

Case Report

Examining the Role of Academic Accommodations and Technical Standards in Preparing Health Professions' Students for Clinical Success: A Case Report

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Abstract

Initiatives focused on equity, inclusion, and support for underrepresented groups are making higher education more accessible, yet the transition from an academic setting to the clinical workplace can pose significant challenges for students, especially those who have relied on academic accommodations. While these accommodations facilitate success in the classroom, they may not fully equip students for the demands of professional practice. This case report examines the perspectives of two graduate faculty at a Mid-Atlantic university, focusing on the relationships between academic accommodations and technical standards in health profession programs. The report explores how technical standards and accommodations influence students' readiness for clinical settings and their potential for professional success. Three key themes emerged: (1) *Preparation for Clinical Success*, highlighting participants' views on how accommodations and technical standards contribute to students' academic and clinical success; (2) *Assumptions and Uncertainties*, revealing representatives' lack of knowledge and hesitancy regarding technical standards, along with a disconnect between administration and faculty in updating and incorporating inclusion principles into these standards, and (3) *Preservation of University Standards and Reputation*, which underscores the importance of maintaining institutional integrity while supporting diverse learning needs. The complex interplay between accommodation policies and technical standards requirements highlights the need for continual assessment to effectively prepare students for workplace demands.

Keywords

Academic Accommodations, Technical Standards, Clinical Preparedness, Student Transition, Workplace Demands

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1. Introduction

Higher education is becoming more accessible to diverse students through initiatives that promote equity, inclusion, financial aid, and support services tailored to the needs of underrepresented and minority populations. Higher education institutions serve as a bridge between education and practice, equipping students with the knowledge, skills, clinical experience, and professional training necessary to meet the evolving demands of the healthcare workplace. Additionally, there is a significant push to develop an inclusive healthcare workforce that reflects the diversity of the patients and clients it serves, promoting equitable and culturally competent care. College admissions, administration, and faculty must recognize the importance of creating and sustaining a supportive learning environment that addresses the diverse needs of students. However, achieving this remains a challenge, requiring intentional efforts to implement inclusive policies, provide academic accommodations, and foster a campus culture that values diversity, equity, and belonging, while also upholding the demands and technical standards of professional clinical practice.

2. Background

The Individuals with Disabilities Education Act (IDEA), initially enacted in 1975 as the Education for All Handicapped Children Act (EAHCA) and renamed in 1990 [1, 2], has been a cornerstone in supporting the educational rights of K-12 students with disabilities. Updated in 1997 and revised in 2004 through the IDEA Improvement Act, it ensures that all public-school students with disabilities can access necessary reasonable accommodations [3, 4]. Typically, these accommodations are outlined in an Individualized Education Program (IEP) or a 504 plan, which details the specific supports required to meet a student's needs. When developing an IEP or 504 plan, parents collaborate with school personnel by providing insight into their child's strengths and weaknesses to determine the most appropriate accommodations [5]. However, once students transition to college, the protections and provisions under IDEA no longer apply. Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) and Americans with Disabilities Act Amendments Act (ADAAA) protects individuals with disabilities from being excluded from the participation in or being subjected to discrimination in a college, university or other post-secondary institution [6-8]. Therefore, post-secondary education students can still receive reasonable accommodations, but it is now their responsibility to disclose personal information to college or university officials in order to obtain and maintain reasonable accommodations [9, 10].

Reasonable accommodations such as extended time on assignments, testing in alternative locations, access to a calculator or laptop, regularly scheduled breaks, and a

note-taker, reader or scribe are well-documented as vital tools for promoting student achievement [11]. These accommodations address diverse needs and reduce barriers to learning, fostering equity in educational outcomes. For instance, extended time and alternative testing locations minimize stress and distractions, while tools like calculators and laptops support cognitive and motor impairments. Studies have consistently shown that accommodations, provided under the ADA, ADAAA and Section 504, enable students with disabilities to access their education effectively and perform at their potential in academic settings [10, 12]. Despite their benefits, challenges surrounding academic accommodations persist in higher education, particularly within healthcare professions.

