

What Diversity Means to Undergraduate Health Science Students

Salome Kapella Mshigeni
California State University San Bernardino

Stephanie Okolo
California State University San Bernardino

Deo Mshigeni
California Baptist University

Monideepa Becerra
California State University San Bernardino

The concept of diversity is ever changing regarding how populations perceive the definition. This project assessed how health-science college students perceive the definition and context of diversity in their personal and professional lives. Using qualitative analysis approach with 112 participants we found out that diversity was perceived to be an accumulation of various factors, i.e. education, religion, color though other factors such as age, gender, language, cultures were also considered. Such results highlight that students have varied definitions of diversity and hence formalized training in core courses on diversity in the context of serving in the healthcare field is essential.

Keywords: diversity, higher education, health science, students, undergraduate

INTRODUCTION

One key yet often overlooked characteristic of a successful college experience is that of campus diversity. In recent years, the college student population in the United States has become progressively more diverse, and this has placed extra demands upon academic institutions that strive to provide a comprehensive education experience for all students (Humphrey, Bartolo, Ale, et al., 2006). History demonstrates that diversity has traditionally included race, ethnicity, and gender, however as society evolves more aspects of diversity have been revealed, including but not limited to: socioeconomic background, sexual orientation, religion, age, language, and culture (Ruggs & Hebl, 2012). Most public and state-funded collegiate institutions mirror the eclectic and disparate populations of their geographic area; with students and faculty emanating from varied cultures, ethnicities, and social classes cooperating in one environment. Studies concur that institutions that promote an atmosphere of diversity will ultimately produce students that fare better not only academically, but also in their interpersonal post-graduate and professional lives as well (Hurtado, 2001). Teaching students to appreciate and collaborate

with individuals that are outside of their own group propagates graduates that are culturally literate, able to diplomatically handle opposition, and respect the differences of others (Ruggs & Hebl, 2012).

Often diversity is known to include our personal and professional histories that frame how we view the world, collaborate with colleagues, stakeholders, and how we interact with our communities on a regular basis. The goal of this study was to prepare our university to become ready and embrace the topic of diversity freely by bringing students, faculty, and staff members together as a community that shares similar values and beliefs to openly learn and discuss diversity without any fear or judgement. Although teaching and discussing topics surrounding diversity can be uncomfortable for both the instructors and students, it is still crucial for instructors and universities to provide an avenue for their students to learn and understand this concept before they enter the healthcare job market. If possible, all core university classes should include diversity in their curriculum to connect with students who come from different backgrounds that will in the long run serve a diverse group of community members.

The need to have instructors teach the concept of diversity in their classroom content is well established, but the pedagogy that will help them build on this subject is less clear. There are no recent studies conducted in U.S. colleges on the topic of diversity inclusion among undergraduate health science students. Thus, this study focused on three areas of diversity based on college students' responses of: *1) the definition of diversity, 2) what diversity looks like from their own perspective, and 3) their understanding of diversity in the healthcare industry.* Students' responses similarly reiterate that the healthcare system should be inclusive and respectful of the differences of others and noted the importance of having healthcare facilities that are staffed with a multitude of individuals from various cultural, religious, and ethnic backgrounds.

By the same token that a diverse college campus breeds heterogeneous graduates; a diversely staffed healthcare establishment may eliminate incidences of discrimination and prejudice, as well as lessen the communication gap between professionals and minority communities being served (Simms, 2013). Therefore, the argument can be made that training undergraduate students the topic of diversity, who are considering to be future healthcare professionals is quintessential to creating a system that is free from inequalities. Using the Diversity Pedagogy Theory (DPT), this study provides recommendations for linking culture, cognition, and schooling as a tool that combines classroom preparation with a rich understanding of the role culture plays in the social and cognitive development of a student (Hernandez, 2009).

