

**JOTE**

Journal of Occupational  
Therapy Education

---

Volume 5 | Issue 1

Article 13

---

2021

## Using Embedded Encounters to Promote Cultural Humility in Occupational Therapy and Physical Therapy Education

Allison Naber

*University of South Dakota*

Amanda Adamson

*University of South Dakota*

Patti Berg-Poppe

*The University of South Dakota*

Moses Ikiugu

*University of South Dakota*

Hanz Tao

*University of South Dakota*

*See next page for additional authors*

Follow this and additional works at: <https://encompass.eku.edu/jote>



Part of the [Occupational Therapy Commons](#)

---

### Recommended Citation

Naber, A., Adamson, A., Berg-Poppe, P., Ikiugu, M., Tao, H., & Zimney, K. (2021). Using Embedded Encounters to Promote Cultural Humility in Occupational Therapy and Physical Therapy Education. *Journal of Occupational Therapy Education*, 5 (1). <https://doi.org/10.26681/jote.2021.050113>

This Educational Innovations is brought to you for free and open access by the Journals at Encompass. It has been accepted for inclusion in Journal of Occupational Therapy Education by an authorized editor of Encompass. For more information, please contact [Linda.Sizemore@eku.edu](mailto:Linda.Sizemore@eku.edu).

---

# Using Embedded Encounters to Promote Cultural Humility in Occupational Therapy and Physical Therapy Education

## Abstract

In the socio-cultural theoretical perspectives, learning is approached as a constructed outcome of interpersonal and intercontextual exchanges. Learners both influence and are influenced by the social and cultural milieu within which they are situated. Embedded learning draws from this perspective to prompt learning through lived experiences. Fostering cultural humility and an appreciation for cultural congruence is an important goal in occupational and physical therapy education. Embedded experiences provide rich opportunities for students to reflect on their own experiences and the experiences of others in order to understand and value differences. In this article, we report the findings of curricular shifts in which intentionally designed and facilitated cultural encounters were incorporated into several curricular courses. Outcomes indicated an improved awareness of diversity and equity as well as an appreciation for individual circumstances that impact on health outcomes.

## Keywords

Cultural humility, embedded experiences, socio-cultural learning theories, occupational therapy education, physical therapy education

## Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

## Acknowledgements

Grant funding was utilized for travel costs to experience sites. Funding was also utilized for the purchase of one of the documentaries for university library loan permissions and a speaker from a local non-profit agency.

## Authors

Allison Naber, Amanda Adamson, Patti Berg-Poppe, Moses Ikiugu, Hanz Tao, and Kory Zimney

# JOTE

Journal of Occupational  
Therapy Education

Volume 5, Issue 1

---

## Using Embedded Encounters to Promote Cultural Humility in Occupational Therapy and Physical Therapy Education

---

Allison Naber, OTD, OTR/L, CLT-LANA

Amanda Adamson, PT, DPT, OCS, CAPP-Pelvic

Patti Berg-Poppe, PT, MPT, PhD

Moses N. Ikiugu, PhD, OTR/L, FAOTA

Hanz Tao, PT, DPT

Kory Zimney, PT, DPT

University of South Dakota

United States

---

### ABSTRACT

In the socio-cultural theoretical perspectives, learning is approached as a constructed outcome of interpersonal and intercontextual exchanges. Learners both influence and are influenced by the social and cultural milieu within which they are situated. Embedded learning draws from this perspective to prompt learning through lived experiences. Fostering cultural humility and an appreciation for cultural congruence is an important goal in occupational and physical therapy education. Embedded experiences provide rich opportunities for students to reflect on their own experiences and the experiences of others in order to understand and value differences. In this article, we report the findings of curricular shifts in which intentionally designed and facilitated cultural encounters were incorporated into several curricular courses. Outcomes indicated an improved awareness of diversity and equity as well as an appreciation for individual circumstances that impact on health outcomes.

---

Cultural humility is a personal quality encompassing respect, empathy, and self-reflection on intrapersonal and interpersonal levels (Hook, 2014). On an intrapersonal level, cultural humility is an awareness that an individual is limited in the ability to fully understand or empathize with the lived experiences of peoples from other cultures. On the interpersonal level, cultural humility is characterized by an acceptance of and respect for differences and an openness to the world views of others (Hughes et al., 2020). Cultivating cultural humility is an important step towards improving attitudes that foster understanding of other cultures, an essential attribute for healthcare providers working with increasingly multicultural and diverse patient populations. Unconscious bias negatively impacts patient care and propagates poor communication, mistrust, and disparities in the provision of care (Hughes et al., 2020). Hughes and colleagues (2020) asserted that the development of “respect for self and others requires the following: intentional development of self-awareness, capacity for empathy and perspective-taking, active and mindful listening, skills of inquiry, and an ethical foundation that illuminates various dimensions of respect for similarities and differences” (p. 29). Curricular efforts intentionally designed to encourage development of these attributes are an important step in coaxing students toward cultural humility. One such curricular effort is use of embedded encounters.

