Section 508 of the Rehabilitation Act, the World Wide Web Consortium's (WC3) Web Content Accessibility Guidelines (WCAG), and recent case law examples.

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Laws and Regulations

Overview

This page contains resources that can be utilized in a variety of PTW courses to introduce students to the laws and regulations that relate to accessibility and that they may encounter as professional and technical writers. You can mix and match any of the following resources into the design of a course or specific unit to introduce students to accessibility laws and regulations that ensure texts both on and off the web are made accessible for a wide range of users.

Accessibility Resources

"Accessibility as Context: The Legal, Fiscal, and Social Imperative to Deliver Inclusive e-Content" Lisa Pappas (2003)

Overview:
Taken from the book *Rhetorical Accessibility: At the Intersection of Technical Communication and Disability Studies*, this chapter provides a thorough background of the legal requirements involved with creating accessible content. From the Americans with Disabilities Act (ADA) of 1990 and the 1998 amendment to the Rehabilitation Act of 1973, which added Sections 504 and 508, to the global adoption of similar standards in the EU and via the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) and their impact on electronic information and technology (EIT). The chapter goes on to detail the role of technical communicators in terms of their legal, business, and ethical responsibilities to create accessible digital content.

Key terms:

- ADA, e-Content, Civil Rights, Legislation, Policy Drivers, Public Education, Section 508, W3C, WCAG

Americans with Disabilities Act (ADA)

"Americans with Disabilities Act" U.S. Department of Labor

Overview:
Provides a brief overview of the coverage of the Americans with Disabilities Act and the U.S. governing bodies that enforce it. A good background document for a brief introduction to the Act.

Key terms:

- ADA, Federal Agencies, Resources

Figure 4 Laws & Regulations

- **Course Design (Figure 5).** Includes practical and theoretical applications of accessibility in the classroom in the form of resources that professors might utilize as they design curriculum.

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Course Design

Overview

This page contains resources that can be used to design curriculum for PTW courses. These pedagogy resources can provide ways to introduce students to topics of accessibility and/or reinforce their learning through the incorporation of practical exercises. You might utilize these resources as you design classroom activities, homework, short-term assignments, and long-term projects that incorporate accessibility topics and/or standards. You can mix and match any of the following resources into the design of a course project to introduce or reinforce accessible practices and ensure professional and technical writing students gain hands-on experience in these topics.

Accessibility Resources

"Curricula on Web Accessibility: A Framework to Build Your Own Classes" W3C WAI

Overview:
 "This resource provides teaching modules to help you create courses on digital accessibility, or to include accessibility in other courses. The modules cover accessibility foundations that apply broadly, and specific skills for developers, designers, content authors, and others."

Key terms:

- Curricula, WAI, W3C, Web Accessibility

"Access/ibility: Access and Usability for Digital Publishing: Guidelines for Teaching Access/ibility" Kairos Cohort [2015]

Overview:
 "In the summer of 2015, 27 scholars and librarians convened at West Virginia University for a summer seminar focused on accessibility in digital publishing...This webtext is a report on the seminar, providing the framework that we developed as a work in progress...Our goal is to map the relationships between global open-access publishing, the accessibility of those publications to diverse users, and sustainability and preservation of digitally published and archived texts, in all their designed formats and media. We are short-handing these concepts through the word "access/ibility," which we take to encompass open access, access and preservation, and accessibility in terms of availability, usability, and disability. The authors of this collection—a cohort of digital rhetoric and disability studies scholars, press directors, and digital publishing librarians—suggest there is a continuing need for consideration of access and accessibility in knowledge production processes. As digital publishing [particularly, but not exclusively, digital scholarly publishing] matures as an industry, all stakeholders of digital publishing should consider these relationships as they research, teach, and publish digital projects and texts."

This section on Teaching Access/ibility focuses "on teaching students to help develop an awareness and understanding of accessibility concerns...teaching best practices to students and colleagues became a concern, as our students are, or will be, publishing in digital forums, and it should be our responsibility to prepare them to compose accessible texts."

Key terms:

- Accessible Design, Accessibility Strategies, Availability/Findability, Ethics, Legal Requirements

Figure 5 Course Design

KEY FINDINGS FROM PHASE TWO

Current students and faculty of the PTW master's program were surveyed and interviewed to gain insight into their understanding of accessibility concepts—both generally and in relation to TPC—and to gauge their reactions to the digital toolkit. From the culmination of these qualitative and quantitative data sets, certain findings became evident regarding what participants considered to be the greatest barriers to centering accessibility within the curriculum, as well as their opinion that, despite these difficulties, this is a vital task to undertake.

Major Finding 1: There Are Several Factors That Make It a Difficult Task to Center Accessibility in Curriculum

Survey and interview results from Phase Two indicated that both student and faculty participants feel that accessibility is not currently a central feature of the GMU PTW master's program, and they expressed ideas about possible factors that have thus far contributed to the difficulties in centering accessibility within their program. The following sections detail the prevailing ideas that emerged from these conversations.

Struggling with Time Constraints

The first barrier to centering accessibility that emerged from participant feedback involves time constraints. In particular, participants recognized the restrictive nature of the course schedule and the difficulty of balancing competing topics which are all vying for space within the bounds of a single, semester-long course. As one professor explained:

So, the problem is, from a curricular standpoint, a pedagogical standpoint, a programmatic standpoint, there are many, many things that should be central, and so everything's competing with the space that we have...

This struggle to fit any additional content on accessibility into the existing curriculum is something that both faculty and students of the program recognized. One student spoke about the courses where they saw topics of accessibility and courses where they hoped it would have been more present, stating:

I think the intro classes, such as ENGH 501, do a great job introducing the concept to students. However, in the later courses, accessibility becomes sidelined by other material.

Other participants supported this sentiment, generally conceding that in order to fit so much content into the core courses of the program, it means that certain topics are pushed out of the spotlight.

Another problem with time constraints emerges as professors rush to prepare their course curriculum for the coming semester. During one interview, a professor in the program discussed this difficulty.

[A]s soon as the conversation goes to “I need to redesign my entire course,” then that's a just a much more difficult thing to get over, especially for professors who don't want to redesign a course or already time strapped.

Other faculty responses mirrored this idea that when balancing the various responsibilities that come with a profession in higher education, it can be difficult for those who are teaching several courses at once—especially if this is their first time

teaching that particular course—to find time in their schedule to consider major course revisions in order to better position topics like accessibility within the curriculum.

Beyond the restriction of time to redesign course curriculum, professors also mentioned feeling a lack of time to train themselves on tools and topics of accessibility and time to compile resources for themselves and their colleagues to utilize in the pursuit of centering accessibility.

Finding the Best Place to Incorporate Accessibility

One area where there was not a consensus among interviewed participants was the debate over where to best situate topics of accessibility in the PTW program. This barrier emerged as it became clear that participants were generally split between those who thought placing accessibility as a central component of the core courses of the PTW program was the best method and those who wanted one or more separate, elective courses made to focus solely on topics of accessibility.

On one side of this split, several participants listed suggestions for core courses in which accessibility might be made more of a central focus. From the survey results, ENGH 501 was indicated as a core course in which multiple participants thought accessibility could find a more central hold, with interview feedback expanding on the idea that, due to the introductory nature of the course, it allows for a brief observation of accessibility topics without having to push other topics to the side to accommodate this shift in focus. Similarly, ENGH 503 was seen in the surveys and interviews as a course in which accessibility concepts could be expanded upon when discussing written or digital editing tools and techniques, perhaps by taking more class time or even fully replacing

topics of lesser importance. Several participants indicated in their surveys that ENGH 505 seemed in some ways to be the best positioned to add hands-on practice with accessibility topics, with interview results explaining this was due to the course's focus on bottom-up document design in which topics of accessibility could be utilized from the very start of a project.

When it came to integrating accessibility outside of the core courses, some participants, typically students, felt that separate "special topics" classes might allow for a more focused and in-depth look at accessibility as it relates to TPC. One student discussed in their survey how existing courses lacked detailed content on accessibility and may not have the necessary room to add more (Appendix E).

[Accessibility] gets touched upon in many classes, but mostly at a surface level. I think the program would do well to offer the occasional special topics course that dives deeper.

Another student also touched on this idea in their interview, and explained that the existing accessibility content in the core courses would be enough to set students up so that they could build off that knowledge in later elective courses.

If you increase familiarity [with accessibility] in the core classes...you'll have people want to take an accessibility course that has practical training...It's basically planting the seeds for the next year's harvest.

It is interesting to note that students were the primary proponents of this idea. Previous responses from faculty on the difficulty of integrating accessibility into existing core

courses due to time constraints would suggest that they have a higher stake in creating separate courses covering these topics; however, this was not the case.

Participants on the other side of this issue were comprised primarily of faculty, and they disputed the idea of creating a separate course (or courses) covering accessibility. As one faculty member put it,

Now that I'm thinking about having a special topics course... it silos all of those conversations just into that one course, instead of making it something that's applied consistently across all of our courses...

The concern among faculty seemed to surround the idea that limiting accessibility to a separate, non-mandatory course could result in students graduating without encountering these concepts at all, or at least in a central and thorough way. Some students agreed with this reasoning, making comments such as,

I do think that [accessibility] should be within the core courses...because everybody has to take those classes.

The participants were fairly evenly split in their thinking on the location for centering accessibility within the PTW program, with a slightly greater number of students and faculty in favor of focusing on adding content to the core courses rather than creating separate, elective courses which focus on the topic more exclusively.

The Need for Tools to Aid in Centering Accessibility

When discussing further barriers to centering accessibility in course curriculum, professors emphasized how the task is made more difficult due to a lack of faculty resources on this topic. All participants were surveyed on their understanding of

accessibility, and demonstrated a decrease in confidence from Question 1, which asked about their knowledge of accessibility in general, to Question 2, which asked about their knowledge of accessibility as it pertains to the field of professional and technical writing (Appendix E). This was elaborated on during the interviews when several professors remarked on their concerns over their own lack of expertise in topics of accessibility in TPC, the absence of accessibility-focused faculty members in the department, and a scarcity of tools and resources for faculty to lean upon when planning their curriculum.

As discussed previously, the consensus among interviewed faculty members was that time is one of their most limited resources. Several faculty members explained in their interviews that one of the primary ways they prepare to teach a new course is to reach out to professors who previously taught the course to obtain old syllabi that they can rework for their upcoming class. While the revised course curriculum might have some alterations based on the previous materials professors have collected and their personal preferences in teaching style, in general they often tend not to look altogether dissimilar from previous course renditions. As one professor commented,

[S]ometimes if you're teaching a new course you have to be emailing other professors to see if they can share their course syllabi and other things...at least you have some ideas of what other people might be doing in their classes or some other readings.

This aversion to extensive course redesign was reflected by other faculty responses, and linked back to their sentiments about feeling like they lacked the expertise, resources, and/or time to take on such a task as redesigning courses to place accessibility more

centrally. Two faculty members exhibited these sentiments in their interviews rather clearly.

I had sort of developed a little bit of capacity about teaching accessibly, but accessibility and disability studies aren't my area of expertise.

...

I think it definitely makes me well aware of the things that I don't know. Like I just don't know how accessibility...fits into our program goals or outcomes.

With faculty and students aware of their lack of expertise on accessibility, or at least presenting an understanding that they could benefit from further resources on the topic, participants turned toward a discussion of the digital toolkit as a potential resource.

