

# Culturally Responsive Pedagogy in Physical Therapy Education

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## Abstract

The push for holistic admissions practices in physical therapy education has evoked concerns that learners who are culturally and linguistically diverse might be less qualified than the predominant demographic traditionally admitted into programs. The implications are that culturally and linguistically diverse learners struggle academically and experience challenges passing the National Physical Therapy Examination. However, as the academic preparedness of learners is discussed, rarely does the conversation include the capabilities of faculty to teach these learners. As cohorts continue to include learners from a greater variety of backgrounds and identities, the largely homogenous professorate, with more than 80% identifying as White, might need training in culturally responsive pedagogy to best serve learners from all backgrounds and identities. Educators often use a “one-size-fits-all” approach in which learners are expected to use the same resources and pace for assignments, readings, and assessments, regardless of their learning strengths or academic preparation. That approach fails to empower educators to design curricula and instruction to position all learners to excel in the classroom. This Perspective explores strategies to support all learners through three dimensions of culturally responsive pedagogy: institutional, personal, and instructional. To truly transform society, we must first transform physical therapy education. Culturally responsive pedagogy advances and supports all student achievement by recognizing, fostering, and using their strengths in the learning environment.

**Keywords:** Culturally Awareness, DEI, Diversity, Pedagogy, Teaching

## Introduction

The lack of representation of the general population in physical therapy education and practice has been unresolved for decades.<sup>1,2</sup> Issues reported by the Institute of Medicine<sup>2</sup> concerning racial and ethnic health disparities in health care are related to deficiencies in provider cultural responsiveness and health care workforce diversity. Members of the physical therapy community have examined contributing factors to limited population representation in the field. In 2016, the American Council of Academic Physical Therapy (ACAPT) Diversity Task Force<sup>3</sup> provided nine recommendations to diversify the profession to meet societal health care needs (see the Table). The ACAPT Diversity Task Force recommended promoting holistic admissions, and since the report, more institutions have adopted these practices. Another desired outcome of holistic admissions processes is to create inclusive and supportive teaching and learning experiences that more homogenous environments may not offer.<sup>4</sup> The Doctor of Physical Therapy (DPT) Program at the College of Saint Mary prioritizes educating all learners within an environment that upholds principles of justice, equity, diversity, and inclusion. This approach aims to equip graduates to collaborate effectively with historically marginalized and medically underserved populations, understanding their cultural needs, beliefs, and unique circumstances to advance health equity.

As more programs adopt holistic admissions practices, some physical therapy faculty have expressed concerns regarding attrition and national licensure board pass rates among culturally and linguistically diverse learners.<sup>5-7</sup> Utzman et al<sup>8</sup> reported that learners older than age 26, from diverse racial or ethnic groups, with undergraduate grade point averages of 3.15 or lower, and having verbal GRE score of 400 or less and quantitative GRE score of 530 or less were associated with increased chances of experiencing academic difficulty. Some physical therapy faculty have identified the need to diversify their cohorts to increase diversity in the profession but have also expressed concerns about having limited resources to support learners with historically marginalized and minoritized identities who may require additional academic support. One way educational institutions can decrease shortages in health care providers, especially those from historically marginalized and minoritized groups, is by reducing student attrition rates.<sup>9</sup> Strategies used to reduce attrition rates among learners with historically marginalized and minoritized identities include prematriculation preparation courses, access to services (counseling, academic, and career), a greater number of full-time faculty with historically marginalized identities, early intervention systems, sensitivity training of non-minority faculty, flexible retention policies, competency-based testing, mentorship, and time management and study skills training.<sup>10</sup>

While the literature often suggests strategies to prepare learners with historically marginalized and minoritized identities for success in academic settings, there is a notable gap in discussing the qualifications of faculty in teaching and learning. Transitioning from roles as physical therapists or physical therapist assistants to academic positions can pose significant challenges in teaching, especially if educators lack basic pedagogical training and awareness of culturally responsiveness.<sup>11,12</sup> It is essential to acknowledge that while individuals may be formally educated to provide physical therapy services, educating future providers requires a distinct

skill set.<sup>13</sup> To optimize this skill set, faculty must foster an environment that embraces culturally responsive pedagogy. The same gaps that existed when faculty were learners are likely to persist when they begin teaching. This raises a critical question: can faculty effectively address the needs of historically marginalized and minoritized learners or those who have experienced educational disparities if they lack pedagogical training and cultural responsiveness?