Embedded encounters are defined as real-world community-based experiences involving cultural interactions that are difficult to simulate in the classroom (Talero et al., 2015). The andragogical aims of embedded encounters (e.g., service, situated, practice, or experiential learning) can foster improvements in self-efficacy, the development of interpersonal and leadership skills (Astin et al., 2000; Brinck & Tanggaard, 2016), improved critical thinking skills (Ferrari & Leonard, 1996), and the shaping of a stronger understanding of self and others (Jones & Abes, 2004). Such experiences can enhance skills in communication, teamwork, creativity, and the capacity to work with diverse populations (Peterson et al., 2014), making them ideal for teaching cultural humility.

### **Extending Socio-Cultural Learning Theories to Education on Cultural Humility**

Experiential learning has its roots in socio-cultural theories (Yardley et al., 2012). In its simplest form, “experiential learning is constructing knowledge and meaning from real-life experience” (Yardley et al., 2012, p. 161). The philosophical underpinnings of this theory are constructivism, and social interactionism principles applied in specific contexts that are fundamental to the learning that develops from students’ lived experiences. Learners both actively influence, and are influenced by, specifics of the social milieu within which they are situated. Learning is further enhanced when a learner receives support from a more knowledgeable or experienced person. Professional students are often the beneficiaries of these types of clinical experiences, led and facilitated by a clinic mentor.

The socio-cultural learning theories supporting situated learning create an ideal framework for teaching cultural sensitivity and diversity awareness. This framework shifts learning from an individualist, cognitivist perception to the greater intricacies of learning from relationships, social practices, historical context, artifacts, and the world,

and toward the ultimate understanding of a situated identity (Brinck & Tanggaard, 2016). In this way, knowledge, skills, and identities are “dialectically” constructed in spaces where cultures and experiences intersect (Brinck & Tanggaard, 2016).

Evidence (Dowell et al., 2001; Ference & Bell, 2004; Larsen & Reif, 2011) supports the educational approach geared towards developing student understandings of cultural differences through instructional methods that carefully and intentionally immerse or embed them in diverse cultural contexts in which they are required to use introspection about their experiences. The interplay between possible discomfort or dissonance and the reflection that follows pushes students to understand complex feelings associated with unfamiliar cultures and to accept that this discomfort does not need to be unsettling – that it can, rather, promote both intellectual growth and perspective-taking (Leonard et al., 2005).

The purpose of this paper is to describe cultural encounter experiences embedded in select occupational and physical therapy courses. We present the results of formative assessments of two student cohorts to illustrate the effect of these experiences in enhancing student cultural awareness and humility. The goal of the cultural encounter experiences was to utilize socio-cultural learning theories through the designed encounters to enhance cultural humility for occupational therapy students (OTS) and student physical therapists (SPT), through reflections about the implications of diversity and inclusivity in practice. Assignments were designed to coax the development of cultural humility and to nudge students towards reflection on ways in which their personal histories impacted their current social status, engagement in activities, and future goals. A long-term goal, while not directly reflected in the current study, was that students would approach cultural/diversity issues in their future practice with compassion and humility, using their awareness to develop cultural congruence with the communities they serve in the future.

### **Description of the Curriculum Revisions**

Faculty from the occupational therapy and physical therapy departments worked together to revise parts of their curricula in order to improve student active learning to cultivate cultural awareness and humility. Prior learning activities for cultural competency lacked a real connection with the communities or groups being explored and often resulted in students making broad assumptions based on accessible information rather than lived experiences. Curricula revisions were funded in part through an internal diversity, inclusivity, and cultural awareness curriculum transformation grant. See Table 1 for a description of the courses prior to revisions.