During the portion of the interview in which participants were given time to explore the digital toolkit, faculty members reflected on how this could act as a possible tool in their own course design. In general, they found the digital toolkit to be a place where they could quickly go to find resources relating accessibility to TPC and pedagogy, with navigation features that not only allowed them to explore topics of accessibility for their own benefit, but also to utilize as quick additions for course curriculum for their students. Feedback from these participants indicated that having an information repository with readings and tools they could utilize in their course design could provide a time-conscious and practical way to work accessibility into the courses of the GMU PTW master's program. One particular aspect that participants appreciated was that the site included resource pages for each of the core courses, which contained content that best aligned with the goals and learning objectives of each course. Faculty members

expressed appreciation that a majority of the resources on these pages were pulled from the course syllabi used in Phase One and thus represent content that professors had previously utilized in these courses. In addition, faculty found that the page on Course Design could prove to be a useful read when considering how they might address accessibility not just through adding resources into their course schedule, but also by centering it more firmly in their pedagogy.

I'm also going to come back to this and look at like, oh, let's talk about how we build this into our pedagogies and our curriculum...I think it would be really, really handy.

While faculty members understood that they would still need to set aside time to comb through these resources, finding ones that work with their teaching style, course design, and upcoming semester course list, they expressed excitement that the digital toolkit could act as a starting point for this undertaking that removes some of the burden of having to go out and find these kinds of resources on their own.

Student participants also reflected on the digital toolkit as a resource for both themselves and their professors. One student explained that they would appreciate such a resource that is not just available to professors, but also to students within the program, providing them with updated resources, guidelines, and tools...

...because the environment where we do documentation has been changing drastically for the last twenty years alone. We can't rely on the old standards.

This student went on to discuss how they work a full-time job in the industry while also putting themselves through this master's program because they hope to gain more skills

and knowledge on topics of TPC that they can implement in the workplace. Several other student participants were in similar situations and brought up how they too were experiencing or expected to experience accessibility-related needs in their workplace that a tool like this might be able to assist with. While not all students agreed that they would return to this tool on their own, possibly opting to access accessibility guidance from their employers or through their own research, student responses did concur that, if nothing else, they recognized that having these resources available to the professors in their program could prove beneficial by helping to ensure accessibility appeared more centrally in the courses they take.

Participants also gave several suggestions for improvements that could be made to the digital toolkit in order to make it a stronger resource for use in the PTW program. Student participants saw the site as a good resource for faculty, but wished it could also act as a resource for students to educate themselves further or perhaps even use as a tool for their professional work. To accomplish this, these participants suggested the addition of more updated resources and tools that they could implement in the workplace, rather than curriculum-focused resources to be used solely within the program. As one student explained,

You're leaning very much on the academic, which is, you know, good...But in terms of professional, what we really look for is the practicality, the day-to-day usage.

Faculty also had suggestions for further pedagogical and curricular resources, as well as ideas on how to make a digital toolkit like this long-lasting in its impact. A request that

came up repeatedly in interviews was for the course syllabi of other professors to exist on the site as a resource. Beyond this, faculty suggested adding a place for example assignments or schedules to show where readings and tools might fit in to a course's curriculum. Several professors mentioned that having an outward-facing site such as this could act as a great resource for students and others in the university and beyond, but perhaps housing a living version of this information repository on an internal site, such as Blackboard, that all professors in the program could access and upload to would assist in keeping the resources relevant and current. As one professor put it,

[T]here is a way to encourage people to come back to a resource like this, especially if it's a living, breathing resource. As you know, teaching evolves, and times change.

These suggestions mirrored the students' desire for more student-facing resources, while adding the facet of an internal, living document that might include additional pedagogical resources. Overall, participants found the idea of a digital toolkit to be a positive and practical resource that professors might use to better center accessibility in the PTW program, and as a jumping off point to further explore concepts of accessibility in the field of TPC.

Balancing Theoretical vs. Practical Resources

Another consideration that emerged from these conversations about centering accessibility in the PTW program was the lack of more practical tools and resources to utilize in courses. This was touched on during the feedback students provided about making the website a more student- or professional-focused resource, though nearly

every participant—both faculty and students—remarked on a desire for more practical and hands-on resources to help guide themselves on these topics and to include in course design. From one of the student survey responses came support for this idea of focusing resources on practical application over theory.

I think accessibility should be taught throughout the curriculum because it is rather important - especially classes that deal heavily with writing content rather than theory-heavy classes.

The frustration of feeling like they had some theoretical knowledge of accessibility, yet no real practical skills, was echoed by others. One student in particular voiced their dislike of such theory-heavy content:

I really wish that...there was an actual unit in every course that's like, all right, you're not only going to learn about what accessibility means in this class, and in your field as a whole, but we're going to practice it...pulling it out of a place of obscurity and confusion and maybe trepidation, because you don't know enough about it, and putting it in a comfortable space to practice it...

To address this issue of the imbalance of theory-based resources vs. practical resources, participants gave suggestions such as adding more tools that they could utilize for creating accessible content or checking the accessibility of existing content, resources that discuss the application of these topics in professional settings, sources from the public or private sectors of industry rather than from research-based publications focused primarily on pedagogy, and pedagogical resources that could assist in the design of hands-on learning opportunities on these topics.

Major Finding 2: It Is a Vital Task to Center Accessibility in TPC, in Academia, and in Our Conversations

The other major takeaway from Phase Two of this research is that, although student and faculty participants felt that accessibility is not currently central to the GMU PTW master's program, they all expressed a desire for it to be so. Participants made it clear that they wanted to learn more about accessibility, have it taught in their classes, and take this knowledge with them into the industry.

Accessibility as Key to TPC

When it comes to the importance of understanding and implementing accessibility as technical and professional communicators, the responses of participants mirrored what is seen in the literature. According to the results of the Pre-Interview Survey (Appendix E), the majority of participants agreed that accessibility should be more central to technical communication pedagogy in general, and all participants stated that it was either Very or Extremely important to incorporate topics of accessibility into the PTW curriculum at George Mason University. One participant explained in their survey response why they believed learning about accessibility is so vital to TPC.

Accessibility is focused on users, and as technical communicators our ultimate goal is to help users understand, use, and access documents easily.

When asked during the interviews about the role of accessibility in the field of TPC, participants agreed that one of the primary roles of professional communicators is a dedication to the advocacy of users and the production of materials that can be understood and used successfully by those users. As one student observed,

Part of the mission of what we do, and almost all spaces of technical writing, is taking something complex and making it simpler for people to understand. So, if a group of those people that you're writing for and designing for can't access what you're trying to help them understand, what good is it doing them?

During another interview, a professor explained how the TPC field has developed this focus on user- or human-centered design over time.

It seems to make sense, especially after the Social Justice Turn in our field, that we're just more aware, or calling more explicit attention to, how examples and acts of technical communication support or enable different communities...I think one of those audiences and communities is certainly disabled people, or the disabled community, and therefore, a part of the broader social justice move would be to make accessibility a more central component of our courses.

The responses from the surveys and interviews support the notion that participants see their role as technical and professional communicators as one that is concerned with issues of social justice and user advocacy: concepts which they find to be interconnected with topics of accessibility.

The Desire for Accessibility-Related Pedagogy

Participants suggested that having accessibility resources, such as the digital toolkit, available for faculty members who design the program's curriculum could help ensure that students are learning the skills they need to fulfill their roles as technical and professional communicators after graduation. During their interview, one professor noted,

Sometimes I think the classroom is the safest, most low risk, most low-stakes place to try something out...

This professor, as well as several other participants, came to the conclusion that integrating accessibility into the curriculum of a graduate TPC program provides a structured and controlled area for practice with accessibility skills. The same professor went on to discuss how keeping accessibility practice in the classroom has the added benefit of protecting vulnerable user populations. They explained that it was preferable that students learn and practice these skills while still in the classroom so that they have room to stumble and grow under the watchful eyes of their professors before being put in a position to work with users from communities with accessibility needs. Students also expressed that learning accessibility skills in the classroom seemed like a much better way to develop and strengthen these concepts rather than trying to self-learn on the job. A student expressed support for this sentiment when explaining,

I think it would be a disservice to not teach [accessibility]. I think it's on the flip side of, if you don't focus on this, we will eventually encounter a time in our professional careers where we'll need to incorporate it, and we won't have the tools, or know how to do it.

As mentioned before, several students in the GMU PTW master's program are already working in full-time positions in the industry as they work toward completing their degree. These students universally expressed a desire to learn concepts of accessibility during their time here at GMU so that they could take these skills with them to their jobs. There were also students and faculty alike that discussed past positions in which they had

faced issues due to a lack of accessibility knowledge and resources, and during their interviews these participants showed a great desire to learn about these concepts in a practical, actionable way so that they would be prepared for future tasks related to accessibility needs in TPC.

Starting the Conversation of Accessibility

Perhaps the most consistent feedback that emerged from this study was that this research spurred participants to think more deeply about topics of accessibility and its role in our field. Regardless of their original survey answers on their confidence in topics of accessibility, professors and students of the PTW master's program all demonstrated a desire to learn and engage more with topics of accessibility moving forward. One student explained that this desire came from a need to understand and integrate accessibility practices in their workplace, and with changes to technology and the TPC field in general over time, they felt like they were falling behind.

The other reason why we need to talk about accessibility is because the environment where we do documentation has been changing drastically for the last twenty years alone. We can't rely on the old standards...

Several students remarked on how, through the process of their participation in this study, they had discussed accessibility to a greater extent than they had during their entire time in the PTW master's program. These students discussed how they wished the program had given them a greater baseline of accessibility knowledge and practical skills, and several described their goal to do more personal research to help better their workplace practices in the future.

Similarly, the faculty expressed a desire to move accessibility into a more central position in the PTW program as a whole, and several even discussed their personal plans for educating themselves further and making changes to their course curriculum. Toward the end of one interview, a professor mentioned the following.

I mean honestly it was after reading your project...I was like, oh yeah, I really should do more accessibility in my teaching.

A few professors even described the changes they had made to their coursework leading up to the interview. They explained that after the initial plan for this research project had been shared with them, it caused them to rethink how they taught certain concepts in their courses. At the time of the interviews, at least two of the participating professors had integrated accessibility to a greater extent in the courses they were teaching in the Fall 2022 semester. Upon review of the digital toolkit, several professors discussed their plans to utilize even the prototypical version of the website in their future pedagogical plans. As one participant explained,

So, if nothing else, you've got me thinking about, well how am I gonna go find stuff and then put it somewhere, either just for me, or better yet for everybody to use.

Participants found that discussing concepts of accessibility made it more apparent to them that they knew these concepts to be important to their work in TPC, and this spurred a desire to learn more, teach more, and incorporate more of these concepts into their work.

DISCUSSION

The results of the content analysis during Phase One of this study indicated a lack of accessibility-related curriculum in the GMU PTW master's program, yet Phase Two revealed that both faculty and students of the program agree on the importance of such concepts to the field of TPC and a desire to more centrally integrate topics of accessibility into our curriculum. From existing literature, it is clear that there is research-based exigence for working toward integrating accessibility more centrally within TPC education in order to meet the growing industry demand for these skills. While industry and scholarship seem to be in agreement on the need for centering accessibility in our pedagogy, there is a current gap in our understanding of how best to go about this. This study revealed some of the current barriers to this process, as well as considerations for overcoming them, which are outlined in the following sections.

Recommendation 1: To Center Accessibility, Focus on the Core and Build Out From There

Possibly the best way to ensure that all graduates of the GMU PTW master's program come into contact with topics of accessibility is to ensure this content is integrated into the core courses they must complete to graduate. While creating special topics courses could prove to be a great option for integrating additional accessibility content within the program, these should only be considered after more focus on accessibility is placed in the core mandatory courses first. During Phase One of this study, the content analysis made it clear that accessibility is not currently a central feature

of the syllabi of the GMU PTW master's program core courses, with the term "accessibility" only appearing in one of the seven syllabi, yet there are clearly spaces in which a greater focus on accessibility can be incorporated.