In addition to deficiencies in pedagogical preparedness, according to Commission on Accreditation in Physical Therapy Education (CAPTE) 2023 aggregate data,<sup>14</sup> 81% of full-time faculty identify as White. Thus, the combined effects of faculty being inadequately prepared and teaching on teams devoid of diversity may produce challenges for culturally and linguistically diverse learners. Naidoo et al<sup>7</sup> reported that learners with historically marginalized racial and ethnic identities encountered barriers to their success, and themes included language and discrimination. Students also reported racist remarks, racial microaggressions, and stereotyping in their educational environments.<sup>7</sup> In addition, professors typically organize curricula and teach with a “one-size-fits-all” approach, meaning every learner is expected to read the same material and complete the same assignments and assessments at the same pace regardless of their learning strengths or academic preparation.<sup>1</sup> Unfortunately, the “one-size-fits-all” approach favors students without substantial barriers to learning (ie, discrimination, inequitable grading practices, separate and unequal education system, attending insufficiently funded schools, learning differences, etc.). This approach fails to empower educators to design curricula and instruction to position all learners to excel in the classroom.

Educators can support student achievement by identifying and cultivating their strengths within the learning environment. This paper will define culturally responsive pedagogy and its benefits and discuss how one institution's DPT program designed its educational environment to support all learners using the three dimensions of culturally responsive pedagogy.

## Culturally Responsive Pedagogy Defined

Geneva Gay<sup>15(p1)</sup> stated, “You can't teach what and who you don't know.” One of the most prolific authors on the topic of culturally responsive pedagogy, Gay defines culturally responsive pedagogy as teaching “to and through students' personal and cultural strengths, their intellectual capabilities, and their prior accomplishments.”<sup>16(p26)</sup> She described “using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively.”<sup>15(p106)</sup> Delgado-Gaitan et al<sup>17</sup> describe culture as a dynamic system of social values, cognitive codes, behavioral norms, worldviews, and beliefs that give order and meaning to a person's experiences. Gay<sup>15</sup> states that everyone has a culture that strongly influences one's thoughts, ideas, communication style, and behaviors, thus affecting how we teach and learn.

The most effective teaching occurs when it includes ecological factors such as prior experiences, community settings, cultural backgrounds, and ethnic identities of everyone in the learning environment.<sup>15</sup> The authors want to highlight that culturally responsive pedagogy is not a new concept in physical therapy education. The physical therapy professoriate has been responsive, but primarily to the cultural needs

**Table.** Nine Recommendations From the 2016 ACAPT Diversity Task Force<sup>a,3</sup>

#	ACAPT 2016 Diversity Task Force Recommendations
1	Promote physical therapy as a viable career option for underrepresented minority (URM) students.
2	Develop resources to help middle school, high school, community college, and four-year college advisors mentor pre-DPT students.
3	Develop a new task force to create a pre-DPT admissions structure to simplify and standardize prerequisites across programs and revise the course prerequisites policy to state that programs should not exceed the standardized set.
4	Provide programming and resources to help promote the use of holistic admissions strategies at physical therapist education programs.
5	Advocate for greater financial assistance for URM physical therapist students.
6	Recommend PTCAS explore the feasibility of automatically identifying applicants from medically underserved areas (MUA) and applicants who may be from underrepresented areas or educationally disadvantaged backgrounds using the applicants' permanent addresses and the Health Resources and Services Administration MUA list or other sanctioned documents that indicate geographic or educational disadvantages.
7	Collaborate with APTA and Student Assembly to develop [reinvent] a mentoring network to match URM prospective students to current URM DPT students and current URM DPT students with new URM professionals.
8	Promote the development of faculty and clinical residencies for URM graduates at Historically Black Colleges and Universities and Hispanic-Serving Institutions.
9	Prioritize a research agenda to further understand factors and provide evidence to support URM students choice of a physical therapist career.