**Table 1***Course Objectives and Activities Prior to Curriculum Revisions*

	<b>Course Objectives Aligned with the Experience</b>	<b>Activities Associated with the Course (Prior to Course Revisions)</b>
<b>Occupational Therapy Course 1: Professional Identity and Field Experience I</b> <i>Fall Term, Year 2</i>	Apply knowledge of the role of sociocultural, socioeconomic, and diversity factors and lifestyle choices in contemporary society to meet the needs of individuals and communities.	Diversity paper, presentation and guide sheet which involved students researching a culture or group to develop an understanding of the culture or group's customs, values, and health concerns along with a community-based program to address an identified concern.
<b>Occupational Therapy Course 2: Occupational Therapy Assessment and Intervention: Psychosocial Practice</b> <i>Fall Term, Year 2</i>	Select appropriate, culturally relevant assessment tools based on client needs, contextual factors, and psychometric properties of tests, and available evidence.	Demonstrate an understanding of how personal views on culture, education, and family background may affect interaction and therapy with adults who have developmental disabilities through reflection on experiences interacting with served individuals.
<b>Physical Therapy Course 1: Client and Community Health Education in Physical Therapy</b> <i>Fall Term, Year 1</i>	Select culturally competent physical therapy instruction for prevention, health promotion and wellness through appropriate patient education methods to promote a therapeutic alliance.  Evaluate challenges of access to health services in rural and underserved populations.	Reflection papers about interviews with patients and physical therapists.  Journal club discussions surrounding various topics such as biases against marginalized others.  Community Health Education Project assesses the students' abilities to investigate specific health-related needs of a rural population.

<b>Physical Therapy Course 2: Professional Conduct and Ethics</b> <i>Fall Term, Year 1</i>	Communicate respectfully and effectively with patients/clients, family members, caregivers, practitioners, and interprofessional team members.	Groups select a culture to study using the domains of culture and link learning back to physical therapy's approach to treatment.
---	--	---

The curricula revisions focused on enhancing the students' exposure to and interaction with diverse community members by participating in specific cultural encounter tracks. In terms of Bloom's taxonomy, the experience was designed to facilitate mastery of cultural/diversity content at higher cognitive levels: understanding, application, analysis, and evaluation of cultural information (Anderson & Krathwohl, 2001; Krathwohl, 2002). Students achieved this mastery of content through immersion into cultural encounter tracks, embedded encounters including observation of and active participation in the corresponding cultural group activities, and reflection on the embedded experience.

Second-year OTS and first-year SPT participated in the embedded experiences as part of the requirements for select courses in their respective curricula. Part of the requirements for these courses was assignment of students to cultural encounter tracks (see description below). All students received an introductory letter describing the cultural encounter tracks and the course-related activities.

### **Cultural Encounter Curricular Tracks**

Students selected one of four cultural encounter tracks for immersion in groups. Whenever possible, groups of students were scheduled in such a way as to maximize the interprofessional mix, although interprofessional learning was not a primary aim of this experience. The cultural encounter activities were built into the two departments' calendars. Four faculty facilitators led each of the separate group experiences. These facilitators may or may not have been instructors for the courses within which related assignments were built.

The cultural encounter track immersion began with each small interdisciplinary group of students viewing a documentary chosen to inform them about the community of interest before they physically went to the community (to help students develop understanding of pertinent cultural information consistent with Bloom's taxonomy). Following the documentary, faculty facilitators debriefed students through guided discussion using open-ended questions in order to spur reflection about thoughts and emotions arising from viewing the documentary. A discussion of attitudes and beliefs about the cultural population in the documentary followed, including explicit identification of stigma and biases towards the group in a non-judgmental environment. Faculty further prepared students for the encounter by describing the expectations and answering questions from the students in order to reduce anxiety about the experience.

### Embedded Encounters

Groups subsequently participated in assigned community-based cultural encounters under the direction of faculty facilitators and in conjunction with the identified agency/site (see Table 2). Each of the cultural encounters involved students interacting with and participating in activities with the members of the target cultural group for two to five and a half hours outside of normal class time. This interaction constituted application of knowledge according to Bloom's taxonomy (Anderson & Krathwohl, 2001). Students used the information learned during the introductory documentary viewing to inform their interaction with members of the assigned cultural community. After the encounters, facilitators re-convened the groups for discussion and debriefing. Faculty prompted students to contemplate their perspectives based on their encounter experiences. This was the evaluation phase according to Bloom's taxonomy.