A significant barrier is the negative stigma associated with accommodations which includes students' fear of being perceived negatively by faculty, as well as faculty members' unfavorable attitudes toward students requiring accommodations [13]. However, there is also evidence of positive faculty perspectives, especially when institutions provide sufficient resources to support accommodations effectively [13]. Despite progress, significant uncertainties remain regarding the implementation of academic accommodations. For instance, the process of accommodating nursing students with learning disabilities is largely unexplored in the nursing education literature, underscoring the need for further clarification [14]. Similarly, in physician assistant studies, barriers to implementing academic accommodations have been identified, including inadequate knowledge of relevant laws, limited institutional resources, and unclear implementation strategies [15].

Volino et al. [16] recommend that institutions develop accommodations that address all aspects of a program's curriculum, including skills laboratories and experiential learning environments. Achieving this requires fostering a supportive culture for accommodations, early identification of key stakeholders, aligning learning outcomes and performance expectations across all learning environments, ensuring smooth transitions, and monitoring and adapting individual accommodation plans [16].

While reasonable accommodations are essential in academic settings, they do not always translate effectively into clinical healthcare roles, particularly in fast-paced, loud, or unpredictable environments. Several challenges arise such as environment incompatibility whereas clinical setting often requires immediate decision-making and rapid physical and mental responses which can conflict with accommodations like extended time or scheduled breaks. Another challenge could be patient safety and privacy that could be compromised when using assistive technology or a note-taker or scribe. Lawsuits highlight the tension between the legal requirements for providing accommodations and the functional demands or technical standards of healthcare jobs, particu-

larly in clinical rotations for students and entry-level professionals [17]. This ongoing tension underscores the importance of clearly defining and applying technical standards in educational programs.

Technical standards are nonacademic skills and abilities required by educational programs for admission, progression, and graduation [18]. These standards typically include competencies such as motor functioning, sensory perception, observational skills, communication abilities, and behavioral attributes. They are designed to ensure students can meet the physical, emotional, and intellectual demands of their curriculum and perform professional tasks effectively. While technical standards establish clear expectations for students, many programs lack transparency in providing this information to prospective or current students [19]. Without access to technical standards prior to or during the application process students with disabilities face challenges in self-advocating for necessary accommodations. Moreover, these standards can act as barriers to entry into health professions for students with disabilities [11].

Restricting access to healthcare professions through overly rigid technical standards undermines workforce diversity and potential. Rather than creating barriers for capable individuals with disabilities, technical standards should be designed to support the recruitment of highly qualified, diverse applicants [20]. These standards should not only be easy to locate prior to application or admission, but should also use inclusive, supportive language and be regularly updated to foster an environment of inclusiveness [19]. A recent study published in the *Journal of Physical Therapy Education* found that institutions with technical standards updated within the past five years were more likely to admit students with physical disabilities [21]. Furthermore, updated technical standards were significantly associated with a higher likelihood of students with physical disabilities graduating [21].

Inclusive technical standards are important, yet the lack of uniformity in their development and implementation, along with limited evidence from healthcare professions on their effectiveness in fostering workplace competence, is concerning. Furthermore, many accrediting bodies, such as the Accreditation Council for Occupational Therapy Education and the Commission on Accreditation in Physical Therapy Education, do not collect data on students with disabilities. Similarly, professional associations, such as the American Occupational Therapy Association and the American Physical Therapy Association, do not track disability representation within their respective fields. As a result, healthcare professional practice lacks critical insights into the inclusion and representation of individuals with disabilities.

To become a practicing healthcare professional, individuals generally must meet educational, national exam, state licensure, and continuing education requirements to demonstrate the knowledge, skills, and competence needed to deliver safe and effective care throughout their careers. At each stage of this process, clear information about the requirements can

help individuals succeed and allow for reasonable accommodations tailored to the specific demands of the field and their individual needs. A study by Moreland et al. [22] found that most respondents, who were either deaf or hard of hearing, were admitted to health professions programs, accepted into post-graduate training, and went on to full employment. The study also revealed a wide variation in respondents' accommodation needs, satisfaction, utilization, and engagement with disability resource providers [22]. This underscores the importance of recognizing that individuals with similar disabilities may require different approaches, highlighting the need for evolving and individualized solutions.