<sup>a</sup>ACAPT = American Council of Academic Physical Therapy; APTA = American Physical Therapy Association; DPT = Doctor of Physical Therapy; PTCAS = Physical Therapist Centralized Application Service.

of the dominant Eurocentric group. Boykin<sup>18</sup> states there has always been an inescapable cultural fabric of schooling in the United States that is predominantly European and middle-class, deeply rooted in structures, ethos, programs, and etiquette that is considered the “right way” to do things. However, as the population demographics shift and learners from a greater range of identities and backgrounds enter physical therapy programs, faculty must have the ability to co-create learning environments that center the cultural knowledge, prior experiences, frames of reference, and performance styles of racial, ethnic, and linguistically diverse students to make learning more relevant and effective for them.<sup>15</sup> Gay<sup>15</sup> reports that culturally responsive teaching is the behavioral expression of knowledge, beliefs, and values that acknowledge the importance of racial and cultural diversity in learning. Thus, as it relates to holistic admissions, diversifying the education environment is the first step but not the end goal.

Teachers carry into the classroom their personal cultural background. They perceive students, all of who are cultural agents, with inevitable prejudice and preconception. Students likewise come to school with personal cultural backgrounds that influence their perceptions of teachers, other students, and the school itself. Together, students and teachers construct, mostly without being conscious of doing it, an environment of meanings enacted in individual and group behaviors, of conflict and accommodation, rejection and acceptance, alienation and withdrawal.<sup>19</sup>(pxii).

Teel and Obidah<sup>20</sup> recommend that educators:

- see cultural differences as assets;
- create caring and inclusive learning communities where culturally different people and heritages are valued;
- use cultural knowledge of ethnically diverse cultures, families, and communities to guide curriculum; development, classroom climates, instructional strategies, and relationship building with learners
- challenge racial and cultural stereotypes, prejudice, racism, and other forms of oppression;
- accept cultural responsiveness as essential to educational effectiveness for learners from all ethnic groups.

### Using Power to Create a More Culturally Responsive Classroom

Fritzgerald<sup>21</sup> states that culturally responsive classrooms are flexible and empowering to students because the distribution of power traditionally held by teachers is shared with learners. In culturally responsive educational environments, learners are viewed with an asset based rather than a deficit-based perspective. When teachers embrace the idea that they, too, are learners in the classroom environment sharing and receiving knowledge, they can honor, welcome, and see students' brilliance.<sup>21</sup>

The dynamics of power play an important role in cultural responsiveness. In addition to their previous suggestions, Teel and Obidah<sup>20</sup> suggest mediating power imbalances in the classroom based on race, culture, ethnicity, economics, and class. To create an inclusive environment, Fritzgerald<sup>21</sup> proposed a code of honor to restore respect to learners in the classroom, which includes (1) acknowledging the existence of the power structure; (2) acknowledging purposeful actions of abolishing the limitations of the power structure; (3) reflect on the honor code by empowering members in the learning community daily in supports and structures; (4) invite members of the learning community into positions of authority, power, and decision-making; and (5) create opportunities for members of the learning community to make decisions that govern their best outcomes. Fritzgerald<sup>21</sup> states that enacting these five honor codes can shift the status quo, making learning environments places where students can exercise their power and eliminate learned helplessness.

Lisa Delpit,<sup>22</sup> in the Harvard Educational Review, proposed five aspects of power that both educators and students should be aware of: (1) issues of power are enacted in the classroom; (2) there are codes and rules for participating in power, referred to as the culture of power; (3) those in power create the rules of the culture of power; (4) those without power can access power if they are told the rules of that culture; and (5) those with power are less aware or least willing to acknowledge they have power and those with less power are most often aware of its existence.