**Table 2**

#### Encounter Details

	<b>Agency</b>	<b>Related Film</b>	<b>Encounter Objectives</b>
<b>Encounter A: Community Health of the Homeless Population</b>	Street Medicine Program in conjunction with a local non-profit organization.	Snyder, K.A. (Filmmaker), & Rajski, P. (Filmmaker). (2008). <i>One Bridge to the Next</i> [Documentary]. United States: Because Foundation.	Assist with basic health care and health promotion for the homeless population at community service centers.  Respect the challenges of the homeless community to access and carry out health care practices to optimize their health and wellbeing.
<b>Encounter B: Daily Activities in a Group Home Setting</b>	Local agency supportive of adults with developmental disabilities (many from lower socioeconomic status families) through activities, group homes, and other services (i.e., employment opportunities).	Joseph Rowntree Foundation (2010). <i>Supporting Derek</i> [Video file].	Develop an understanding and appreciation of the day-to-day challenges encountered by individuals served by a group home setting by helping them work on their individual occupational goals in the group home setting.
<b>Encounter C: Elementary School Classroom</b>	A local elementary school serving approximately 600 students in grades K-5. The school is	Lowman, S. (Producer & Director). (Mar 2017). <i>Teach us all</i> [Documentary].	Contemplate challenges to development and learning when children are faced with issues such as stress and food/shelter insecurities.



<b>Volunteer Integration</b>	rich with diversity (~45% Caucasian; 78.3% of all students at the school qualify for free or reduced meals). The school is considered a “progressing” school, ranking between the top 10 percent and the bottom 5 percent of schools across the state.	United States: Array films.	Gain an appreciation of the gifts that the multicultural classroom offers to classroom instruction and relationship-building.  Observe ways that learning structures and environments support the educational needs of children from diverse backgrounds and experiences.
<b>Encounter D: Native American Culture in a Midwestern state</b>	Native American Cultural Center at a Midwestern university.	Skurnik, J. (Filmmaker), & Vasquez, R. (Filmmaker). (2012). <i>The Thick Dark Fog: Reclaiming Native American Identity</i> [Documentary]. United States: New Day Films.	Develop an understanding and appreciation for the historical experiences of the Native American communities in a Midwestern state.  Respect the current challenges faced by people from the Native American community concerning their health, education, and wellbeing.

### Reflection

To build upon the cultural encounters, students completed assignments in their relevant discipline-specific courses (see Table 3). These assignments included writing reflection papers, project work, and discussion. They were designed as prompts for students to reflect upon and contextualize the role and impact of race, gender, ethnicity, class, disability, sexuality and/or religion on health and equity. The assigned course activities also allowed faculty to gauge student growth through reflection, project work, and discussion.

Table 3

*Course Activities after Curriculum Revisions*

	<b>Activities Associated with the Cultural Encounter Experiences (After Course Revisions)</b>
<b>Occupational Therapy Course 1: Professional Identity and Field Experience I</b> <i>Fall Term, Year 2</i>	Following a cultural encounter experience <sup>a</sup> with SPT, OTS work with OTS peers from the same track to provide a presentation with a summary of their cultural encounter and a community-based program based on their cultural encounters. Students participate in collaborative learning group activities to further integrate acquired knowledge into a reflective discussion.
<b>Occupational Therapy Course 2: Occupational Therapy Assessment and Intervention: Psychosocial Practice</b> <i>Fall Term, Year 2</i>	Following a cultural encounter with SPT, OTS participate in a debriefing session and complete a term reflection paper on their cultural encounter experiences, indicating how lessons learned will be applied in clinical practice.
<b>Physical Therapy Course 1: Client and Community Health Education in Physical Therapy</b> <i>Fall Term, Year 1</i>	Following a cultural encounter with OTS, SPT select culturally competent physical therapy instruction for prevention, health promotion and wellness to individuals utilizing appropriate patient education methods to promote a therapeutic alliance; appraise individual biases and their relation to building therapeutic alliance; evaluate challenges in rural and underserved populations to maintain and secure health services.
<b>Physical Therapy Course 2: Professional Conduct and Ethics</b> <i>Fall Term, Year 1</i>	Following a cultural encounter experience with OTS, groups with one SPT from each of the four tracks will use a handout of topic points for discussion to relay their experiences, feelings, attitudes, barriers, and self-realization of the culture they encountered. The focus will be on self-change as a result of exploring a diverse experience and the impact that the direct culture immersion will have on their future communication and care techniques as a practicing provider.

<sup>a</sup>The cultural encounter experience includes an occupational/ physical therapy integrated session with an occupational therapy or physical therapy faculty facilitator. During this session, students watch a documentary together and engage in a follow-up discussion. In smaller groups, students are subsequently sent to the assigned cultural group for the immersion experience. After all students have completed the assignment, the integrated occupational/physical therapy group meets with the facilitator for a debriefing session about their embedded experiences. These activities are brought back into the occupational or physical therapy classroom for reflection through discussions about the embedded experiences within each exclusive discipline.

