

SKILLS-BASED EDUCATION

COMMENTARY

Addressing the Challenges of Providing Accommodations for Pharmacy Students With Disabilities Across Learning Environments

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In accordance with the Americans with Disabilities Act of 1990 and the Accreditation Council for Pharmacy Education Standards 2016, schools and colleges are required to provide reasonable disability-related accommodations for eligible students enrolled in a Doctor of Pharmacy (PharmD) program. Strategies for providing reasonable and effective accommodations in didactic classrooms have been well defined. In contrast, PharmD programs often grapple with supporting learners requiring disability-related accommodations during skills-based laboratory and experiential learning performance assessments. A process that supports individualized accommodation planning, spans the breadth of the curriculum, aligns with course-level goals and learning objectives, and supports achievement of the 2013 Center for the Advancement of Pharmacy Education Educational Outcomes at the PharmD program level is essential to a student's successful academic progression. This commentary discusses challenges that arise when developing accommodation plans in patient-care skills laboratories and offers methods for bridging skills-based accommodation needs to experiential settings, while managing accommodations in an ever-evolving practice landscape.

Keywords: accommodations, skills-based, laboratory, experiential, disability

INTRODUCTION

The Americans with Disabilities Act (ADA) is a civil rights law passed in 1990 that protects individuals with disabilities from discrimination within public life. The ADA aims to ensure that those with disabilities have equal rights and opportunities with regard to jobs, transportation, schools, and other public and private spaces. In 2009, the ADA Amendments Act redefined disability to clarify and broaden its definition as “a physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having an impairment.”¹

Within educational settings, accommodations reduce or remove barriers so that all qualified students have the opportunity to engage in learning and complete training requirements. Individuals may request disability-related accommodations needed to gain equal access, rights, and/or privileges.

Educational institutions are asked to address two overarching questions when accommodations are requested: “Does an individual have a disability as defined by the ADA?” and if so, “Are the accommodations requested reasonable?”² A reasonable accommodation is a modification or adjustment to the way things are normally done that does not fundamentally alter a program's objectives, standards, or integrity, or result in an undue burden.³ In the context of health professions education, technical standards provide a benchmark for curriculum-based skills and abilities that must be preserved.^{4,5} Therefore, aspects specific to individual health professions, such as the Doctor of Pharmacy (PharmD) program, must be considered when designing institutional accommodation processes and individualized accommodation plans.⁶⁻⁹

Vos and colleagues provided guidance on application of reasonable accommodations specific to advanced pharmacy practice experiences (APPEs). They believe successful accommodations are predicated on providing preceptors and experiential faculty adequate time, resources, and knowledge.⁶ These necessities extend to simulated environments where students develop skills for experiential rotations, specifically the patient care skills laboratory. In this

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commentary, we suggest that when accommodations are requested within pharmacy education, stakeholders from skills laboratory and experiential learning environments should be engaged early to support reasonable and effective accommodation planning. This commentary provides guidance on how collaborations can ensure that adequate time, resources, and knowledge are shared across learning environments as students move from skills laboratory to experiential learning, and common challenges encountered along the way.

In this manuscript, “bridge” is used as a metaphor for transitioning accommodation plans across the PharmD curriculum. A recent article proposed key actions that institutions should consider to ensure students with learning disabilities are treated fairly and provided reasonable chances for success.⁷ We believe appropriately threading accommodation plans throughout a curriculum is an action missing from that list. Too often accommodation plans are created in silos for application within specific areas of the curriculum instead of integrating curricular areas into an overarching plan as it is developed. Robust accommodation planning occurs when purposeful collaboration extending across the entire curriculum takes place, and that must include skills laboratory and experiential stakeholders. By aligning accommodation plans across both settings, programs establish realistic expectations for learners, faculty, and preceptors, and provide transparency around those expectations as students transition from simulated to real-world environments during introductory pharmacy practice experiences (IPPEs), APPEs, and after graduation.