For ENGH 501: Introduction to Professional Writing and Rhetoric, suggested additions to the syllabi would be to add more accessibility resources and focus into the Readings and Resources, Weekly Topics, and Projects sections. These additions, coupled with the broad descriptions of social justice and related concepts that already exist in the Descriptions and Goals sections, would help situated this introductory course so that it can start to familiarize students with accessibility topics from the beginning of the program. In ENGH 502: Research Methods in Professional Writing and Rhetoric, suggested additions would be to add more accessibility resources and focus into almost all sections of the syllabi in order to center accessibility rather than position it as an add-on. By incorporating accessibility into the way we teach research processes, we can instruct our students to approach TPC research with accessibility in mind from the start. For ENGH 503: Theory and Practice of Editing, suggestions are to add accessibility topics into all categories of the syllabus except Weekly Topics—due to the volume of content that must be covered in this class over the course of a semester, there is perhaps no room to add more here; however, with additions to the other sections, it can help balance out the focus on accessibility across the course. Proposed additions include weaving both readings and practical tools for accessibility checks and design into existing course topics, which will enable this course to better prepare students with both written and digital editing skills that lend to increased document and web accessibility. While

ENGH 505: Document Design did not include any related topics for accessibility in the syllabus reviewed in this study, there is nonetheless ample room to incorporate suggested integrations of accessibility readings, topics, and assignments, which would tie in to existing content very naturally and help place accessibility as a central focus of the course. Instructing students on how to design accessible documents will make them better practitioners that can more readily meet the diverse needs of their users.

While focusing on adding accessibility topics and resources does support the idea of making accessibility central rather than an add-on, this does not lessen the difficulty faced in placing this topic into the curriculum of the core courses which are already bursting with content. A difficulty that is commonly faced in curriculum redesign is fitting topics within the time constraints of a single-semester course. With so much content to pack into a few short weeks, even when topics on accessibility can be fit into one of the core courses of the program, it often comes at the cost of cutting other topics of import; in this way, topics must battle one another for dominance in a course's curriculum. For example, within the PTW program ENGH 501 is a course designed to introduce students to a variety of TPC concepts that are meant to guide them into the master's program. However, due to the fact that it must act as an introduction to many important concepts of TPC, it is limited by the time and depth it can take to explore accessibility. With the existing curriculum of this course being as full as it is, topics of accessibility would most likely need to be incorporated briefly into pre-existing content or else decisions would need to be made to replace other course foci altogether. While it is vital that we work to integrate accessibility more centrally into the core courses of our

program to ensure that students come into contact with these topics, we must also consider how to best balance these additions with the concepts currently present in those courses.

Recommendation 2: We Must Teach Our Students Practical Skills That They Can Transfer to Industry

Centering accessibility topics, tools, and techniques into our curriculum could assist in preparing students to meet the industry demand for TPC practitioners with at least a basic understanding and skillset in accessibility content. As was seen in the Phase Two responses, participants felt that the classroom is one of the best places to learn these skills to better prepare them for post-graduate work. Yet a lack of practical resources limits the impact that accessibility-related curriculum could have on preparing students for workplace demands. Much of the TPC scholarship on accessibility seems to focus on the reasoning behind creating accessible content or the theoretical ideas about utilization and implementation into academic settings. While this research can be useful for pedagogical purposes, integrating more practical, student-facing content into the curriculum would better position professors to guide students in building practical skills of this nature that they can utilize in TPC professions.

The majority of the resources incorporated into the digital toolkit were pulled from the Phase One content analysis—both content that existed in current syllabi and that was suggested to fill existing shortcomings—and were primarily focused on high-level ideas about how accessibility relates to TPC industry and pedagogy, rather than practical tools or best practices for utilizing these concepts in a work environment. While some

practical readings and tools were positioned in the digital toolkit—including website accessibility checkers, instructions on how to caption videos, suggestions for incorporating accessibility-focused assignments into a course, etc.—these were far outweighed by more theory-based content, and did not satisfy the desires of the participants in this study. In future considerations for creating and maintaining an information repository of accessibility resources, more focus should be placed on practical resources that can be utilized in course design by professors in order to create hands-on learning opportunities within the classroom. Likewise, if a student-facing website is maintained in the future, including practical resources that walk users through the steps for creating or editing content in accessible ways can be useful to students who wish hone their skills in these practices and to transfer those skills into their workplace.

Recommendation 3: It Is Okay to Start Small, Just Get Started

Existing literature includes several studies that focus on redesigning curriculum units, entire courses, and even whole programs in order to build coursework around a central focus of accessibility. However, what those studies rarely discuss is the time and effort it takes to overhaul curriculum on such a scale. With restrictions of time and lack of resources available to professors, it often proves impractical to commit to a total curriculum or program change without spending an enormous amount of time and effort in the planning of such an undertaking. Conversely, utilizing a resource such as the digital toolkit to provide more immediate assistance and support to professors could prove to be a viable solution that helps bridge the gap between a clear desire that professors and students have for integrating accessibility into the program and the current

reality. While the importance of accessibility in TPC pedagogy is clear, and a satisfactory end goal may have us move toward a more widespread and thorough overhaul of the program to better center these topics in our curriculum, we should not wait for a chance to set things in motion now, even if that means focusing on smaller scale applications.

When time and resources are scarce, an information repository of accessibility readings, tools, and guidance for curriculum could prove to be imperative for faculty members. A digital toolkit can provide the resources needed to better integrate accessibility as a central component of the GMU PTW master's program in a way that ensures both students and professors benefit. Better incorporation of accessibility into program curriculum would allow students to practice these skills in a contained environment so as to become more comfortable and confident in their understanding before moving to industry and utilizing these skillsets at a professional capacity. Similarly, professors who may lack experience in accessibility practices can build knowledge and confidence in the practical application of accessibility topics and tools so as to better center these concepts in their pedagogy and pass them along to students through curriculum. Rather than waiting and hoping to learn these concepts in the workplace, or putting off the integration of accessibility as a core component of the program's curriculum because we lack the time to overhaul the courses or program at large, the digital toolkit can be a more effective and instantaneous resource to introduce concepts of accessibility as they relate to TPC in the safe and contained environment of academia.

While it may feel like implementing small changes, such as creating a website to store accessibility resources, will have a limited effect on the overall program outcomes regarding accessibility pedagogy, these small changes can start to add up into something much greater over time. One of the most encouraging outcomes of this study was the response from participants conveying their excitement about this topic and their plans to focus on centering accessibility in their work moving forward. Holstein and Gubrium (1995) describe the phenomenon of “active interviews” in which both the interviewer and interviewees are part of the meaning-making process, and “[r]espondents are not so much repositories of knowledge—treasuries of information awaiting excavation—as they are constructors of knowledge in collaboration with interviewers” (p. 4). This effect of active participation is demonstrated by the fact that while this study was focused on analyzing participant feedback to uncover themes about the digital toolkit and its potential as a resource for the PTW program, participants were similarly gaining knowledge and insights from the interview process and prototype of the digital toolkit to make their own plans for incorporating accessibility in the future. A conversation is a two-way street, and by starting that conversation with academics in the field of TPC and centering it around accessibility, we can begin to collectively make a change for the future. The desire for greater knowledge on accessible writing and design practices is clearly present among members of this program. Even employing a single supportive tool and starting small conversations around accessibility can create a spark that ignites the passion of our students and faculty to continue building on these ideas and moving toward a more accessibility-focused program.

CONCLUSION

Technical and professional communicators educate themselves on issues of social justice in order to be effective advocates for their users by incorporating human-centered design principles into their work. The recent social justice turn in TPC has led academics and practitioners to an understanding of how vital a role accessibility plays in that effort. By designing documents with a human-centered mindset, practitioners are focused on the end goal of document design: to create content that can be used by those it is designed for. While it is unlikely that all users of a document will be part of the disabled community or need accessibility standards met in order to utilize a document, we must be aware that any user might have these needs. To incorporate accessibility in the work we do is to universally design for all users. To this end, we must train students of TPC to meet the accessibility needs of their users. Not only is this focus on incorporating accessibility in our pedagogy aligned with the human-centered focus of the discipline, but it also prepares students to meet the demands of industry, which increasingly calls for practitioners with skills in creating and maintaining accessible content. While the desired outcomes are thus clear, the path to achieving them is less so. Current literature is divided on the best ways to incorporate accessibility more centrally in TPC pedagogy—ranging from suggestions for minor curriculum changes to complete program redesign.

In order to test a potential method of better centralizing accessibility, this study was conducted on the curriculum of a single university master's program. In Phase One of the study, the four core courses in the George Mason University Professional and

Technical Writing master's program were analyzed, and findings indicated that the current syllabi of these courses do not present accessibility as a central feature. However, each of the four courses—English 501: Introduction to Professional Writing and Rhetoric, English 502: Research Methods in Professional Writing and Rhetoric, English 503: Theory and Practice of Editing, and English 505: Document Design—present opportunities in which accessibility resources could be added to bring these topics to the forefront. In Phase Two of this study, a digital toolkit—a website acting as an information repository for accessibility-based resources—was created and presented to current students and faculty for feedback. The main takeaways from their insights focused on the difficulty of centering accessibility within the program due to time and resource constraints, but a desire to overcome these in order to place accessibility more firmly within the PTW program. To accomplish this, the PTW program should focus on integrating accessibility topics into the core courses first and foremost, and to use practical, hands-on resources within the curriculum to accomplish this. Also, regardless of the scope of these changes, starting the conversation around accessibility is the first and most important step toward the goal of achieving a more central focus on accessibility within the program.

This study was limited by the small scope of the research. By focusing solely on the GMU PTW master's program core courses, the research was reduced in size to a select number of syllabi and participants. For the Phase One content analysis, a total of seven syllabi were reviewed, with only one syllabus available each for the ENGH 503 and ENGH 505 courses. Of the syllabi received, structures and contents varied, making it

difficult in some cases to make direct comparisons. The Phase Two surveys and interviews were limited by the pool of participants as well as their scheduling availabilities. A total of eight participants were interviewed: three professors and five students. Interviews were designed to be scheduled for up to two-hour time blocks, though due to scheduling restrictions several participants were interviewed over shorter periods, with some as brief as 30-minutes. The research was further limited by the fact that the prototype of the digital toolkit was created and discussed in the context of the study, and without an opportunity for professors to test this tool during actual course design. However, the input of the current professors and students is backed by their experience in this program and is thus the best way to discuss the potential of such a prototype without actual implementation. Similarly, though it can be restricting to focus on a single master's program, it also provides a more focused lens in which to observe the current makeup of said program, and work in-depth with current stakeholders to determine their wants and needs in terms of pedagogy. While the research findings may point to suggested improvements specifically within the GMU PTW master's program, the implications have the potential to be applied in similar programs related to professional and technical writing in other universities.

More research is needed if we are to determine the best methods for centering accessibility in TPC pedagogy. For example, participants in this study disagreed over whether accessibility should be integrated into the existing core courses or if new "special topics" courses should be created. Further research to explore the nature of integrating accessibility across the entire PTW master's program course catalog could

determine the benefits of adding such elective courses. Additionally, improvements for subsequent versions of the digital toolkit were suggested by participants, such as adding more practical resources and creating a living document where professors could update syllabi and suggested curriculum. Incorporating these ideas could allow for more effective iterations of this information repository in the future. Further research into other tools and methods to help in the pursuit of centering accessibility would similarly embolden professors with the resources they need to rework their pedagogical practices in ways that better prepare students to be successful practitioners of TPC and advocates for their diverse users. While the digital toolkit showed promise, different iterations should be studied—such as an internal, faculty-facing live site and external, student-facing site—to determine the extent of its effectiveness. As we work to prepare students to be advocates for users with disabilities, it is also vital that we consider the accessibility needs of our students. To do this, it would be appropriate to research ways of implementing accessible pedagogy in the classroom, to ensure we not only teach our students about accessibility, but also teach them in accessible ways.