### Assessment

Reported course outcomes data were analyzed to provide an understanding of the extent to which course objectives had been achieved and to provide a summary report to the committee issuing the supporting grant. The study was approved by the human subjects' review board of a Midwest university's Institutional Review Board (IRB) as a retrospective analysis (IRB-19-183). The study was classified as minimal risk, and specific consent was not required. Formative assessments were used to track student development in knowledge, skills, and attitudes related to the selected encounter as well as growth as health professionals. Methods of assessment were integrated into encounter activities (see Table 1). Both OTS and SPT completed encounter activities.

When developing the cultural encounter tracks, faculty outlined objectives for the cultural encounter experiences. Seven objectives were integrated into a researcher-developed Cultural Encounters Student Survey delivered via an online survey questionnaire to which students responded at the end of the cultural encounter experience. Students responded to each of the seven questionnaire items based on the encounter objectives by indicating their agreement with the item on a 5-point Likert-type scale anchored at "1=strongly agree" and "5=strongly disagree". Face validity of the questionnaire was assured by submitting it to faculty experts for feedback to confirm that it would elicit appropriate information relevant to encounter objectives.

### Results

Participants were comprised of 118 students across two cohorts in consecutive academic years (Cohort 1, n=60 [Encounter A, OT n=8, PT n=8; Encounter B, OT n=6, PT n=8; Encounter C, OT n=8, PT n=7; and Encounter D, OT n=8, PT n=7]; Cohort 2, n=58 [Encounter A, OT n=7, PT n=7; Encounter B, OT n=6, PT n=8; Encounter C, OT n=7, PT n=8; and Encounter D, OT n=8, PT n=7]). Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS) for Windows, version 25.0 (IBM Corp, 2017). Chi-Square Goodness of Fit tests were used to determine the extent to which the objectives set for the cultural encounter experiences as measured on the survey questionnaire were met as indicated by student responses to the questionnaire items. The null hypothesis,  $H_0$ , was that students would not perceive encounter objectives as having been achieved. The alternative hypothesis,  $H_1$ , was that student responses to the questionnaire would indicate that they "agreed" or "strongly agreed" that the encounter objectives had been achieved.

The findings of the Chi-Square Analysis can be seen in Table 4. The null hypothesis,  $H_0$ , was rejected for all encounter objectives with responses favoring the "strongly agree" or "agree" responses regarding the perception that cultural encounter objectives were met. A Pearson Chi-Square test of association was completed to determine if there were differences noted between the two cohorts in this perception (that the cultural encounter objectives had been met). This analysis indicated no statistically significant relationship between cohort membership (Cohort 1 or Cohort 2) and the perception that encounter objectives had been met in all cases except for the perception that the experience helped them develop an informed perspective of local issues that have a global impact,  $\chi^2(2, N=118) = 6.16, p = .01$ . Significantly more students in Cohort

1 (98.3%) strongly agreed or agreed than those in Cohort 2 (86.2%) that the experience enhanced their awareness that there were local issues that had a global impact. They also strongly agreed or agreed with the notion that the experience prepared them for diversity and inclusivity in practice,  $\chi^2(2, N=118) = 3.98, p = .05$ . Significantly more students in Cohort 1 (98.3%) strongly agreed or agreed than those in Cohort 2 (89.7%) that the experience enhanced their preparation for diversity and inclusivity in practice.

**Table 4**

*Extent to Which Cultural Encounter Project Objectives Were Met*  
(Chi-Square Goodness of Fit Test; N= 118)

	Observed Value	Expected Value	Percentage	$\chi^2$	p-value
<b>Effectiveness of Debriefing Session in Preparing Students for the Encounter</b>					
<i>Strongly Agree</i>	43		36.44		
<i>Agree</i>	61		51.7		
<i>Neutral</i>	10		8.47		
<i>Disagree</i>	3		2.5		
<i>Strongly Disagree</i>	1	23.6	0.85	112.68	<i>p</i> <.01
<b>Usefulness of Encounter in Exposing Students to Diversity</b>					
<i>Strongly Agree</i>	49		41.53		
<i>Agree</i>	59		50.0		
<i>Neutral</i>	8		6.78		
<i>Disagree</i>	2		1.69		
<i>Strongly Disagree</i>	0	29.5	0	83.7	<i>p</i> <.01
<b>Improvement of Students Awareness of Local Issues with a Global Impact due to the Experience</b>					
<i>Strongly Agree</i>	48		40.68		
<i>Agree</i>	61		51.69		
<i>Neutral</i>	9		7.63		
<i>Disagree</i>	0		0		
<i>Strongly Disagree</i>	0	39.33	0	37.24	<i>p</i> <.01