DISCUSSION

Institutions are required to have a process by which students with disabilities can request accommodations.¹ Based on the authors’ collective experiences, this process applies well to the didactic learning environment, but does not always consider the challenges presented by the skills laboratory and practice experiences, and the different accommodations needed within these simulated and real-world environments. As such, we discuss challenges that require addressing and considerations that can be used by skills laboratory and experiential directors to build a bridge between the two learning environments within accommodation processes.

Challenge 1. Establishing a Supportive Culture for Accommodations

Although most faculty are supportive of students with disabilities as participants in educational settings, some view students with disabilities less favorably.¹⁰ This may be due to their lack of knowledge or training related to

disabilities and making reasonable accommodations to effectively manage a student’s ability to achieve course outcomes.¹¹ Schools should educate faculty and staff regarding the role and value of accommodation planning in a student’s development and overall education and address associated misperceptions and stigmas. This can occur through both new faculty orientation programming as well as on-going faculty development. Providing clear expectations and processes for handling accommodations supports a culture of equity based on student learning needs.

A variety of resources are available to identify and meet accommodation-based requirements, develop impactful plans, and create a culture that supports student learning through accommodations across the curriculum. Organizations such as the Job Accommodation Network (askjan.org), Association on Higher Education And Disability (ahead.org), US Department of Justice Civil Rights Division (ada.gov), US Equal Employment Opportunity Commission (eoc.gov), and US Department of Education (ed.gov) offer valuable tools, guidance, and assistance for accommodation planning and development.

Challenge 2. Identifying Key Stakeholders Early in the Process

Effective accommodation planning is contingent on having necessary stakeholders at the table.

In the early stages of planning, it may be difficult to identify key individuals, especially if the documented request for accommodation lacks sufficient detail. For example, an accommodation request may generically state “double (2x) the standard time for all written or Scantron exams and quizzes, including take-home exams.” Such a request flags instructors of courses with written or Scantron exams and quizzes to be engaged in the accommodation process; however, instructors of courses with primarily performance-based assessments, such as skills laboratory and experiential courses, should also be immediately identified as key stakeholders. Most if not all schools and colleges of pharmacy immediately engage students within simulated skills laboratory environments in preparation for practice experiences. As such, accommodations provided in the skills laboratory could be carried over into both IPPEs and APPEs. Schools and colleges should have an accommodation process that considers this relationship early on in the planning stages.

Programs should also educate students on the process and importance of engaging with key stakeholders early and often to ensure that sufficient time and resources are dedicated to successful accommodation planning. If a student is given the opportunity from the start to engage with the majority of stakeholders and explain the context of a request,

underlying accommodation needs may be identified earlier. For example, if a student requiring additional examination time shares that the requested accommodation is related to impaired visual acuity, stakeholders in communication with the student will realize that courses beyond the traditional didactic setting will be impacted. This additional information may also alert stakeholders to other accommodations that will be needed for activities and assessments commonly used within the skills laboratory and experiential education learning environments, such as reading a sphygmomanometer or navigating an electronic health record (EHR). The same type of accommodations needed for reading a sphygmomanometer or navigating an EHR would extend from the skills laboratory to the experiential learning environment. As such, conversations with experiential directors should be initiated simultaneously and in concordance with the skills laboratory coordinators. To achieve this, faculty from these two environments should be proactive in reaching out to each other and school- and university-level leadership to offer guidance on reasonable accommodations throughout the process. This allows coordinators ample time to ensure that skills laboratory accommodations are reflective of practice. Additionally, directors will have time to identify those sites and preceptors best able to make reasonable accommodations for the student. Finally, advanced planning allows for purchasing any special equipment that may be needed, which could later be shared across learning environments as the student progresses through the PharmD program.

Challenge 3. Aligning Learning Outcomes and Performance Expectations Across Learning Environments

Accommodations should be reflective of actual practice in order to facilitate students' transitions between settings. Establishing realistic expectations provides transparency as to how accommodations transcend the skills laboratory and experiential learning environments. Table 1 illustrates a few examples of how accommodations can bridge across learning environments. If an accommodation is identified only in the didactic curriculum, a student should be empowered to start discussions about potential accommodation needs in future learning environments.