While both scholarship and industry has concurred on the necessity of placing accessibility as a core principle of the TPC discipline, we have yet to firmly implant this principle into our pedagogy in ways that will prepare students to be well-equipped to handle the diverse accessibility needs of users. This research attempted to find a way to do just that. The primary purpose of this study was to design a new curriculum tool that could be used to better integrate accessibility more securely into pedagogy and to involve current students and faculty in the process in order to gain better insight into the actual

needs and practicalities of such a curricular shift. The hope is that these methods can be generalized and applied to other university programs in an effort to finally make the push to center accessibility in TPC pedagogy.

APPENDIX A: CONTENT ANALYSIS RESULTS FROM PHASE 1

ENGH 501: INTRODUCTION TO PROFESSIONAL WRITING AND RHETORIC

Table 2 Course Syllabus A Content Analysis

	Section of Course Syllabus			
	Course Description/Goals /Objectives? (<u>Y</u> /N)	Readings/Resources? (<u>Y</u> /N)	Class Discussions/Weekly Topics? (<u>Y</u> /N)	Projects/Assignments? (Y/ <u>N</u>)
Question 1: Where is accessibility? How does it currently fit into the course?	<ul style="list-style-type: none"> • “We will pay particular attention to the ‘social justice turn’ and how it has influenced scholarship and practice.” • “You will develop a deep, complex understanding of...ethical and social responsibilities of professional communicators...” • “We will explore questions such as...How do we design communication materials that ‘amplify the agency of oppressed people— 	<ul style="list-style-type: none"> • Technical Communication After the Social Justice Turn: Building Coalitions for Action (Walton, Moore, & Jones, 2019) • Solving Problems in Technical Communication, Johndan Johnson-Eilola and Stuart Selzer (eds), 2013 • “IEEE Transactions on Professional Communication Special Issue on Enacting Social Justice in Technical and Professional Communication” (2020) 	<ul style="list-style-type: none"> • Week 5 – Work, audience, user-centered • Week 6 – The Social Justice Turn [introduction] • Week 7 - TPC, Ethics, and Law • Week 10 – The Social Justice Turn [advocacy] • Week 11 – The Social Justice Turn [human-centered design] • Week 12 – Race, ethnicity, disability & Queer 	<ul style="list-style-type: none"> • Only general/brief assignment descriptions available in this syllabus, no details. From these, nothing accessibility-related appears in the projects.

	<p>those who are materially, socially, politically, and/or economically under-resourced' (Walton & Jones, 2018, p. 242)"</p> <ul style="list-style-type: none"> • Idea of professional communicators as "activists" • "How are [sic] professional communicators produce, reproduce, maintain or resist systems of oppression?" • "We will examine...Tensions and concerns at the heart of the field, especially relationships between industry and academia" • Overall, there is a large focus on social justice, resisting oppression, ethical and social duties, etc. While there is no true mention of accessibility, these topics can encompass it. 	<ul style="list-style-type: none"> • "Legally Minded Technical Communicators" (Agboka, 2020) • "The Technical Communicator as Advocate" (Jones, 2016) • "Disability studies, cultural analysis, and the critical practice of technical communication pedagogy." (Palmeri, 2006) • "The technical communicator as participant, facilitator, and designer in public engagement projects." (Moore, 2017) • Very small sections on accessibility; however, texts include discussions of social justice, advocacy, universal design, and legal and ethical duties. 		
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Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	Course Description/Goals /Objectives? (Y/ N)	Readings/Resources? (Y /N)	Class Discussions/Weekly Topics? (Y/ N)	Projects/Assignments? (Y/ N)
	<ul style="list-style-type: none"> Topics are generally broad, and accessibility can fall under the already present categories. 	<ul style="list-style-type: none"> Week 7 – TPC, Ethics, and Law – could add readings on accessibility legal requirements like Section 508, plain language, etc. Week 5 – Work, audience, user-centered – topic is good, but the textbook readings could be paired with more accessibility-focused content 	<ul style="list-style-type: none"> Week 12 (Race, ethnicity, disability & Queer) pretty well represents this topic – potential improvement could be to separate Disability as its own week, however due to time constraints this may not be possible 	<ul style="list-style-type: none"> There does not appear to be room to add here. Assignments are based on readings, review of journals, and individual research on topics of the students' choosing

Y(es)/N(o) (If Y – how? If N – why?)

Table 3 Course Syllabus B Content Analysis

Question 1: Where is accessibility? How does it currently fit into the course?	Section of Course Syllabus			
	Course Description/Goals /Objectives? (Y /N)	Readings/Resources? (Y /N)	Class Discussions/Weekly Topics? (Y /N)	Projects/Assignments? (Y/ N)
	<ul style="list-style-type: none"> "This course broadly examines the history, theory, and practice of professional and technical writing as well as rhetoric" "...our class will focus on theoretical and 	<ul style="list-style-type: none"> Eva Brumberger and Claire Lauer "A Day in the Life: Personas of Professional Communicators at Work" Iva Cheung "Plain Language to Minimize 	<ul style="list-style-type: none"> Week 13 – Ethics and User Groups This week focuses on ethical concerns and includes discussion of plain language, though it is split with other topics such as 	<ul style="list-style-type: none"> None of the projects listed have descriptions. Upon researching these project descriptions in separate listings in the course Blackboard, none seem designed

	<p>practical examination of the historical and contemporary issues that occupy this field.”</p> <ul style="list-style-type: none"> • These descriptions are broad and thus don't limit the ability to integrate accessibility discussions into the theory and practice of technical communication 	<p>Cognitive Load: A Social Justice Perspective”</p> <ul style="list-style-type: none"> • Jennifer Slack, Davide Miller, and Jeffrey Doak “The Technical Communicator as Author: Meaning, power, Authority” • No true mention of accessibility, but personas, a technical communicator's duty to social justice, and balancing power between readers and writers can all tie to this conversation 	<p>deceptive data, miscommunication outcomes, and safety concerns. Possibility to switch focus to accessibility; however, with limited time frame of the course, this may not be viable.</p>	<p>with teaching accessibility in mind</p>
Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	<p>Course Description/Goals /Objectives? (Y/<u>N</u>)</p> <ul style="list-style-type: none"> • Descriptions of the course and objectives are already fairly broad – so it would not be appropriate to include a specific accessibility-based objective in the design of this syllabus language 	<p>Readings/Resources? (<u>Y</u>/N)</p> <ul style="list-style-type: none"> • Jay Dolmage “Open Access(ibility?).” • Allison Hitt “Foregrounding Accessibility Through (Inclusive) Universal Design in Professional Communication Curricula.” • The first reading includes the ethical role of communicators to design for all bodies, and the second could be paired with 	<p>Class Discussions/Weekly Topics? (<u>Y</u>/N)</p> <ul style="list-style-type: none"> • Week 4 – Field of Practice/Field of Research [add discussions of disparities between industry need for accessible content and scholarship/research that positions it separately] • Week 11 – Researching Writing at Work [integrate studies of accessibility as a rising concern in the 	<p>Projects/Assignments? (<u>Y</u>/N)</p> <ul style="list-style-type: none"> • Week 4's Industry Analysis assignment involves finding job descriptions, which could be used to look for accessibility skill requirements in the industry

		Brumberger and Lauer discussion on personas	workplace, government requirements, etc.] <ul style="list-style-type: none"> Week 14 – Contexts and Practices of Professional Writing (Technology and Media) [possible to add discussion of technical tools for accessibility, though as this class is more theory based, it might be best left for a more practical class like 503/505] 	
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Y(es)/N(o) (If Y – how? If N – why?)

Table 4 Course Syllabus C Content Analysis

	Section of Course Syllabus			
	Course Description/Goals /Objectives? (Y/ <u>N</u>)	Readings/Resources? (<u>Y</u> /N)	Class Discussions/Weekly Topics? (<u>Y</u> /N)	Projects/Assignments? (Y/ <u>N</u>)
Question 1: Where is accessibility? How does it currently fit into the course?	<ul style="list-style-type: none"> Nothing specifically linked to topics of accessibility in this section 	<ul style="list-style-type: none"> Solving Problems in Technical Communication, Johndan Johnson-Eilola and Stuart Selzer (eds), 2013 Jennifer Slack, Davide Miller, and Jeffrey Doak “The Technical Communicator as Author: Meaning, power, Authority” 	<ul style="list-style-type: none"> Week 5 – Ethics Week 11 – Tools Week 13 – Tech + Design For all above topics, no description is provided in this syllabus, making it difficult to estimate what was covered. However, these topics might include conversations on accessibility and if 	<ul style="list-style-type: none"> Lack of detailed descriptions leave room for speculation. The list of projects matches somewhat with other 501 courses. Professional Development could include attending STC webinars on accessibility Industry Analysis could involve checking for

		<ul style="list-style-type: none"> Note: Difficult to identify other readings, as only author last names are listed (no title or year) Free STC Student Membership (Note: I myself had this membership as a student of the PTW program and used it to attend a free webinar involving an introduction to accessibility in the field) 	nothing else, these topics could “Fit” here for future courses	accessibility knowledge/skills in job descriptions
Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	Course Description/Goals? (Y/N)	Readings/Resources? (Y/N)	Class Discussions/Weekly Topics? (Y/N)	Projects/Assignments? (Y/N)
	<ul style="list-style-type: none"> There is room to add accessibility when it comes to discussion of what students will learn in terms of practical knowledge to use in the industry (E.g., In discussion of how this class will connect to finding careers in the field, or for students already working in the 	<ul style="list-style-type: none"> Could be supplemented similarly to other 501 classes, though difficult to tell if this is needed based on lack of information on listed readings Going off primary topics (see next column) more readings could be geared to 	<ul style="list-style-type: none"> See above row – if nothing else, those three weeks would allow room for accessibility discussions in terms of ethics, tools, and tech/design 	<ul style="list-style-type: none"> See above row – If not already integrated into these projects, there is room to place accessibility as part of the existing assignments without changing them drastically

	field who can learn more about what they may encounter in their “day-to-day experiences”)	these subjects and their connection to accessibility specifically		
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Y(es)/N(o) (If Y – how? If N – why?)

ENGH 502: RESEARCH METHODS IN PROFESSIONAL WRITING AND RHETORIC

Table 5 Course Syllabus D Content Analysis

Question 1: Where is accessibility? How does it currently fit into the course?	Section of Course Syllabus			
	Course Description/Goals /Objectives? (Y/ <u>N</u>)	Readings/Resources? (Y/ <u>N</u>)	Class Discussions/Weekly Topics? (<u>Y</u> /N)	Projects/Assignments? (Y/ <u>N</u>)
	<ul style="list-style-type: none"> This section does mention an ethics discussion, but it would be a stretch to assume this incorporates accessibility without purposeful inclusion 	<ul style="list-style-type: none"> “Design as Advocacy” (Rose, 2016) “A user-centered design approach to self-service ticket vending machines.” Siebenhandl et al (2013). These readings do not discuss accessibility and disability specifically but do touch on social justice, ethical design, human-centered design, equity, advocacy, etc. and thus could pair well with more focused discussions or readings 	<ul style="list-style-type: none"> Week 7 – Data Collection 3: Usability Usability conversation acts as a natural segue to discussions of accessible content 	<ul style="list-style-type: none"> No project descriptions include any mention of accessibility or related concepts

Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	Course Description/Goals /Objectives? (Y/N)	Readings/Resources? (Y/N)	Class Discussions/Weekly Topics? (Y/N)	Projects/Assignments? (Y/N)
	<ul style="list-style-type: none"> The description is too broad to be an appropriate place to include this focus, but it would be possible and more fitting to add a Learning Objective about ensuring usability, ethics, or else designing studies with accessibility in mind 	<ul style="list-style-type: none"> Week 5 – Data Collection: Survey, or Week 12 – Data Analysis 1: Survey, would benefit from reading(s) on how to make surveys accessible, Week 12 in particular includes discussion of Qualtrics surveys Week 7 – Data Collection 3: Usability – add reading on accessibility as it relates to usability. Siebenhandl reading occurs this week and brings up usability due to age, but focused more on a lack of technology knowledge. Instead, bring in more pointed readings on physical or mental usability 	<ul style="list-style-type: none"> Week 5 – Data Collection: Survey, and Week 12 – Data Analysis 1: Survey, have room to tie these topics more directly to accessibility (see column to left for reading suggestions) Week 3 – Research Ethics could include discussion of legal requirements Weeks 5-9 cover topics of data collection and could include more practical discussion of tools for this process and how to make them accessible 	<ul style="list-style-type: none"> Survey Assignment could be used to show students how to make accessible surveys (with Qualtrics or another tool) Usability Study Assignment involves having students make and test texts with users and could include provisions to create accessible texts Research Presentation could involve instructions on how to make a presentation (PowerPoint, handouts, charts, etc.) accessible for audience

Y(es)/N(o) (If Y – how? If N – why?)