	Observed Value	Expected Value	Percentage	$\chi^2$	<i>p</i> -value
<b>Improvement of Awareness about Influence of Individual Circumstances on Life Outcomes due to the Encounter</b>					
<i>Strongly Agree</i>	55		47.01		
<i>Agree</i>	58		49.57		
<i>Neutral</i>	4		3.41		
<i>Disagree</i>	0		0		
<i>Strongly Disagree</i>	0	39.0	0	47.23	<i>p</i> <.01
<b>Effectiveness of Encounter in Preparing Students for Diversity and Inclusivity in Practice</b>					
<i>Strongly Agree</i>	45		38.14		
<i>Agree</i>	66		55.9		
<i>Neutral</i>	7		5.93		
<i>Disagree</i>	0		0		
<i>Strongly Disagree</i>	0	39.33	0	45.48	<i>p</i> <.01
<b>Usefulness of Course Assignments in Facilitating Student Reflection about the Role and Impact of Diversity on Health and Equity</b>					
<i>Strongly Agree</i>	27		22.88		
<i>Agree</i>	76		64.41		
<i>Neutral</i>	13		11.02		
<i>Disagree</i>	2		1.69		
<i>Strongly Disagree</i>	0	29.5	0	108.37	<i>p</i> <.01
<b>Appropriateness of Time Spent in Documentary and Cultural Encounter</b>					
<i>Strongly Agree</i>	33		27.97		
<i>Agree</i>	70		59.32		
<i>Neutral</i>	9		7.63		
<i>Disagree</i>	6		5.08		
<i>Strongly Disagree</i>	0	29.5	0	89.98	<i>p</i> <.01

Feedback from student debriefing and survey results revealed student belief that the time provided for the documentary and pre-encounter briefing session was adequate and appropriate; that the encounter provided adequate exposure and opportunity for interaction with the assigned cultural group; that the encounter helped them develop an informed perspective about the cultural group; that the experience helped them understand better how historical context affected the impacted cultural group; and that the encounter activities and course assignments provided them with a context for reflection and growth. While there were differences between the two cohorts in awareness of local issues that had a global impact and perception of preparation for diversity and inclusivity in practice, both cohorts responded positively about the extent to which encounter objectives had been met.

During a faculty team debriefing session, both the logistics of planning the cultural encounters and the assignments and reflections submitted as part of the cultural encounters were explored. After the second cohort of students completed the cultural encounter experience, faculty discussed the need to adapt the introductory letter sent out to students before track selection, encouraging them to select a cultural encounter track providing a new and unique experience, rather than choosing an encounter in a cultural environment that may already be familiar to them.

### **Discussion**

The goal of the cultural encounter experiences was to impact OTS and SPT professional and personal experiences, through exposure and reflection on the implications of diversity and inclusivity in practice. The development of cultural humility through immersion during the cultural encounter prompted students to understand how their personal histories impacted their socio-political standings, their engagement in activities, and their future goals. Educational programming that teaches cultural humility can scaffold understanding, compassion, and grace within clinical practice. Such programming may cultivate a lasting awareness among students of others' worldviews, so that students may approach differing, culturally-specific, and values-laden perceptions of health and disability from a respectful and culturally congruent perspective. In the present curricular revisions, a qualitative approach was taken to understand the subtleties of personal growth among individual students. Assignments related to the encounters required students to reflect on their experiences, feelings, attitudes, barriers, and self-realization as it relates to the encountered culture, with the aim of improving cross-cultural communication and care. Another assignment required students to appraise individual biases and their relation to building therapeutic alliance. In each of these instances, students were asked to apply their encounter experiences in their communication and establishment of therapeutic alliances with their patients. In doing so, students drew from their own personal histories and biases to inform their thoughts about how they may adapt their own actions and attitudes with reference to a culture that is not their own.

Using data collected from the 2017 National Health Interview Survey (NHIS), Terlizzi et al. (2019) found that minority groups felt it was very important to seek health care services from a provider who either shared or understood their culture. According to Shepherd et al. (2018) and Abramson et al. (2015), minority groups often reported that they received inadequate care due to a lack of understanding of cultural differences that existed between the providers and patients. Previous research has shown associations of racial and ethnic disparities among minorities with poor health or health outcomes, and higher mortality rates within the health care spectrum. Programs that advance cultural humility elevate the recognition and understanding of cross-cultural differences with the aim of improving access to health care and enhancing medical outcomes for minority groups (Powell, 2016). Venner and Verney (2015) recognized that knowledge of various cultures, alone, is limiting. Learning activities that force one to move beyond simple recognition and allow for experience within a cultural environment or encounter can lead to self-reflection, growth, and change. Effective health professionals need both

cultural humility and cultural competence when working with diverse patients (Yancu & Farmer, 2017). Stubbe (2020) further argued that cultural humility is a lifelong learning process if professionals are to avoid stereotyping.