There is a complex interplay between reasonable accommodations in the classroom, technical standards in academic programs, and workplace demands in health professions. A critical concern for higher education institutions is ensuring that students are adequately prepared to transition into the workplace. While academic accommodations are designed to help students succeed in the classroom, they may not fully address the demands of clinical environments, where specific technical standards and job requirements must be met regardless of prior accommodations. This gap raises questions about how effectively current accommodations and technical standards support students' long-term growth and success in professional settings. The purpose of this case report was to examine perspectives on the rationale behind accommodations and technical standards in health professional programs. It aimed to explore how the interaction between these elements impacts students' academic and clinical success at a Mid-Atlantic university. The report was guided by the following research question: In what ways do accommodations and technical standards help prepare students for academic and clinical success in various health profession graduate programs?

3. Methods

This case report utilized a qualitative, phenomenological reduction approach to understand experiences and perspectives of graduate program representatives regarding the relationship between accommodations and technical standards in health professional programs. The report aimed to understand how these factors influence student success in academic and clinical settings. Phenomenological reduction involves the researchers focusing on the participants' experiences, setting aside personal judgments or biases, allowing the researchers to fully engage with and understand the essence of the phenomenon as it is lived and described by the participants [23]. After obtaining Institutional Review Board approval, participants were recruited through email following a purposive sampling method to ensure relevant insights on the topics. Purposive sampling methods were chosen to recruit participants who have knowledge of their healthcare program's technical standards and are teaching faculty members with experience in

academic accommodations. Eligibility criteria included being a full-time faculty member in a leadership role within the divisions of athletic training, occupational therapy, pharmacy, physical therapy or physician assistant studies. Data collection and analysis involved semi-structured in-

terviews, participant transcript review, and thematic analysis to ensure reliability and validity. Tables 1 and 2 outline the initial interview questions for programs with and without technical standards respectively.

Table 1. Interview Questions for Programs with Technical Standards.

Initial Interview Questions

1. Do you feel that the program's technical standards are beneficial to the student's success? Why or why not?
2. What are your perceptions on the effectiveness of including technical standards in your program?
3. Have you ever experienced a situation where technical standards affect the admissions process?
4. How does your program anticipate technical standards will prepare students for real life work scenarios?
5. How does your program resolve any conflict between the technical standards of your program and the accommodations the students are requesting?
6. Can you tell us about a time when there was a conflict that could not be resolved?
7. Tell us about a time when a conflict was resolved?

Table 2. Interview Questions for Programs without Technical Standards.

Initial Interview Questions

1. Do you feel the absence of technical standards for this program supports students' post-academic success or challenges it? Why?
2. Why does your program not have technical standards?
3. How does your program resolve any conflict between accommodations and future career success?
4. Can you tell us about a time there was a conflict that could not be resolved?
5. Can you tell us about a time when a conflict was resolved?

4. Data Collection

Graduate program representatives at a Mid-Atlantic university were recruited via email using purposive sampling to ensure each participant met the eligibility criteria. The email included information about the report's purpose and an informed consent form outlining the report's details. Participants who responded, met the eligibility criteria, and completed the informed consent form were included in the report. Each participant was then provided with an interview date, time, and Zoom Video Communications link. Prior to the interview, participants were given an electronic copy of their program's technical standards (if applicable) to inform the discussion. Two participants completed interviews lasting 30-40 minutes via Zoom Video Communications, which were audio and video recorded. Participants were reminded of the

voluntary nature of their involvement and participant information was anonymized to protect confidentiality and autonomy. All data was securely stored electronically on password-protected computers.

The interview protocol included both closed and open-ended questions designed to elicit detailed responses on accommodations, technical standards, and workplace preparation. After the interviews were completed and transcribed verbatim, the transcripts were sent to participants for member checking to confirm their accuracy.