Table 6 Course Syllabus E Content Analysis

	Section of Course Syllabus			
	Course Description/Goals /Objectives? (<u>Y</u> /N)	Readings/Resources? (<u>Y</u> /N)	Class Discussions/Weekly Topics? (<u>Y</u> /N)	Projects/Assignments? (Y/ <u>N</u>)
Question 1: Where is accessibility? How does it currently fit into the course?	<ul style="list-style-type: none"> In the “Why are they [methods] important” section it discusses power imbalance, injustice, people in the margins, equity, and justice Topics are broad and as such could encompass accessibility, though not explicitly stated 	<ul style="list-style-type: none"> <i>O’Leary, Zina (2021). The Essential Guide to Doing Your Research Project (4th edition)</i> <i>Teston et al. (2019), “Surveying precarious publics”</i> <i>Rosselot-Merritt, (2020) “Fertile Grounds”</i> [<i>Rose and Cardinal, “Participatory Video UX”</i> Readings range from brief inclusion of topics related to accessibility (power dynamics, ethical research, accessible documentation lending to legitimacy) to more focused texts (designing surveys for participants with disabilities, need for more research about supporting users with disabilities including multimodal texts, captions, etc.) 	<ul style="list-style-type: none"> Week 3 – Surveys touches on surveying those in precarious positions (such as participants with disabilities) Week 4 – Interviews discusses ethical concerns in research and issues of power Week 5 – Usability, and Week 7 – UX, may already include discussions of agency 	<ul style="list-style-type: none"> Not inherently – personal student projects can focus on this (mine did) but they do not have to, so currently no direct connection to this topic through the course assignments

Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	Course Description/Goals /Objectives? (Y/<u>N</u>)	Readings/Resources? (<u>Y</u>/N)	Class Discussions/Weekly Topics? (<u>Y</u>/N)	Projects/Assignments? (<u>Y</u>/N)
	<ul style="list-style-type: none"> Current descriptions probably cover enough. No direct mention of accessibility or disability but captured in justice and equity pursuits and would stick out if this specific topic was included over others. 	<ul style="list-style-type: none"> Week 6 – Community-Based Partnerships include readings about translating for different languages to ensure access to communities. It does not directly discuss it, but this could lead to a discussion of interpreters/ASL (or room to add another reading here) Week 5 – Usability/Heuristic Evaluations, incorporate more pointed reading on usability and disability 	<ul style="list-style-type: none"> Week 3 – Surveys could add discussions of how to make surveys accessible, making this a more practical and hands-on unit Week 4 – Interviews includes an opportunity for students to interview members of the profession, interview questions could be added that ask participants about the use of accessibility in the workplace See note in left column about Week 6 	<ul style="list-style-type: none"> Final project presentations can be required to be accessible (captions for videos, print slide deck for visually impaired, provide materials electronically upon request, etc.)

Y(es)/N(o) (If Y – how? If N – why?)

ENGH 503: THEORY AND PRACTICE OF EDITING

Table 7 Course Syllabus F Content Analysis

	Section of Course Syllabus			
	Course Description/Goals /Objectives? (<u>Y</u> /N)	Readings/Resources? (<u>Y</u> /N)	Class Discussions/Weekly Topics? (<u>Y</u> /N)	Projects/Assignments? (Y/ <u>N</u>)
Question 1: Where is accessibility? How does it currently fit into the course?	<ul style="list-style-type: none"> Purpose Section calls for class “emphasis on inclusive information design to help you to critically analyze texts to make them usable to readers” Having a statement like this as such as central part of the syllabus and course description prime readers to assume this will be integral to the class 	<ul style="list-style-type: none"> “Reconceiving technical editing competencies for the 21st century” Lang, S., & Palmer, L. (2017). “Teaching Editing through a Feminist Theoretical Lens” Popham, S.L. (2019). Current readings include discussion of Section 508 as well as equity, respect, and accessibility 	<ul style="list-style-type: none"> Week 2 – Introduction to Grammar and Accessibility has a direct focus on accessibility Week 8 – AI Tools in Editing discusses readability as well as AI tools – these may include accessibility checkers Week 13 – Ethical Editing has potential for these topics as well 	<ul style="list-style-type: none"> Project descriptions in this syllabus do not have a direct link to topics and techniques of accessibility as written
Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	<ul style="list-style-type: none"> Add Course Objective about ensuring readability or usability for readers and creation of accessible/inclusive information to make it as central as in the Purpose Section; this seems to align with how course information 	<ul style="list-style-type: none"> Week 2 – Introduction to Grammar and Accessibility consider adding more readings on accessibility to (somewhat lacking) Week 8 – AI Tools in Editing consider adding readings or exploration of practical tools for to 	<ul style="list-style-type: none"> The current layout of information means that the curriculum is quite packed, so existing weeks (see above row) should suffice 	<ul style="list-style-type: none"> Portfolio assignments could include projects in which students must make content accessible (edited videos, website, text for accessibility) Freelance Editing Project could be redesigned to partner with community entity

	is presented and would not be out of place among the other objectives	help with accessibility checks		to have students do freelance accessible editing work <ul style="list-style-type: none"> • Non-text based editing demonstration project could be tweaked to focus on accessibility or replaced with another project altogether, since this seems the least integral to the course
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Y(es)/N(o) (If Y – how? If N – why?)

ENGH 505: DOCUMENT DESIGN

Table 8 Course Syllabus G Content Analysis

	Section of Course Syllabus			
	Course Description/Goals /Objectives? (<u>Y</u> /N)	Readings/Resources? (Y/ <u>N</u>)	Class Discussions/Weekly Topics? (Y/ <u>N</u>)	Projects/Assignments? (Y/ <u>N</u>)
Question 1: Where is accessibility? How does it currently fit into the course?	<ul style="list-style-type: none"> • Course Description: “We will see how documents are designed to repress/oppress and also how documents can be designed to magnify the agency of users.” • Course Learning Objectives: Design socially just documents, Design 	<ul style="list-style-type: none"> • <i>Document Design: A Guide for Technical Communicators</i>. Kimball & Hawkins (2008). • Several readings skirt the issue (ethics, human-centered design, UX testing, etc. but none mention accessibility and disability specifically). Kimball & Hawkins do 	<ul style="list-style-type: none"> • Unclear at this time if any topics touch on accessibility based on the syllabus (nothing explicitly stated) 	<ul style="list-style-type: none"> • Unclear at this time if any topics touch on accessibility based on the syllabus (nothing explicitly stated)

	<p>with users in mind, How technical communicators apply their specialized knowledge in service of the community, Demonstrate an awareness and understanding of the impact of visual rhetoric on society</p> <ul style="list-style-type: none"> • While no direct mention of accessibility is made, these topics can encompass it 	<p>have a single mention of Vision Deficiency, but this and other scatterings are too brief to be substantial</p>		
Question 2: Where could accessibility be? Where are opportunities to add it? How could it fit into the course	Course Description/Goals /Objectives? (Y/<u>N</u>)	Readings/Resources? (<u>Y</u>/N)	Class Discussions/Weekly Topics? (<u>Y</u>/N)	Projects/Assignments? (<u>Y</u>/N)
	<ul style="list-style-type: none"> • Accessibility could be listed specifically as part of these goals, though the language as-is lends to the inclusion of this area as well as others, so it may be an unnecessary addition and too specific in relation to other topics 	<ul style="list-style-type: none"> • Lots could be added to what already exists and would fit in well • Week 4 – Design as Advocacy Work could similarly have a reading dedicated to advocacy for users with disabilities • Week 5 – Theories of Design is set up to discuss human dignity/rights and human-centered design, so could add reading here 	<ul style="list-style-type: none"> • Plenty of room to have these discussions in Week 4 – Design as Advocacy Work, Week 5 – Theories of Design, Week 9 – Graphics and Color, and Week 14 – Work on [UX] Test Plan 	<ul style="list-style-type: none"> • Microdesigns could have guidance that any designed text must follow a set of accessibility standards and/or be run through an accessibility checker • Design Thinking Challenge is about coming up with a solution to a real-world GMU campus issue. This could encourage students to focus on accessibility issues around campus, or at

		<ul style="list-style-type: none"> • Week 9 – Graphics and Color could use readings on color-blind or visually impaired users and tools for ensuing text contrasts • Week 14 – Work on [UX] Test Plan has readings that could be switched out for examples of usability/accessibility testing tools, ways to test with a diverse user base (such as those with disabilities), etc. 		<p>least incorporate this in their solution design.</p> <ul style="list-style-type: none"> • Usability Testing and Usability Report could include parameter that accessibility be a part of the test in some way • Infographic and Flyer assignments could have accessibility standards/checker as part of the process
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Y(es)/N(o) (If Y – how? If N – why?)

APPENDIX B: INTERVIEW CONSENT FORM

Centering Accessibility in Technical Communication Pedagogy

I. Research Procedures

This research is being conducted to investigate how and to what extent accessibility is positioned as a core tenet of the the George Mason University (GMU) Professional and Technical Writing (PTW) master's program and what pedagogical practices can better position accessibility as a central feature. The goal is to propose a change in curriculum that can be employed at GMU to prepare students to be better user advocates.

If you agree to participate, you will be asked to complete a brief survey through Qualtrics to gauge your previous understanding of and engagement with accessibility and its role in GMU curriculum. You will then be asked to review a digital "toolbox" of accessibility resources and participate in a 2-hour long focus group or individual interview, based on preference and schedule, with other current faculty members or students (based on your status) of the GMU PTW master's program. Interviews and focus groups will take place via Zoom. Researchers will audio and video record the interviews and focus groups and will save all of the files in Zoom's cloud recording feature. All participants will need to agree to audio recording for the Zoom focus group; those who do not wish to agree to video recording will be asked to turn off their camera for the session, and those who do not agree to audio recording will be excluded from the focus group and instead scheduled for an individual interview with no audio or video recording.

Researchers will analyze the feedback from interviews and focus groups to understand the differing perspectives of the faculty and students of the program in regard to the role of accessibility in the curriculum as well as the toolbox's effectiveness in centering accessibility.

II. Risks

There are no more than minimal risks involved in participating in this research. The foreseeable risks or discomforts include sharing thoughts on the participants' program while they are still members of the program (student or faculty), however all identifying information for participants will remain confidential to anyone outside the study to avoid any potential harm.

III. Benefits

There are no benefits to you as a participant other than to further research in the GMU PTW program by sharing your knowledge and feedback about the curriculum “toolkit”, which may result in additional resources that faculty can use in their own course design as well as resources that students can use to deepen their knowledge of accessible practices in their field.