A student from the embedded encounter expressed hope to “provide better care” by “re-training my brain to categorize associations differently regarding individuals of various race, cultures, and ethnicities.” Another student acknowledged “the social inequalities that exist” and “the lack of available resources for low income or homeless individuals.” Not only did students gain immediate understanding through reflection, but they also realized that the immersion experience provided them with “skills to carry with me throughout my career.” Further, another student recognized that “there may have been a great deal of cultural diversity surrounding me my whole life, I just did not have the understanding to see it.” Not only did the students demonstrate growth in their reflections but they also further explored their own limitations and recognized the process of cultural humility as an attribute of ongoing professional discovery. The above comments from students reaffirm the value of embedded encounters and support the development of activities situated within sociocultural learning theory frameworks.

### **Limitations**

The authors acknowledge that the reported results are based on only four cohorts of students (two occupational therapy and two physical therapy), which limits the generalizability of the findings to occupational and physical therapy students in general. The authors acknowledge as well, that students typically report valuing cultural experiences, suggesting that positive outcomes may be related to the experiences themselves and not specifically related to intentional changes that were made in the curricula.

### **Implications for Occupational and Physical Therapy Education**

Overall, the project demonstrated proof of concept, as the benefits of the learning experience outweighed any associated project expenses. The cultural encounters and transformation of course-related activities was an effective and affordable way to infuse lessons in diversity into the occupational and physical therapy curricula, using an interdisciplinary format to achieve meaningful outcomes. Future implementation of this educational approach along with additional research on learning outcomes will help to determine the long-term impact of these experiences on how students utilize compassion, humility, and awareness to develop cultural congruence with the communities they serve in the future. Not only will this educational approach in occupational and physical therapy curricula support the framework and principles of the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (USDHHS National Culturally and Linguistically Appropriate Services Standards, 2018) for improving the nation’s health equity, it will also serve as an example for other health provider educational programs and institutions seeking to implement effective learning experiences to improve the needs of the diverse communities they interact with and serve.

### Future Project Plans

Going forward, efforts will be directed at exploring how cultural encounters may directly impact the various encounter communities and professionals. For instance, in one of the occupational therapy program courses, students prepared Guide Sheets about the culture encountered. One of the Guide Sheets created by students will be utilized by the Street Medicine Program as part of the orientation training for new volunteers. These more actionable outcomes will help students understand their roles as advocates and educational partners.

### Conclusion

We developed cultural encounter experiences for occupational and physical therapy students that included facilitated discussions, embedded experiences, and assignments in select courses. There was evidence that students positively improved their awareness about the influence of individual circumstances on life outcomes and that the encounter experiences prepared them for awareness of diversity and inclusivity in practice. Overall, the curricula changes that we made provided experiential learning opportunities that drew from socio-cultural learning theory, with the aim of developing student cultural humility and encouraging them to explore their personal implicit biases. Student self-reports following the immersion experience were encouraging and indicated that the encounter objectives were met.

---

### References

- Abramson, C.M., Hashemi, M., & Sánchez-Jankowski, M. (2015). Perceived discrimination in U.S. healthcare: Charting the effects of key social characteristics within and across racial groups. *Preventative Medicine Reports*, 2(81), 615–21. <https://doi.org/10.1016%2Fj.pmedr.2015.07.006>
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Allyn & Bacon.
- Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., & Yee, J. A. (2000). *How service learning affects students*. Higher Education Research Institute.
- Brinck, L., & Tanggaard, L. (2016). Embracing the unpredictable. Leadership, learning, changing practice. *Human Resource Development International*, 19(5), 374–387, <https://doi.org/10.1080/13678868.2016.1141607>
- Dowell, A., Crampton, P., & Parkin, C. (2001). The first sunrise: An experience of cultural immersion and community health needs assessment by undergraduate medical students in New Zealand. *Medical Education*, 35(3), 242-249. <https://doi.org/10.1046/j.1365-2923.2001.00772.x>
- Ference, R. A., & Bell, S. (2004). A cross-cultural immersion in the US: Changing preservice teacher attitudes toward Latino ESOL students. *Equity & Excellence in Education*, 37(4), 343-350. <https://doi.org/10.1080/10665680490518605>
- Ferrari, J. R., & Leonard, J. A. (1996). Integrating research and community service: Incorporating research skills into service learning experiences. *College Student Journal*, 30, 444–451.
- Hook, J. N. (2014). Engaging patients with cultural humility. *Journal of Psychology and Christianity*, 33(3), 277–280.