5. Data Analysis

After data collection, the researchers analyzed the interview transcripts to identify key themes. Transcripts were coded 'in vivo' to support a ground-up approach for identifying emerging codes and themes with the analysis using

inductive coding and review to ensure reliability and depth in capturing participants' perspectives and experiences. For instance, codes such as 'preparedness' and 'success due to accommodations' were grouped under the theme *Preparation for Clinical Success*. Google documents were utilized to organize significant concepts and ideas expressed by participants, which were then reviewed and consolidated into themes. To enhance rigor and validity, the researchers applied triangulation techniques. A collaborative review of the preliminary coding and thematic analysis further enhanced the report's reliability and credibility.

6. Results

The final sample included two graduate program representatives from pharmacy and occupational therapy. As participants shared their experiences and perspectives, commonalities emerged in their narratives. These similarities were categorized into three themes derived from the data: *Preparation for Clinical Success*, *Assumptions and Uncertainties* and *Preservation of University Standards and Reputation*. Table 3 provides an overview of the codes associated with each theme.

Table 3. Themes and Codes.

Themes	Codes
Preparation for Clinical Success	Preparedness Success due to accommodations Uncertainty
Assumptions and Uncertainties	Communication gap Perceived beliefs on the value of technical standards Assumptions of setting requirements Program procedures
Preservation of University Standards and Reputation	School reputation Transparency and disclosure

6.1. Preparation for Clinical Success

The theme *Preparation for Clinical Success* emerged from the codes: preparedness and success due to accommodations. *Preparedness* reflects the balance between implementing appropriate technical standards that prepare students for clinical skills and ensuring that all students, regardless of disability or functional status, have an equal opportunity to succeed in the classroom. Participant 1 shared: "They get to the fieldwork [hands-on learning experience in the clinic] portion and are unsuccessful sometimes because those technical standards are not checked off, or met in the same way as they are during a clinical experience." Additionally, *preparedness* highlights how certain technical standards may create obstacles to future student success in the clinic. These standards may not fully accommodate students' needs, especially when a disability interferes with essential clinical tasks. For instance, Participant 2 discussed:

If there's a change in their technical standards [student's abilities] while they're enrolled, theoretically, there will be a conversation about whether or not this can be accommodated

and, if not. I mean our technical standards are a graduation requirement, and so, if they would not, if the student's abilities could not be accommodated in a way that let them meet the standard, I think that they would have to then be dismissed from the program or withdraw from the program.

Success due to accommodation demonstrates how academic accommodations contribute to student success in the clinic while meeting program-specific technical standards. Participant 2 shared:

We've got a situation now where a student is looking for potential accommodation, because of difficulty hearing which causes problems when you go to take a blood pressure. There are tools that are available to amplify the noise, so that you can still take a manual blood pressure and therefore the accommodation...does not impact the ability to demonstrate the skill.

6.2. Assumptions and Uncertainties

The theme *Assumptions and Uncertainties* consists of four codes: uncertainty, communication gap, perceived beliefs on the value of technical standards, and assumptions of setting

requirements. *Uncertainty* reflects program representatives' lack of clarity and hesitation regarding the role and application of technical standards. Participant 2 expressed this uncertainty: "Either it [technical standards] works great or it's not really relevant. I don't know how to tell the difference between those two."

Communication gap highlights the lack of communication between university administration and council, program directors, and professors, which contributes to a gap in knowledge about technical standards and their classroom implications. Participant 2 shared: "What I don't know is where in the process, once we get their application materials, we share with them what our [technical] standards are compared to any other school's [technical] standards". Participant 1 noted the limited discussions about technical standards within their program which did not have them at the time of the interview: "Not while I've been here that I'm aware of. To see when we may have discussed technical standards at any time, it looks like 2018 there was a discussion."