IV. Confidentiality

The data in this study will be confidential. We protect the confidentiality of participants in the following ways:

- Survey results and transcribed interviews and focus groups will be scrubbed of names and identifying information if mentioned during interviews. Participants will be identified in reports and thesis by pseudonym only; any generally identifying information will be changed. Only the PI, Co-PI, and members of the research team will have access to the full study data.
- Audio and video recordings and transcripts of the interviews will be stored solely using the online Zoom cloud recording feature, and not downloaded nor stored elsewhere. This feature will be password protected with only the PI and CO-PI having access.
- The interviews/focus groups will be transcribed by the Co-PI. The transcriptions will be analyzed by the Co-PI, with oversight from the PI. The data will be stored in an encrypted folder for a period of five years, after which it will be destroyed.
- Participants may review Zoom’s website for information about their privacy statement: <https://zoom.us/privacy>

It is important to note the following:

- Although focus group participants will be asked to keep the contents of the discussion confidential, due to the nature of a focus group, the researcher cannot control what participants might say outside of the research setting.
- While it is understood that no computer transmission can be perfectly secure, reasonable efforts will be made to protect the confidentiality of your transmission.
- The de-identified data could be used for future research without additional consent from participants.
- The Institutional Review Board (IRB) committee that monitors research on human subjects may inspect study records during internal auditing procedures and are required to keep all information confidential.

V. Participation

To be eligible to participate, you must be a current student or faculty member of the GMU PTW master's program and be over 18 years of age. Your participation is voluntary, and you may withdraw from the study at any time and for any reason. Participants are free not to answer any questions without penalty. If you decide not to

participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled. There are no costs to you or any other party. Under the U.S. federal tax law, you may have individual responsibilities for disclosing the dollar value of the incentive received on this study.

VI. Contact

This research is being conducted by Kathryn Jedlicka, a master's student in the English department at George Mason University. She may be reached at 703-655-2335 or kjedlick@gmu.edu for questions or to report a research-related problem. The PI for this research is Dr. Heidi Lawrence of the English department at George Mason University. She may be reached at 571-216-8104 or hlawren2@gmu.edu for questions or to report a research-related problem. You may contact the George Mason University Institutional Review Board office at 703-993-4121 or IRB@gmu.edu if you have questions or comments regarding your rights as a participant in the research.

This research has been reviewed according to George Mason University procedures governing your participation in this research.

VII. Consent

I have reviewed the content in this form, all of my questions have been answered by the research staff, and I agree to participate in this study.

Verbal consent provided by participant spelling their last name [researcher to check here]: ☐

Participant's Last Name:

Participant provides verbal consent for audio recording: ☐

Participant provides verbal consent for video recording: ☐

Date: ##/##/####

APPENDIX C: QUALTRICS PRE-INTERVIEW SURVEY QUESTIONS

1. On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how confident are you in your understanding of the general concept of “accessibility”?
[0 – not at all, 1 – not very, 2 – neutral, 3 – somewhat, 4 – very, 5 – extremely]
2. On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how confident are you in your understanding of the concept of “accessibility” as it pertains to professional and technical writing?
[0 – not at all, 1 – not very, 2 – neutral, 3 – somewhat, 4 – very, 5 – extremely]
3. Prior to coming to GMU, did you have any personal experience with topics of accessibility? This could include classes or other training, workplace experience, independent or group research, etc.
[Y/N/Unsure]
4. If you answered “yes” to the previous question, can you provide a brief account of your experience with accessibility prior to coming to GMU?
[Short Response]
5. In the last 5 years, what courses in the George Mason University Professional and Technical Writing master’s program have you taught (faculty) or taken (students)?
[all PTW master’s program courses will be listed based on GMU Course Catalog]
6. Of the classes that you have taught/taken in the GMU PTW master’s program in the last 5 years, approximately what percentage of them featured topics of accessibility?
[0%, 1%-25%, 26%-50%, 51%-75%, 76%-100%]
7. Do you believe that accessibility should be more central to technical communication pedagogy?
[Y/N/Unsure]
8. On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how important do you think it is to incorporate topics of accessibility in the technical communication curriculum at GMU?
[0 – not at all, 1 – not very, 2 – neutral, 3 – somewhat, 4 – very, 5 – extremely]
9. Why do you think this?
[Short Response]

APPENDIX D: INTERVIEW QUESTIONS

I. General Accessibility Questions (20-25 min)

Before we jump in to look at the digital toolkit, I have a few questions regarding your understanding of accessibility and where/to what extent you have encountered it at GMU.

- When you hear the term “accessibility”, what comes to mind? Can you define it in your own words?
 - Consider: what is it? What isn’t it? Do you have any examples?
- Thinking about accessibility, have you ever witnessed it being discussed or implemented at GMU? If so, where, and in what ways?
- Based on your understanding of the curriculum at GMU, where do you think accessibility gets taught? Are there any gaps that you can think of where accessibility studies could/should be integrated into the curriculum where they don’t already exist? (Feel free to refer to the university-wide curriculum or the courses in the GMU English department.)
- Based on your knowledge of the GMU PTW program core courses (ENGH 501, 502, 503, 505), to what extent do you think topics of accessibility are currently integrated into the curriculum? Can you explain and/or give specific examples?
 - Are there any gaps that you can think of where accessibility studies could/should be integrated into this curriculum?

II. Review of the Digital Toolkit (45-60 min)

I’d now like you to navigate to the toolkit. We will look over the toolkit as a whole as well as some individual resources within it and discuss them.

Section a: Usability Test

- I’d like you to consider a scenario where you want more information on the “Americans with Disabilities Act”. Can you show me how you might navigate this website to find a resource for that?
 - What did you think about the navigation process to get to this resource?
 - For example, was it easy or difficult to find the resource? Why do you think that is?
 - What did you think about how much time it took you to find the resource?
 - At any point, did you have trouble navigating to or accessing the resource? If so, can you describe this?
- Now, take a moment to review this resource.
 - What do you think about this type of resource [video, website link, article, legal document]?
 - Does it present information in a clear, easily understood way?

- Can you envision a scenario in which you would use this resource either independently or in relation to a course/on the job?
- How can you envision this use changing for a different course/job?
- Can you tell me about a time when you think having access to this resource would have solved a problem you had?
- Take a moment to explore the website and find another resource – any resource you want – feel free to take a few minutes to do this.
 - Which one did you choose?
 - Is there a specific reason why you chose this resource?
 - For example, did it have to do with the layout of the site, location of the resource, name of the resource, medium/type of resource, or other reason?
 - What do you think about this type of resource [video, website link, article, legal document]?
 - Does it present information in a clear, easily understood way?
 - Can you envision a scenario in which you would use this resource either independently or in relation to a course/on the job?
 - How can you envision this use changing for a different course/job?
 - Can you tell me about a time when you think having access to this resource would have solved a problem you had?

Section b: Website Review

- Within the toolkit there are resources marked for general “Course Design” by members of the GMU PTW program. To what extent do you think these resources would be useful to incorporate in the PTW program?
 - Are there any that stick out as particularly well- or ill-suited for a PTW audience?
- Within the toolkit there are resources marked for use in a particular course within the GMU PTW program. To what extent do you think these resources would be useful to incorporate in the specified course?
 - Are there any that stick out as particularly well- or ill-suited for this course? Are there any that you could see working well in another course?
- Now, thinking about the site overall and the layout of the resources:
 - Do you find the organization of the site to be useful and conducive to ease of navigation – why or why not?
 - What do you think about the general look and feel of the site?
 - Do you think the site adequately functions as a storage hub for these resources – if yes, what about the site makes it a good location for these resources – if no, why not?
- After reviewing the digital “Toolkit” provided, do you have any questions about the use of the toolkit, or any of the resources provided within?
- Are there any additional resources not included in the toolkit that you would like to see added? (This can be specific – a particular article, video, etc. - or more general – a concept, type of resource, etc.).

- For Faculty: Would you consider using this toolkit when designing or preparing for future courses you will teach in this program? Why or why not?
 - Are there any specific resources that you would consider using in your own courses? If so, what are they and why?
- For Students: Do you think you would benefit from professors in this program using the resources in this toolkit within their course design? If so, in what way? If not, why?
 - Are there any specific resources that you would consider using in your workplace or for other needs (personal, research, etc.)? If so, what are they and why?
- Do you think this toolkit would be an effective addition to the GMU PTW program? Why or why not?

III. Wrap-Up (20-25 min)

- Is there anything you learned about accessibility or the role accessibility plays in the GMU PTW master's program from reviewing this resource and/or participating in this research?
- Are there other resources you can think of that currently exist at Mason, in industry, or in the community which we could utilize here to have a stronger accessibility focus in the curriculum? What do you do when you want to incorporate accessibility resources? What do you want to do when you learn?
- Are there any other methods or mediums that you could think of that could help integrate accessibility into the PTW program besides this toolkit?
- Student: do you think this is an important topic to learn for going out into the job force?
- Are there any final thoughts or ideas you want to share today that we haven't had a chance to discuss?

APPENDIX E: PRE-INTERVIEW SURVEY RESPONSES

Q1 - On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how confident are you in your understanding of the general concept of “accessibility”?

Table 9 Pre-Interview Question 1 Responses

Answer	%	Count
0 – not at all	0.00%	0
1 – not very	0.00%	0
2 – neutral	0.00%	0
3 – somewhat	37.50%	3
4 – very	25.00%	2
5 – extremely	37.50%	3
Total	100%	8

Q2 - On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how confident are you in your understanding of the concept of “accessibility” as it pertains to professional and technical writing?

Table 10 Pre-Interview Question 2 Responses

Answer	%	Count
0 – not at all	0.00%	0
1 – not very	0.00%	0
2 – neutral	12.50%	1
3 – somewhat	37.50%	3
4 – very	25.00%	2
5 – extremely	25.00%	2
Total	100%	8

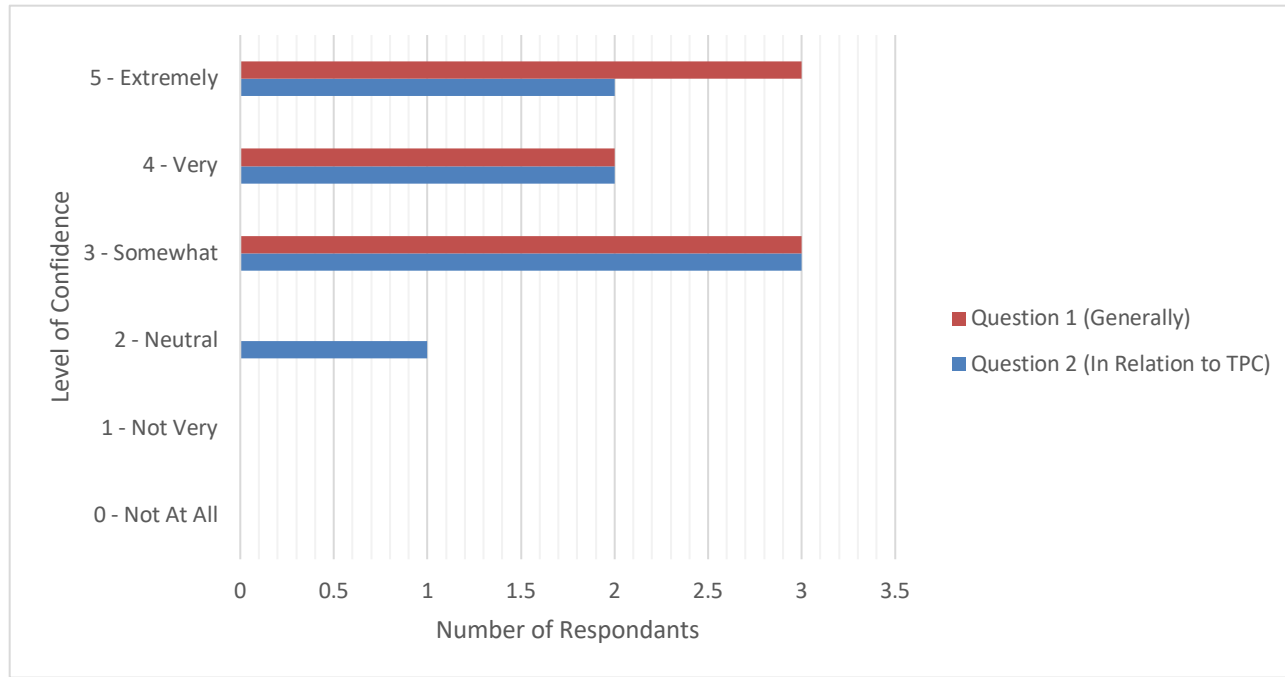


Figure 6 Respondents' Confidence in Their Understanding of "Accessibility"

Q3 - Prior to coming to GMU, did you have any personal experience with topics of accessibility? This could include classes or other training, workplace experience, independent or group research, etc.