Educators who share power demystify success for all students and elevate them to the status of learner and leader.<sup>21</sup>

In learning communities where honor is present, the faculty communicates to students the following<sup>21</sup>:

- Students are more important than the system they serve.
- Students are more important than faculty's personal preferences.
- Students are more important than the way the curriculum is packaged.
- Faculty are willing to learn about students to help them reach their goals.
- Students are important, and faculty will honor students with instruction that holds them accountable and empowers them to take ownership of their learning.

Empowerment translates into academic competence and confidence. Students must believe they can succeed in learning and be willing to pursue success until they accomplish mastery.<sup>15</sup> Culturally responsive teachers appropriately scaffold the curriculum and learning experiences to support student efforts toward high-level academic achievement. Additionally, educators practicing culturally responsive pedagogy showcase the learners' brilliance by recognizing and using their cultural strengths as teaching and learning resources.<sup>15</sup>

The authors want to emphasize that culturally responsive teaching has value for all students because everyone in the learning community acquires more insightful and accurate knowledge about the cultures, lives, experiences, and achievements of humankind.<sup>15</sup> Culture and education are linked, and different ethnic groups have cultural differences; thus, it is normal and ethical to incorporate cultural diversity into the classroom to support all learners equitably.<sup>15</sup> Culturally responsive pedagogy facilitates all learners' success and comprises three dimensions: institutional, personal, and instructional.<sup>23</sup>

### Three Dimensions of Culturally Responsive Pedagogy in a DPT Program

Richards et al<sup>23</sup> present culturally responsive pedagogy as encompassing institutional, personal, and instructional dimensions, each incorporating macro- and micro-level elements within the educational system. The institutional dimension involves the school's physical infrastructure, policies, and engagement with the community. The personal dimension focuses on teachers' attitudes and beliefs. The instructional dimension emphasizes teaching methods that acknowledge and integrate students' cultural diversity into classroom practices. The following section offers examples of the College of Saint Mary Doctor of Physical Therapy Program application of these three dimensions.

#### Institutional Dimension

According to Little,<sup>24</sup> making institutions more culturally responsive includes looking at the school's organizational structure, values, policies, and procedures that impact historically marginalized and minoritized learners and its approach to community involvement. Since its inception in 1923, the College of Saint Mary has been inspired by the Sisters of Mercy,<sup>25</sup> who strive to become an antiracist community committed to eliminating personal and institutional racism and dismantling oppressive structures, policies, and processes. In its mission statement, College of Saint Mary places cultural responsiveness front and center by highlighting the

importance of dignity, inclusivity, service, compassion, and integrity.<sup>25</sup> The inclusion of programs and campus activities to support historically marginalized and minoritized learners, such as Pride events, scholarships for undocumented students, and housing for single mothers, display the values that support culturally responsive pedagogy.

At the program level, the policies and practices in the College of Saint Mary DPT program were designed to be culturally responsive. The DPT program mission is to offer a hybrid curriculum to prepare competent, compassionate, and professional physical therapists who demonstrate excellence in physical therapist practice for all people, particularly those with historically marginalized and minoritized identities, and those in medically underserved communities.<sup>26</sup> The Program Director and the university's senior leadership team were interested in providing citizens in medically underserved areas access to physical therapy education. The distance learning model allows students to be educated where they live (many reside in physical therapy deserts), which could help improve access to physical therapist services.

After writing the program's mission statement, the Program Director recruited clinical expert educators from a variety of backgrounds and identities to develop the curriculum. The program sought to create an environment to support the development of physical therapists who are culturally responsive to address societal health care needs. To accomplish this goal, the program developed inclusive recruitment and retention practices for faculty and students. The faculty recognized that the Graduate Record Examination (GRE) posed a needless barrier for various types of applicants, especially those from historically marginalized and minoritized backgrounds. Consequently, the GRE is not a requirement for admission into the program. To uphold the program's mission, both students and faculty actively participate in group discussions and self-reflection activities throughout the curriculum. These activities aim to challenge personal and communal beliefs and biases.