Perceived beliefs on the value of technical standards captures program representatives' subjective views on the role of technical standards in health profession programs. Participant 2 shared:

Technical standards are based on the kinds of activities and abilities that a pharmacist has to have in order to carry out their job. That is for us probably somewhat broader than it might be for other healthcare professions. I think that the technical standards have been drawn up in order to be as broadly applicable to students...so that for coming in, they're aware of what limitations are accommodatable, and I suppose, and the limitations that they might have that are not accommodatable.

Participant 1 added, "I think it [technical standards] would add another level to learning and ensuring preparedness for clinical practice."

Assumptions of setting requirements refers to program representatives' beliefs about what clinical settings will demand from students and graduates as they create and implement their program's curriculum in an evolving healthcare landscape. Participant 2 speculated:

Well, if a person were blind... I can't think of a situation in which they would be able to operate in any kind of a pharmacy setting. I can potentially imagine non-pharmacy settings where a pharmacist's knowledge could be beneficial for a job, and if there were readers or data input tools available that would accommodate that job's requirements.

6.3. Preservation of University Standards and Reputation

The theme *Preservation of University Standards and Reputation* consists of three codes: program procedures, school reputation, and transparency/disclosure. *Program procedures* refers to the processes set by the program concerning technical standards. Participant 2 shared:

Because our technical standards are set up in order to help prevent a student from being unable to meet, I guess I'd say non-academic requirements for practicing as a pharmacist and so it helps keep them from going through what I have to acknowledge as an expensive program and then being unable to benefit from that knowledge when they graduate.

School reputation describes how academic accommodations may affect student performance in the clinic and, thus impact a school's reputation. Participant 1 indicated "the fieldwork [clinical experience] educator has not given a passing score on the form and that comes back to the university."

Lastly, *transparency and disclosure* identifies the transparency and disclosure of program specific technical standards to students during the application process and/or as a student in the program. Participant 1 indicated "We have loose guidelines, I guess I'll say that" and participant 2 indicated that potential students "would learn about that [technical standards] as part of the application process" but "I've not been involved deeply enough in admissions to know whether that has come up over the past 25 years during that stage of the process."

7. Discussion

The themes that emerged from the data highlight the complexity of academic accommodations, technical standards and preparation of students for workplace demands in health professions settings. The first theme *Preparation for Clinical Success* highlights participants' views on how accommodations and technical standards prepare students for academic and clinical success within health professions. Health programs are responsible for ensuring students develop the competencies needed for their future careers. Participants believed students are most prepared when they meet designated technical standards. A student with a hearing impairment may struggle to take manual blood pressure readings without an adapted stethoscope, preventing them from meeting clinical competencies. When reasonable accommodations are implemented effectively, students can meet technical standards and succeed in both academic and clinical settings. The use of an adapted stethoscope was identified as a successful accommodation for a hearing-impaired student, enabling them to demonstrate required competencies. The findings align with literature suggesting that technological advancements and accommodations can support students in meeting technical standards, fostering success in graduate health programs and preparing students for the transition from the classroom to the clinic [11, 18, 24]. Moreover, as noted by Moreland et al., [22] healthcare professional programs can improve the educational pathway toward a diverse workforce by offering high-quality, tailored accommodations that recruit, support, and help students with disabilities graduate. In contrast, Sharp [21] identified that a fixed mindset, characterized by faculty focusing on limitations, rigid interpretations on

regulations and a tendency to default to familiar approaches created barriers to graduation for students with disabilities.

The second theme of *Assumptions and Uncertainties* encompasses program representatives' lack of knowledge and hesitancy regarding the creation and distribution of technical standards as well as the disconnect between administration and faculty concerning the updating and incorporation of inclusion principles within these standards. In our report, when participants were asked about the purpose, establishment, and usage of technical standards, they displayed uncertainty, often attributing decisions to those made prior to their involvement in the programs. This lack of clarity, which could stem from either personal knowledge gaps or systemic communication failures, is crucial because it directly impacts how technical standards are communicated and utilized, potentially affecting student outcomes [19]. Despite this uncertainty, previous research has highlighted the importance of transparent communication and regular updates regarding technical standards. Kezar et al. [18] recommended regular meetings among school administrators and faculty to stay current with technological advancements and the evolving demands of the profession. Transparency, including public forums and open discussions, could help mitigate the uncertainties identified in our report and those of others, ensuring that all stakeholders, including students, administrators, and faculty, are well-informed about technical standards and their implications.