The process should create a culture with an open line of communication among students, preceptors, coordinators, directors, and representatives from disabilities resources. Reasonable assurance should be made to confirm that curricular goals and objectives are met and not altered. Skills laboratory coordinators and experiential directors should be proactive in sharing de-identified methods of providing reasonable accommodations in their respective learning

environments. Allowing others to learn from these experiences and incorporate relevant noteworthy practices into their plans supports student success and enhances collaboration among stakeholders. Prioritizing accommodation planning within multi-institutional practice communities facilitates these efforts.

Protection of student privacy throughout all communications is critical to maintain confidentiality and adhere to the Family Educational Rights and Privacy Act. Information related to accommodations should only be shared by the student or with their permission, and only with individuals directly involved with developing and making arrangements for student accommodations.

Limited resources and inadequate facilities or space may impede effective accommodation plan development within higher education. Restrictive budgets and insufficient support place further strain on adequately addressing students' accommodation needs. Performing individualized and programmatic needs assessments throughout the accommodation development and implementation process can help identify and address potential issues before they significantly impact a student's learning experience. Considering our example of a student requiring visual acuity accommodations, if specialized equipment is used within the classroom, the same or similar equipment should be available in the experiential setting. This requires advanced planning, identification of essential skills, and potentially, financial considerations. Notably, accommodations must be reasonable. Purchasing expensive equipment to complete a skill that can be successfully achieved through a vocalized description may not be considered reasonable.

Challenge 4. Monitoring and Adapting Individual Accommodation Plans

Developing and implementing well thought out accommodation plans for students is just the first step in an iterative process. Accommodation plans bridging the skills laboratory and experiential environments are longitudinal and should include mechanisms for monitoring the plan's feasibility, effectiveness, and continued appropriateness, while making adjustments as needed. A student, coordinator, director, or preceptor should have the ability to request modifications if a plan is not working. All relevant parties should be engaged in developing the plan's next iteration. This is particularly important when individuals involved in initial plan development are not familiar with skills laboratory or experiential learning environments and associated needs outside of the didactic realm.

Inconsistencies and unclear guidance in developing individualized education programs reflective of intended educational outcomes may also cause problems,

Table 1. Bridging Accommodations That Can Be Created Across Learning Environments for Pharmacy Students With Disabilities

Accommodation(s) Provided per Varied Learning Environments			
Learning Challenge and Accommodation Request	Didactic	Patient Care Skills Laboratory	Practice Experience
Challenge: difficulty concentrating Accommodation request: double the standard time requested for all written or Scantron exams and quizzes, including take-home exams	Request applied as indicated	Double the standard time for evaluations that involve navigating the simulated EHR and documenting Extra time not needed for evaluations that involve direct patient care interactions (eg, medication history or counseling) as determined in consultation with the student	Additional time for navigating site's EHR and documenting Extra time not needed for direct patient care encounters (eg, medication history or counseling) as determined in consultation with the student
Challenge: impaired visual acuity Accommodation request: double the standard time requested for all written or Scantron exams and quizzes, including take-home exams	Request applied as indicated	Assistive devices that provide magnification of screens and instruments allowed for lab activities and evaluation Additional time not needed for group lab activities as determined in consultation with the student but allowed for individual evaluations with aspects impacted by visual acuity	Assistive devices that provide magnification of screens and instruments approved for use at the site Additional time allowed for aspects of direct patient care impacted by visual acuity
Challenge: physical disability that impairs standing for long periods Accommodation request: breacktime to rest to be taken as needed	No accommodation requested/granted	Short breaks allowed during or for entirety of labs extending beyond 60 minutes	Collapsible stool allowed at the site Brief breaks allowed when standing for more than 60 minutes, while remaining engaged in workflow

Abbreviations: EHR=electronic health record.