Regarding community engagement, the College of Saint Mary Director of Diversity organized meetings and dinners on campus and invited local residents to engage with guest speakers to discuss various topics related to discrimination and inequalities experienced by marginalized groups. These meetings inspired the Program Director, the Director of Clinical Education, and the DPT program and Clinical Coordinator to meet with community leaders to identify residents around the campus who were interested in partnering with the university to co-create learning opportunities to support residents' health journeys, connect residents to community resources, and prepare physical therapy students for professional practice.

#### Personal Dimension

The ability to self-reflect is integral to the personal dimension.<sup>23</sup> Faculty need to acknowledge and understand the different aspects of their identity and how that may impact their reactions and interactions with others. That is important for all aspects of identity, not just those elements tied to race, ethnicity, sexual orientation, and gender. Crenshaw<sup>27</sup> defined identity as "not simply a self-contained unit, it is a relationship between people and history, people and communities, people and institutions."<sup>1</sup>(p.13)

The various elements of identity, particularly those more visually evident, profoundly impact how the world views



someone. For better or worse, interactions with others lead to conditioning and a level of expectation on the part of the recipient. In turn, those experiences play a significant role in how one will interact with others and exist in the world; the feedback accrued from the world throughout life inevitably begins to shape one's behavior.

Further complicating these dynamics is the concept of intersectionality. Kimberlé Crenshaw is a prominent scholar and legal theorist known for her groundbreaking work on the concept of intersectionality. She describes intersectionality as a framework for understanding how different aspects of identity, such as race, gender, class, and sexuality, intersect and interact to shape individuals' experiences of oppression and privilege.<sup>27,28</sup> Crenshaw's work has been instrumental in highlighting the complexities of discrimination and advocating for a more nuanced approach to social justice issues.

Identity is a huge part of intersectionality; some identities provide more privilege than others, while some are associated with more discrimination or a relative "other" or lesser status. When various aspects of identity intersect, particularly those that are more oppressed, they create a distinctive experience that results from the combination of these identities. This intersection may compound or modify discrimination. For instance, a heterosexual Black woman encounters a unique form of discrimination stemming from both her marginalized gender and racial identities. In contrast, a heterosexual White woman experiences discrimination primarily based on her marginalized gender identity, while her racial identity affords her privilege, resulting in a significantly different and lesser degree of discrimination compared to a Black woman. Having multiple marginalized identities leads to a different experience than possessing a single marginalized or privileged identity.

Intersectionality is "a lens through which you can see where power comes and collides, where it interlocks and intersects. It is not simply that there is a race problem here, a gender problem here, and a class or LGBTQ problem there. Many times, that framework erases what happens to people who are subject to all these things."<sup>28(p1)</sup> One must possess a level of understanding and appreciation of their intersectionality and the intersectional elements present in others relative to them.

Multiple strategies may help physical therapy educators reflect on and explore their identity. Educators should be encouraged to reflect on their attitudes, beliefs, and biases to help create greater self-awareness. They should also be encouraged to explore their personal history and experiences to understand their past better, which may provide clues and insight into what motivations govern their behaviors. This can create a greater understanding of one's value system and how that can impact one's relationships with learners. If an educator has negative feelings or beliefs towards any cultural, language, or ethnic group, it will affect relationships with learners.<sup>23</sup> Richards et al<sup>23</sup> emphasized that educators must explore their childhood experiences and familiar events that shape their understanding of themselves as racial or nonracial beings. Educators can interview their family members to gather information about their beliefs and experiences regarding different societal groups.

Educators can uncover their implicit biases by scrutinizing their interactions with students. They should reflect on their assumptions about the student or situation and consider how these assumptions may have influenced their understanding of the situation.<sup>29</sup> This process prompts honest and thoughtful self-reflection, revealing the different perspectives

through which people may perceive the same experience. By acknowledging their biases, educators can help create a learning environment built on trust and acceptance, which opens up numerous opportunities for student success.<sup>23</sup>

Additionally, educators can analyze their affiliations with various societal groups and spaces and consider why others may not have access to those same affiliations. Recognizing individual connections to multiple societal groups and understanding the advantages and disadvantages of belonging to each group can enhance understanding of the complexities of privilege, marginalization, and the intersectionality of different identities.