Assumptions also arose regarding students' post-graduation roles, as health profession programs cannot predict with certainty the clinical settings in which students will work. According to Sharp [21], faculty who demonstrated adaptability in their perspectives and approaches toward students not only supported educational completion, but also exhibited the flexibility needed to meet the unique needs of students facing an uncertain future. This uncertainty, as similarly noted by Kezar et al., [18], is amplified by the variation in clinical workload requirements across settings, complicating the application of standardized technical requirements. It is unclear whether the technical standards set by health professions programs will fully align with the demands of all practice areas. For example, students receiving extended time accommodations in the classroom may seek slower-paced environments, such as home health care settings with more time for documentation and breaks between clients, as opposed to faster-paced hospital settings. Moreover, students may enter non-traditional or emerging practice environments where current technical standards may not be relevant. Since clinical sites differ significantly, the responsibilities and requirements can vary greatly, further highlighting the limitations of standardized technical standards.

The third theme, *Preservation of University Standards and Reputation*, encompasses program procedures, school reputation, and the disclosure and transparency of technical standards to prospective and current students. Participants voiced concerns that students who receive classroom ac-

commodations might face challenges in clinical settings, potentially reflecting negatively on the program's reputation. While this perspective is not directly substantiated in existing literature, related research highlights apprehensions among faculty and administrators about the clinical performance of students with disabilities [24, 25]. These concerns often stem from misconceptions about students' ability to transition effectively from classroom accommodations to clinical requirements. Since programs are not permitted to disclose student accommodations to clinical sites, the responsibility falls on the student to request necessary accommodations, much like they would as an employee. This dynamic creates a delicate balance. Programs must support students without breaching confidentiality, while remaining unaware of specific interactions or accommodations (or lack thereof) between the student and the clinical site. This limitation underscores the importance of clear guidance and preparation for students, empowering them to navigate these responsibilities independently while maintaining compliance with legal and ethical obligations surrounding accommodation processes [10, 26]. In this context, the impact of effective accommodations becomes even more apparent. Moreland et al. [22] found that satisfaction with accommodations was associated with obtaining employment shortly after graduation. This suggests that students provided with appropriate accommodations not only achieve greater success and confidence in their abilities, but are also better equipped to engage in discussions about accommodations during job searches. Furthermore, effective accommodations may enhance the overall quality of education and training, resulting in better preparedness for successful workplace entry [22].

Additionally, this case report revealed insufficient disclosure of technical standards during both the admission and enrollment phases, similar to findings from Stauffer et al. [19] who noted that the lack of availability and transparency of technical standards sends implicit messages about the acceptability of including students with disabilities. This gap creates barriers for students, particularly those with disabilities, in understanding and requesting accommodations. The limited transparency of technical standards may lead to misaligned expectations between students and programs, increasing the likelihood of unsuccessful clinical outcomes. This lack of disclosure can also hinder students' awareness of program requirements, limiting their ability to self-advocate effectively and potentially impacting their academic and professional success. Addressing these issues through greater transparency, clear communication, and robust support systems could enhance inclusivity while preserving program reputation [26, 27].

8. Limitations & Future Research

This case report had several limitations. The data reflected the perspectives and experiences of two health professions faculty members from a single university,

limiting the generalizability of the findings. Future research should include participants from a broader range of programs and higher education institutions to provide a more comprehensive understanding of the issues. Additionally, this case report focused solely on faculty perspectives, excluding input from other key stakeholders. Incorporating the viewpoints of students, clinical site instructors, and employers would offer deeper insights into how health profession programs prepare students to meet the demands of the workplace.