- Hughes, V., Delva, S., Nkimbeng, M., Spaulding, E., Turkson-Ocran, R. A., Cudjoe, J., Ford, A., Rushton, C., D'Aoust, R., & Han, H. R. (2020). Not missing the opportunity: Strategies to promote cultural humility among future nursing faculty. *Journal of Professional Nursing*, 36(2020), 28-33. <https://doi.org/10.1016/j.profnurs.2019.06.005>
- IBM Corp. (2017). *Statistical Pack for Social Sciences. Version 25.0*. IBM Corp.
- Joseph Rowntree Foundation. (2010). Supporting Derek [Film; documentary].
- Jones, S. R., & Abes, E. S. (2004). Enduring influences of service learning on students' identity development. *Journal of College Student Development*, 45, 149–166. <https://doi.org/10.1353/csd.2004.0023>
- Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, 41(4), 212-218. [https://doi.org/10.1207/s15430421tip4104\\_2](https://doi.org/10.1207/s15430421tip4104_2)
- Larsen, R., & Reif, L. (2011). Effectiveness of cultural immersion and culture classes for enhancing nursing students' transcultural self-efficacy. *Journal of Nursing Education*, 50(6), 350-354. <https://doi.org/10.3928/01484834-20110214-04>
- Leonard, L., Akersten, S., Adkison, S., & Nuhfe, E. (2005). Defining the shape of diversity pedagogy. In M. L. Ouellett (Ed.), *Teaching Inclusively* (pp. 46-56). New Forums.
- Lowman, S. (2017). Teach us all [Film; documentary]. Array Films.
- Peterson, J. J., Wardwell, C., Will, K., & Campana, K. L. (2014). Pursuing a purpose: The role of career exploration courses and service-learning internships in recognizing and developing knowledge, skills, and abilities. *Teaching of Psychology*, 41(4), 354–359. <https://doi.org/10.1177/0098628314549712>
- Powell, D. L. (2016). Social determinants of health: Cultural competence is not enough. *Creative Nursing*, 22(1), 5-10. <https://doi.org/10.1891/1078-4535.22.1.5>
- Shepherd, S.M., Willis-Esqueda, C., Paradies, Y., Sivasubramaniam, D., Sherwood, J., & Brockie, T. (2018). Racial and cultural minority experiences and perceptions of health care provision in a mid-western region. *International Journal for Equity in Health*, 17, 33. <https://doi.org/10.1186/s12939-018-0744-x>
- Skurnik, J., & Vasquez, R. (2012). The thick dark fog: Reclaiming Native American identity [Film; documentary]. New Day Films.
- Snyder, K.A., & Rajski, P. (2008). One bridge to the next [Film; documentary]. Because Foundation.
- Stubbe, D. E. (2020). Practicing cultural competence and cultural humility in the care of diverse patients. *Focus*, 18(1), 49-51. <https://doi:10.1176/appi.focus.20190041>
- Talero, P., Kern, S. B., & Tupé, D. A. (2015). Culturally responsive care in occupational therapy: An entry-level educational model embedded in service-learning. *Scandinavian Journal of Occupational Therapy*, 22(2), 95-102. <https://doi.org/10.3109/11038128.2014.997287>
- Terlizzi, E.P., Connor, E.M., Zelaya, C.E., Ji, A.M., & Bakos, A.D. (2019, October 8) *National Health Statistics Reports*, 130. <https://www.cdc.gov/nchs/data/nhsr/nhsr130-508.pdf>
- United States Department of Health and Human Services National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care. (2018, October 2). <http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53>

- Venner, K. L., & Verney, S. P. (2015). Motivational interviewing: Reduce student reluctance and increase engagement in learning multicultural concepts. *Professional Psychology: Research and Practice*, 46 (2), 116-123.  
<https://doi.org/10.1037/a0038856>
- Yardley, S., Teunissen, P. W., & Dornan, T. (2012). Experiential learning: Transforming theory into practice. *Medical Teacher*, 34(2), 161–164.  
<https://doi.org.ezproxy.usd.edu/10.3109/0142159X.2012.643264>
- Yancu, C. N., & Farmer, D. F. (2017). Product or process: Cultural competence or cultural humility? *Palliative Medicine and Hospice Care Open Journal*, 3, e1-e4.  
<https://doi.org/10.17140/PMHCOJ-3-e005>