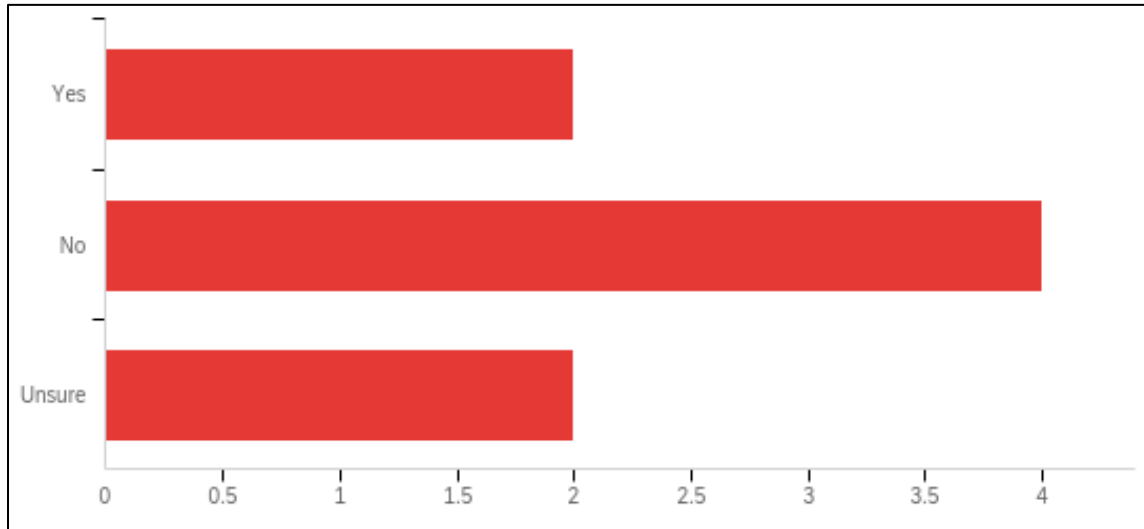


Figure 7 Respondents' Prior Experience with Accessibility

Table 11 Pre-Interview Question 3 Responses

Answer	%	Count
Yes	25.00%	2
No	50.00%	4
Unsure	25.00%	2
Total	100%	8

Q4 - If you answered “yes” to the previous question, can you provide a brief account of your experience with accessibility prior to coming to GMU? If you answered "no" or "unsure", you can skip this question.

If you answered “yes” to the previous question, can you provide a brief account of your experience with accessibility prior to coming to GMU? If you answered "no" or "unsure", you can skip this question.

As my major during my undergraduate years was writing and technical communications, we did have some minor sections of different courses that talk about accessibility. But I don't remember having a class that is primarily dedicated to just accessibility.

Working at TTM Technology, I had to give training courses regarding accessibility for languages, as well as safety regulations regarding safe access for those with physical disabilities.

She didn't have to pay attention

Not in terms of his own accessibility needs but in terms of best practices and teaching you think of it more, making it accessible for the class.

See video

Q5 - In the last 5 years, what courses in the George Mason University Professional and Technical Writing master's program have you taught (faculty) or taken (students)? (Select all that apply).

Table 12 Pre-Interview Question 5 Responses

Answer	%	Count
ENGH 501: Introduction to Professional Writing and Rhetoric	13.73%	7
ENGH 502: Research Methods in Rhetoric and Writing	13.73%	7
ENGH 503: Theory and Practice of Editing	11.76%	6
ENGH 504: Internship in Writing and Editing	5.88%	3
ENGH 505: Document Design	13.73%	7
ENGH 506: Research for Narrative Writing	0.00%	0
ENGH 507: Web Authoring and Design	5.88%	3
ENGH 508: Digital Rhetoric	1.96%	1
ENGH 509: Proposal Writing and Development	7.84%	4
ENGH 551: Introduction to Literary Theory	0.00%	0
ENGH 609: Online Writing	0.00%	0
ENGH 611: Studies in Rhetoric	7.84%	4
ENGH 612: Cultures in Professional Writing	0.00%	0
ENGH 613: Technical Communication	9.80%	5
ENGH 615: Proseminar in Composition Instruction	0.00%	0
ENGH 675: Feminist Theory and Criticism	0.00%	0
ENGH 676: Introduction to Cultural Studies	0.00%	0
ENGH 689: Advanced Proposal Writing	3.92%	2
ENGH 690: Special Topics in Writing and Rhetoric	0.00%	0
ENGH 696: Northern Virginia Writing Project Teacher/Research Seminar	0.00%	0
ENGH 697: Composition Theory	3.92%	2
Total	100%	51

Q6 - Of the classes that you have taught/taken in the GMU PTW master's program in the last 5 years, approximately what percentage of them featured topics of accessibility?

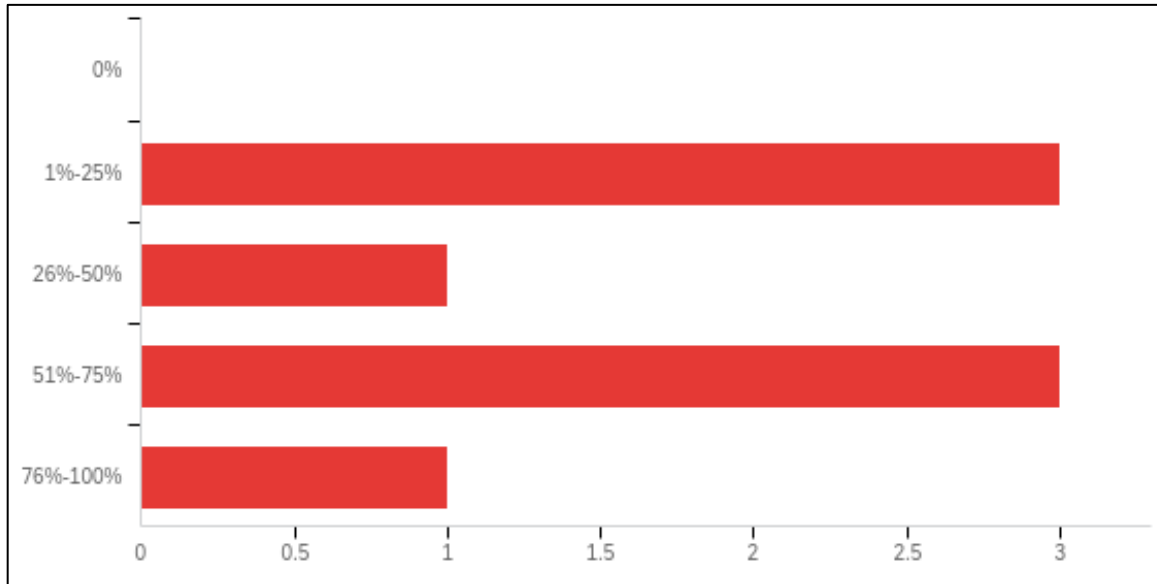


Figure 8 Percentage of GMU PTW Courses Featuring Accessibility

Table 13 Pre-Interview Question 6 Responses

Answer	%	Count
0%	0.00%	0
1%-25%	37.50%	3
26%-50%	12.50%	1
51%-75%	37.50%	3
76%-100%	12.50%	1
Total	100%	8

Q7 - Do you believe that accessibility should be more central to technical communication pedagogy?

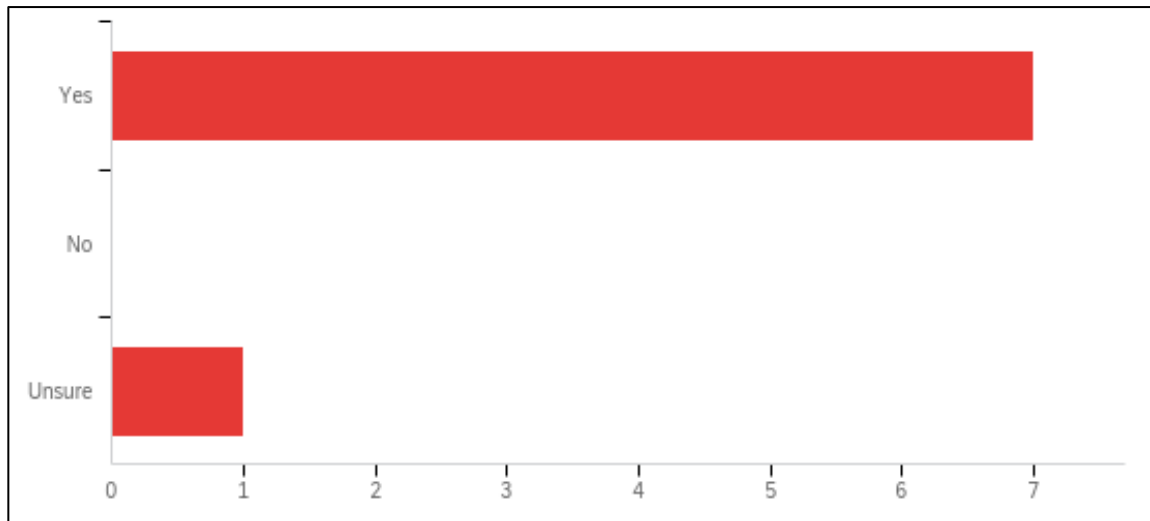


Figure 9 Perception of Centering Accessibility

Table 14 Pre-Interview Question 7 Responses

Answer	%	Count
Yes	87.50%	7
No	0.00%	0
Unsure	12.50%	1
Total	100%	8

Q8 - On a scale of 0 to 5 (0 indicating “not at all” and 5 indicating “extremely”) how important do you think it is to incorporate topics of accessibility in the technical communication curriculum at GMU?