9. Conclusion

The findings of this case report highlight the complex relationship between academic accommodations, technical standards, and workplace demands. While accommodations and preparation support student success, uncertainties and assumptions remain regarding the extent to which technical standards address the full spectrum of potential workplace settings. Although technical standards help uphold university standards and reputation, limited transparency and accessibility can pose challenges for students with disabilities, impeding their ability to self-advocate for necessary accommodations. This raises critical questions about whether the current structure of technical standards unintentionally creates barriers, restricting access to health professions programs for students with disabilities.

Abbreviations

IDEA	Individuals with Disabilities Education Act
EAHCA	Education for All Handicapped Children Act
IEP	Individualized Education Program
ADA	Americans with Disabilities Act
ADAAA	Americans with Disabilities Act Amendments Act

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Data Availability Statement

The data is available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest.

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Biography

Callie Victor is an Associate Professor in the Division of Occupational Therapy at Shenandoah University. She earned her PhD in Health-Related Sciences from Virginia Commonwealth University in 2016 and has been a registered and licensed occupational therapist since 2006. Dr. Victor has been conducting social sciences research since 2016, collaborating with graduate students in the MSOT and OTD programs at Shenandoah University.

Cathy Felmlee Shanholtz is an experienced academic and practitioner in the field of occupational therapy, with over 20 years of experience in occupational therapy practice; specifically working with individuals with intellectual and developmental disabilities and the pediatric population. Currently serving as the Inaugural Program Director of the Occupational Therapy Program at McDaniel College, Cathy Felmlee-Shanholtz brings a wealth of experience in both teaching and program development. Previously, holding leadership roles at Shenandoah University, where she advanced multiple hybrid and online occupational therapy programs. Passionate about fostering interdisciplinary collaboration, Cathy is committed to integrating evidence-based practices and innovative learning models into the education and training of future occupational therapy professionals.

Minelva Holove-Murillo has a background in both the academic and clinical domains. She is a dedicated occupational therapist with experience in pediatric care and inpatient adult rehabilitation. Holove-Murillo also serves as an adjunct professor at Shenandoah University, where she specializes in exploring the intersection of culture and occupational performance. Her pediatric practice is distinguished by a deep commitment to infant and caregiver mental health, complemented by a strong focus on advocacy.

Laura Guadalupe Davila, OTD, OTR/L, earned her clinical doctorate degree in occupational therapy from Shenandoah University in 2023. Laura has experience in adult inpatient rehabilitation and pediatric outpatient services, in addition to experience in program development for life skills for refugee/displaced minors.

Sarah Hosseinian, OTD, OTR/L, earned her clinical doctorate in occupational therapy from Shenandoah University in 2023. During her time completing her doctorate, Sarah completed fieldwork rotations focusing on treatment of patients in both inpatient and outpatient settings; in addition to developing and researching a program focusing on reducing burnout and compassion fatigue in informal caregivers.

Mia Noelle Koch, OTD, MS is a PhD student at the University of Texas – Dallas. She earned her clinical doctorate in occupational therapy from Shenandoah University in 2023 and her Master of Science in psychology from the University of Texas – Dallas (UTD). Mia works as a teaching and research assistant in the Reasoning Lab at UTD. Mia has completed numerous clinical and academic internships in mental health, pediatrics, and higher education.

Research Field

Callie Victor: Quality of Life, Low Vision, Visual Impairments, Community Living Older Adults, Team Teaching

Cathy Felmlee Shanholtz: Interprofessional Education (IEP), Intellectual and Developmental Disabilities, Neurodevelopment and Pediatric Therapy, Team Teaching

Minelva Holove-Murillo: Culture & Cultural Humility, Higher Education Program Design, Maternal Depression, Early Intervention

Laura Guadalupe Davila: Accessibility, Accommodations, Refugee Minors, Life Skills, Displaced Adolescents

Sarah Hosseinian: Accessibility, Accommodations, Caregiver Burnout, Compassion Fatigue, Informal Caregivers

Mia Noelle Koch: Decision Making, Cognitive Impairment, Cognition, Cognitive Biases, Brain Stimulation, Executive Function, Pupillometry