The Program Director and Director of Clinical Education investigated the perspective among physical therapy educators that culturally and linguistically diverse learners are less academically prepared compared to those from the dominant culture typically admitted into DPT programs. In their research on experts addressing the academic readiness of these learners, they encountered the work of Zaretta Hammond, an educator renowned for her expertise in instructional design, equity issues, literacy, and culturally responsive teaching. Hammond's work underscores the systemic inequities ingrained in the US education system, evident in laws, policies, and practices at federal and state levels that have historically favored White citizens while marginalizing culturally and linguistically diverse populations.<sup>30</sup> Through an exploration of various authors, educators, and researchers, the Program Director and Director of Clinical Education recognized the importance of understanding the historical foundations of the US education system. This understanding informs faculty preparation and the creation of an inclusive educational environment to support all learners.

The faculty read a text by the aforementioned Hammond,<sup>30</sup> who also specializes in culturally responsive teaching and neuroscience in education. Hammond's work aims to empower educators to foster inclusive learning environments that respect and support students' diverse cultural backgrounds. She emphasizes understanding students' cultural assets and implementing teaching strategies to promote equity and academic success for all.

The faculty's engagement with Hammond's text catalyzed a collective effort to nurture a culture of vulnerability and personal development within the DPT program. Central to this endeavor was the establishment of weekly team meetings, overseen by faculty and staff, fostering reflective dialogues to scrutinize actions and perspectives. These sessions catalyzed introspection, prompting several faculty members to delve into scholarship and self-study to deepen their comprehension of how stereotypes, fear, and ignorance influence beliefs and behaviors, echoing Hammond emphasis on nurturing inclusive learning environments.

During those weekly gatherings, faculty engage in discussions that extend beyond the confines of the classroom, delving into broader social, political, and economic factors contributing to unequal educational outcomes. They recognize that in traditional physical therapy education, health statistics regarding marginalized groups are often presented devoid of context, perpetuating biases, stereotypes, and prejudices. This lack of contextual understanding not only misinforms future health care providers but also exacerbates existing health disparities.<sup>31,32</sup>

In the early development of the College of Saint Mary DPT program, the Program Director and Director of Clinical

Education engaged in crucial conversations about world and US history, their cultural upbringings, and similarities and differences between cultural groups. These conversations provided a platform for drafting language to support the learning community. Immersing themselves in literature and the insights of thought leaders who opposed oppression was integral in shaping the program's culture and climate.

Through independent study and group discussions, faculty developed comfort integrating historical facts and experiences of marginalized groups into the curriculum. For example, in gross human anatomy, students learn the origins of anatomical resources and contemplate issues of justice and reparations for groups exploited, tortured, mutilated, and murdered for scientific knowledge (eg, the Holocaust, human experimentation on people of African descent). They also examine the ethics around the profit and knowledge gained from using such resources and the lack of justice for victims and their descendants.

### Instructional Dimension

Culturally responsive educators employ instructional tools such as resources, teaching methods, and learning experiences that honor and utilize students' culture, language, and personal identities in the classroom.<sup>23</sup> According to Hammond<sup>30</sup> and Gay,<sup>15</sup> culture plays a fundamental role in how individuals perceive and interpret the world, serving as the "software" for the brain's "hardware." Educators must tap into students' cultural cognitive structures to deliver instruction that supports the development of higher-order thinking and problem-solving skills.<sup>30</sup>

Specific strategies for culturally responsive instruction include faculty acknowledging both the differences and commonalities among students. Hammond emphasizes the importance of moving beyond superficial aspects of culture, such as food and observable patterns, to deeper levels, including worldviews, core beliefs, and spirituality.<sup>30</sup> Educators should recognize that culture and language may influence students' behavior and attitudes in the learning environment. For instance, some cultural groups may express themselves more openly and question the power dynamics in the classroom. However, questioning may be perceived negatively by insecure or uninformed faculty members, potentially leading to reprimands for what may be perceived as unprofessional behavior.