Note: The table is intended to provide general examples of how accommodations may be bridged across learning environments, but specific accommodations should be tailored to individual student needs and modifications should be made as needed.

necessitating continued monitoring. Attention should be placed on the students' needs rather than disabilities.¹² If faculty and students are not fully engaged in the accommodation development process, all participants' needs may not be met. Once in place, the plan should include a mechanism for monitoring continued appropriateness and offer guidance on the frequency of such monitoring. Modifying an institution's accommodation planning process to include longitudinal check-in points, provide transparent paths for requesting accommodation adjustments, and support shared decision making in plan adaptation can optimize the learning experience and ultimate practice readiness of those requiring disability-related accommodations.

Challenge 5. Ensuring the Bridge Between Learning Environments Remains Functional and Intact

Monitoring the functionality, integrity, and effectiveness of the planning process, relative to the skills laboratory and experiential learning environments, is integral to maintaining the bridge. An institution's process should allow for reflection on the bridge over time. In other words, are all necessary stakeholders present at the appropriate time points? Should additional perspectives be included? Are accommodations within each environment connected, transparent, and effective? Institutions should maintain open lines of communication across the bridge and routinely revisit these questions to facilitate bridge maintenance. Scheduling regular check-ins with stakeholders to reflect, gather feedback, and identify opportunities for improvement can enhance all stakeholders' experiences.

The overall process involves time and effort. Recognizing that accommodation planning, implementation, and monitoring are the responsibilities of stakeholders in both the skills laboratory and experiential environments can help establish expectations. This may involve orienting new coordinators, directors, and preceptors to their roles during the accommodation planning process, and providing them with protected time and/or establishing mechanisms to track and recognize invested time and effort.

CONCLUSION

Institutions typically have processes in place for accommodation planning for pharmacy students with

disabilities. However, those processes may not align across all curricular learning environments. Creating accommodation plans in silos for related but separate environments, such as a skills laboratory and experiential setting, can result in duplicative efforts, inconsistent expectations, and frustration for learners and instructors. Instead, institutions should ensure accommodation planning builds and maintains bridges across the curriculum, especially between skills laboratory and experiential learning environments.

REFERENCES

1. ADA Amendments Act of 2008, PL 110-325 (S 3406), September 25, 2008. <https://www.eeoc.gov/statutes/ada-amendments-act-2008>. Accessed April 1, 2021.
2. Smith WT, Allen WL. Implications of the 2008 amendments to the Americans with Disabilities Act for medical education. *Acad Med.* 2011;86:768-772.
3. Enforcement Guidance on Reasonable Accommodation and Undue Hardship under the ADA, October 17, 2002. <https://www.eeoc.gov/laws/guidance/enforcement-guidance-reasonable-accommodation-and-undue-hardship-under-ada>. Accessed April 1, 2021.
4. Berry TM, Chichester CO, Lundquist LM, et al. Professional technical standards in colleges and schools of pharmacy. *Am J Pharm Educ.* 2011;75(3):Article 50.
5. Bagenstos SR. Technical standards and lawsuits involving accommodations for health professions students. *AMA J Ethics.* 2016;18:1010-16.
6. Vos S, Kooyman C, Feudo D, et al. When experiential education intersects with learning disabilities. *Am J Pharm Educ.* 2019; 83(8):Article 7468.
7. Afeli SA. Academic accommodation strategies for pharmacy students with learning disabilities: what else can be done? *Curr Pharm Teach Learn.* 2019;11:751-756.
8. Tee SR, Owens K, Plowright S et al. Being reasonable: supporting disabled nursing students in practice. *Nurse Educ Pract.* 2010;10:216-221.
9. Meeks LM, Jain NR. Accessibility, Inclusion, and Action in Medical Education: Lived Experiences of Learners and Physicians with Disabilities. Washington, DC: Association of American Medical Colleges; 2018.
10. Gitlow L. Occupational therapy faculty attitudes toward the inclusion of students with disabilities in their educational programs. *OTJR.* 2001;21:115-131.
11. Kruse BG, Elacqua TC, Rapaport RJ. Classroom accommodations for students with disabilities: a needs assessment. *J Coll Stud Dev.* 1998;39:296-298.
12. Kurth N, Mellard D. Student perceptions of the accommodation process in postsecondary education. *J Postsecond Educ Disabil.* 2006; 19:71-84.