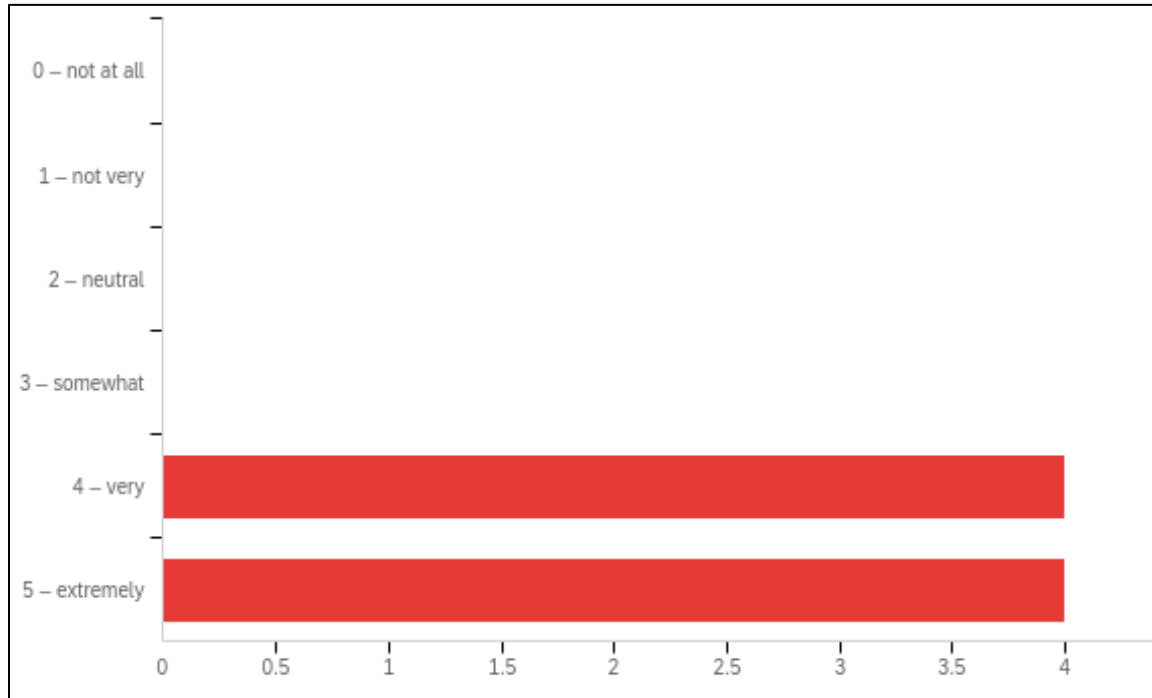


Figure 10 Importance of Incorporating Accessibility in Curriculum

Table 15 Pre-Interview Question 8 Responses

Answer	%	Count
0 – not at all	0.00%	0
1 – not very	0.00%	0
2 – neutral	0.00%	0
3 – somewhat	0.00%	0
4 – very	50.00%	4
5 – extremely	50.00%	4
Total	100%	8

Q9 - Based on your answer to the last question, why do you think this?

Based on your answer to the last question, why do you think this?

I believe that students need to learn how to write for a wide range of audiences and learn how to do so successfully and not just on the surface level.

This is based on Section 508 Compliance is VITAL to any government documentation work. Understanding Accessibility and how it effects government documentation, and business documentation in general, is essential to being successful as a documentation specialist.

Accessibility is a doorway into a variety of discussions. It's not something which should be viewed as an end-point

If technical communication is to make complex material more digestible, then it is inherently an accessibility issue.

Accessibility is focused on users and as technical communicators our ultimate goal is to help users understand, use, access documents easily

Q10 - When you hear the term “accessibility”, what comes to mind? Can you define it in your own words? You might consider: What is it? What isn’t it? Do you have any examples?

When you hear the term “accessibility”, what comes to mind? Can you define it in your own words? You might consider: What is it? What isn’t it? Do you have any examples?

To my understanding it is writing with a wide range of audiences in mind. Creating content that everyone can read - that means taking in consideration different impairments (didn’t want to call it a disability) that your audiences can have.

The ability of a document to be read or understood by multiple audiences, regardless of physical capability or limitations.

I would define accessibility as the methods used to increase understanding of content, by making the content available for a dynamic set of audiences. When I hear the term "accessibility" I think of inclusion, exclusion, empathy, simplification, and cooperation. I think of inclusion, because accessibility should consider the incorporation of previously denied or excluded audiences. I think of empathy, because it's important when considering accessibility to analyze the function of whatever work your doing from the audience's perspective. This ties into cooperation, because technical writers will definitely face scenarios where the audience has suggestions for making more accessible content.

Equitable access to information. Making sure persons who consume information outside the norm have similar access to said information.

When one is able to easily understand or use information or technology

Q11 - Thinking about accessibility, have you ever witnessed it being discussed or implemented at GMU? If so, where, and in what ways?

Thinking about accessibility, have you ever witnessed it being discussed or implemented at GMU? If so, where, and in what ways?

It's brought up from time to time just slightly in other courses only when we talk about diverse sets of audiences.

I've seen it discussed in terms of Proposal Writing and understanding Social Justice.

I've heard about accessibility throughout my education at GMU. One term which stuck with me was "Plain Language." I really like thinking about this term, because I come across so many folks from outside of the program who write with such advanced diction that I need a dictionary/thesaurus to understand what they're talking about.

Via class topics, mostly. This includes assignments related to accessibility, readings, and discussions.

NO

Q12 - Based on your understanding of the curriculum at GMU, where do you think accessibility gets taught? Are there any gaps that you can think of where accessibility studies could/should be integrated into the curriculum where they don't already exist? (Feel free to refer to the university-wide curriculum or the courses in the GMU English department specifically.)

Based on your understanding of the curriculum at GMU, where do you think accessibility gets taught? Are there any gaps that you can think of where accessibility studies could/should be integrated into the curriculum where they don't already exist? (Feel free to refer to the university-wide curriculum or the courses in the GMU English department specifically.)

I think accessibility should be taught throughout the curriculum because it is rather important - especially classes that deal heavily with writing content and rather than theory heavy classes.

I see accessibility being taught mostly in English courses. It needs to be incorporated into all forms of study.

The two main places I hear about accessibility are in document design (ENGH 505) and proposal writing (ENGH 509/689). I think for classes like ENGH 503 there could be a larger discussion about the topic, with more exercises to drive home the importance of user experience (UX) methods and plain language.

It gets touched upon in many classes, but mostly at a surface level. I think the program would do well to offer the occasional special topics course that dives deeper.

485/505, 501

Q13 - Based on your knowledge of the GMU PTW program core courses (ENGH 501: Intro to Professional Writing and Rhetoric, 502: Research Methods in Rhetoric and Writing, 503: Theory and Practice of Editing, 505: Document Design), to what extent do you think topics of accessibility are currently integrated into the curriculum? Can you explain and/or give specific examples? Are there any gaps that you can think of where accessibility studies could/should be integrated into this curriculum?

Based on your knowledge of the GMU PTW program core courses (ENGH 501: Intro to Professional Writing and Rhetoric, 502: Research Methods in Rhetoric and Writing, 503: Theory and Practice of Editing, 505: Document Design), to what extent do you think topics of accessibility are currently integrated into the curriculum? Can you explain and/or give specific examples? Are there any gaps that you can think of where accessibility studies could/should be integrated into this curriculum?

Document design did talk about accessibility the most, according to my recollections. It was so briefly mentioned in 503 and we did have deeper conversations about it on 501.

N/A

I think the intro classes, such as ENGH 501, do a great job introducing the concept to students. However, in the later courses accessibility becomes sidelined by other material. It seems more like a discussion point than a tool to apply, such as how in ENGH 503 the concept is mentioned briefly but then pushed aside when additional content is introduced. I think it should be something all classes in the PTW program keep at the front of every discussion and include with every assignment they give out.

Mostly via readings and discussions. There have been very few actual assignments related to accessibility.

505 is more focused on designing accessible documents

REFERENCES

- ADA.gov. (n.d.). *Introduction to the Americans with Disabilities Act*. Retrieved April 12, 2023, from <https://www.ada.gov/topics/intro-to-ada/>
- Agboka, G. Y., & Dorpenyo, I. K. (2022). Curricular efforts in technical communication after the social justice turn. *Journal of Business and Technical Communication*, 36(1), 38–70. doi.org/10.1177/10506519211044195
- Colton, J. S. & Walton, R. (2015). Disability as insight into social justice pedagogy in technical communication. *The Journal of Interactive Technology and Pedagogy*, (8). <https://jitp.commons.gc.cuny.edu/disability-as-insight-into-social-justice-pedagogy-in-technical-communication/>
- District of Columbia Office of Disability Rights. (n.d.). *ADA 101—ADA Glossary—Legal and Practical Terms A-B*. Retrieved February 27, 2023, from <https://odr.dc.gov/book/ada-101-ada-glossary-legal-and-practical-terms/ada-101-ada-glossary-legal-and-practical-terms-b>
- Dolmage, J. (2018). Open access(ibility?). In L. E. Gries & C. G. Brooke (Eds.), *Circulation, Writing, and Rhetoric* (pp. 262-278). University Press of Colorado. doi.org/10.2307/j.ctt21668mb.18
- Eubanks, P. & Abbott, C. (2003). Using focus groups to supplement the assessment of technical communication texts, programs, and courses. *Technical Communication Quarterly*, 12(1), 25-45. <https://www.proquest.com/scholarly-journals/using-focus-groups-supplement-assessment/docview/215436236/se-2?accountid=14541>
- Franzosi, R. (2010). *Quantitative narrative analysis*. SAGE Publications, Inc. dx.doi.org/10.4135/9781412993883
- General Services Administration (GSA). (2018, May). Applicability & conformance requirements. *Section508.gov*. Retrieved April 15, 2023, from <https://www.section508.gov/develop/applicability-conformance/>
- George Mason University. (2022). *University Catalog 2022-2023 English (ENGH)*. Retrieved April 14, 2023, from <https://catalog.gmu.edu/courses/engh/>
- Haas, A. M. (2012). Race, rhetoric, and technology: A case study of decolonial technical communication theory, methodology, and pedagogy. *Journal of Business and Technical Communication*, 26(3), 277–310. doi.org/10.4324/9781410617385

- Hitt, A. (2018). Foregrounding accessibility through (inclusive) universal design in professional communication curricula. *Business and Professional Communication Quarterly*, 81(1), 52–65, doi:10.1177/2329490617739884
- Holstein, J., & Gubrium, J. (1995). *The active interview*. SAGE Publications, Inc.
<https://doi.org/10.4135/9781412986120>
- Huntsman, S., et al. (2018). Cultivating virtuous course designers: Using technical communication to reimagine accessibility in higher education. *Communication Design Quarterly*, 6(4), 2018, 12-23. <https://doi.org/10.1145/3309589.3309591>
- Jones, N. N. (2016). The technical communicator as advocate: integrating a social justice approach in technical communication. *Journal of Technical Writing and Communication*, vol. 46, no. 3, July 2016, pp. 342–61. DOI.org (Crossref), doi.org/10.1177/0047281616639472. Accessed 11 Mar. 2022.
- Moran, K. (2019). *Usability testing 101*. Nielsen Norman Group. Retrieved March 1, 2023, from <https://www.nngroup.com/articles/usability-testing-101/>
- Morgan, D. L. (1997). *Focus groups as a qualitative method*. SAGE Publications, Inc.,
<https://doi.org/10.4135/9781412984287>
- Sonka, K., et al. (2021). Finding a teaching ally: Designing an accessibility-centered pedagogy. *IEEE Transactions on Professional Communication*, 64(3), 264–74. doi.org/10.1109/TPC.2021.3091190
- Swacha, K. Y. (2018). “Bridging the gap between food pantries and the kitchen table”: Teaching embodied literacy in the technical communication classroom. *Technical Communication Quarterly*, 27(3), 261-282.
<https://doi.org/10.1080/10572252.2018.1476589>
- Taylor, D. M. (2018). *Americans with disabilities: 2014*. U.S. Department of Commerce, Economics and Statistics Administration, Census Bureau.
www.census.gov/library/publications/2018/demo/p70-152.html
- U.S. Access Board. (n.d.). *Rehabilitation Act of 1973*. Retrieved April 14, 2023, from <https://www.access-board.gov/law/ra.html>
- Web Accessibility Initiative (WAI). (2020, November 2). *WCAG 2 Overview*. Retrieved April 15, 2023, from <https://www.w3.org/WAI/standards-guidelines/wcag/>
- Zdenek, S. (2018). Guest editor’s introduction: Reimagining disability and accessibility in technical and professional communication. *Communication Design Quarterly*, 6(4), 4–11. doi.org/10.1145/3309589.3309590

BIOGRAPHY

Kathryn Jedlicka received her Bachelor of Arts in English from Salisbury University in 2018, then spent several years working as the head of the publications department at a government contractor, working of producing training courses for federal employees. She then went on to pursue her Master of Arts in English at George Mason University with a concentration in Professional and Technical Writing in 2023. She plans to continue working in the field of technical writing, as her passion for document design, editing, and text production continues to flourish.