The DPT faculty actively support learners by catering to their individual strengths and unique learning needs. They achieve this by incorporating diverse images, studies, and insights from physical therapy experts representing different cultural backgrounds into the development of learning materials. This diverse representation enriches the educational experience for all students, fostering a more inclusive learning community. Students in the DPT program collaborate with residents from various backgrounds to gain insight into their lived experiences, access resources, and cultivate a deeper understanding of different cultural groups. The faculty's diverse identities and backgrounds further enhance culturally responsive instruction, with a significant portion identifying as members of marginalized communities. As a result, all learners benefit from the faculty's broad range of perspectives and experiences.

Furthermore, the DPT faculty actively address power dynamics within the classroom, striving to create an environment where every student is treated with dignity and respect. They acknowledge their mistakes and actively work to

improve, ensuring continual growth and development within the program.

Hammond<sup>30</sup> stresses the significance of leveraging the science of learning to support culturally and linguistically diverse students. The DPT faculty recognizes how the sociopolitical context impacts students and utilizes learning science to foster independent thinking and learning among students. Faculty members have access to ongoing education resources to gain teaching certifications in various areas, thereby enhancing their ability to support learners. They employ the Understanding by Design framework to structure the curriculum and draw on learning theories to shape learning experiences. According to Hammond,<sup>30</sup> culturally responsive educators can utilize information processing theory to aid the brain's stages of data organization: input, elaboration, and application. Strategies such as capturing the brain's attention, organizing information into manageable chunks, actively processing new information, and providing opportunities for application are recommended to facilitate learning progression. Students are frequently tasked with analyzing and synthesizing information from multiple perspectives.

In the second semester of this institution's DPT curriculum, students are introduced to a modified clinical reasoning tool. This tool integrates patient concerns, elements of the International Classification of Functioning and Disability Model, and patient values and circumstances to determine appropriate support for their health journey. Students learn to apply this tool across the curriculum, including during clinical internships, to assess their thought processes, challenge their assessment and intervention decisions, and monitor patients' progress. Adopting such a framework may assist learners in organizing and applying material more effectively in clinical practice.

### Conclusion

The lack of representation from historically marginalized and minoritized groups and inadequate training in cultural responsiveness pose challenges for physical therapy educators in effectively meeting the needs of learners who have historically faced educational inequalities. While efforts are underway to address this issue, progress has been slow. Culturally responsive pedagogy, aligned with principles of justice, equity, diversity, and inclusion, holds promise in this regard. By recognizing and amplifying learners' strengths, it fosters a supportive learning environment conducive to success for all students.

Addressing the lack of representation in physical therapist education and practice necessitates a comprehensive approach. This involves increasing the presence of educators and students from historically marginalized groups. However, mere diversification of the student body and faculty is insufficient; institutions must also provide appropriate support and services to these individuals while adopting culturally responsive pedagogy to create an inclusive and equitable learning environment.

By implementing these strategies, we can work towards greater representation, diversity, and excellence in the physical therapy profession, thereby contributing to the pursuit of health equity for all. To truly transform society, we must begin by transforming physical therapy education. This transformation requires the adoption of culturally responsive policies and practices that enable all learners, regardless of their backgrounds, to thrive. Culturally responsive pedagogy plays a crucial role in advancing and supporting student

achievement by recognizing, nurturing, and leveraging their strengths within the learning environment.

## Author Contributions

Kimberly Elizabeth Varnado [Conceptualization-Lead, Visualization-Lead, Writing – original draft-Lead, Writing – review & editing-Lead], Shannon Richardson [Conceptualization-Supporting, Visualization-Supporting, Writing – original draft-Supporting, Writing – review & editing-Supporting], Nipaporn Somyoo [Conceptualization-Supporting, Visualization-Supporting, Writing – original draft-Supporting, Writing – review & editing-Supporting], Anne Mejia-Downs [Conceptualization-Supporting, Visualization-Supporting, Writing – original draft-Supporting, Writing – review & editing-Supporting].

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