LITERATURE REVIEW

It remains important for academic institutions to constantly be aware of the changing landscape of diversity in higher education and how that translates into the provision of healthcare services by health science professionals. Tools and skills to address and manage the topic of diversity need to be provided in academic institutions so that instructors are equipped to best prepare their students to understand what diversity is, express what it means from their own perspective, and what diversity ought to mean in the healthcare industry. The use of diversity frameworks such as the Diversity Pedagogy Theory is essential in seamlessly preparing undergraduate students to not only learn about diversity but also understand its practicality when they enter the job market. Previous studies conducted in Europe have presented highly useful approaches to educating students on diversity such as: the recruitment of diverse students; the recruitment of diverse instructors; the provision of diversity trainings; reframing educational topics to include diversity; fostering student engagement through group activities; and creating a safe space for everyone to express themselves (Ruggs & Hebl, 2012). In addition, understanding diversity in healthcare and how important the voice of those we serve matters is a crucial piece of the puzzle in the preparation and provision of competitive education (Simms, 2013). This can be implemented by teaching students not only the theoretical aspect of diversity but also providing them with the practical experiences through their internship's hours in the field in order to understand what healthcare workers are doing to reduce disparities and embrace diversity in serving others.

Equally important to the academic degree received from a university is the communal experience that college students have when in a campus environment. University campuses often have their own culture, dominated by the demographics of their campuses, i.e. many California State Universities (CSUs) serve first generation college students who come from different racial/ethnic backgrounds (CSU Campuses, 2019). As such, the universities should hire a diversity pool of faculty and staff that can better serve and represent the student population. Universities provide students with a micro-level example of how culturally diverse the world is, with students and faculty of all backgrounds collaborating and engaging in the classroom all year (Humphrey, Bartolo, Ale, et al., 2006). A curriculum that includes diversity in its learning objectives enhances the educational outcomes of its students because it equips them with the technical, cognitive, and interpersonal skills necessary to interact with other diverse populations (Hurtado, 2001). Additional studies show positive effects in college students that have gone through diversity training in their ability to be accepting and considerate of cultural differences, and an increase in students' critical thinking, problem-solving skills, and cognitive reasoning (Ruggs & Hebl, 2012; Humphrey, Bartolo, Ale, et al., 2006). These skills will benefit students when they graduate out of college as they are needed to effectively engage with individuals and communities around the world.

The concept of diversity goes beyond simply acknowledging the intrinsic differences that separate people. It is understanding the history that shapes those differences and making conscious efforts to be inclusive to all individuals regardless of their race, nationality, gender, sexual orientation, socioeconomic status, religious beliefs, political beliefs, or cultural practices (Hurtado, 2001). According to the Centers for Disease Control and Prevention (CDC), diversity is an appreciation and respect of the people we work with as well as the people we serve with the goal of reducing health care disparities in underserved and minority communities, especially when it comes to disease prevention and control (CDC, 2017).

Many academic institutions are struggling to meet the challenges of the changing face of their student population. More efforts are needed to recruit a diverse pool of staff and faculty that will not only teach the basics of a healthcare discipline but also prepare healthcare students with the knowledge and skills that they need to serve a diverse pool of patients in their communities. Hence, diversity means giving minority and stigmatized groups the opportunity to be in positions of leadership, not just recruited to give the appearance of diversity, but also to teach the next generation of students how to serve a diverse pool of patients. This allows for other individuals from marginalized groups to see themselves represented in places where they may have thought their group rarely existed (Ruggs & Hebl, 2012). This opens a greater line of communication between many industries (i.e. healthcare) and cultural populations (i.e. universities) because these are professionals that can advocate and accurately communicate needs on behalf of their groups (Simms, 2013). Health science students learn from their peers, their professors, as well as professionals in the field when completing their academic internship hours famously known as field work experience. This level of exposure to various eclectic personalities and beliefs enriches the educational experience of students because it inspires citizenship to begin in the classroom (Ruggs & Hebl, 2012). This is important because medical and health science students hope to advance to become healthcare professionals that work intimately with individuals from diverse communities. Hence, it is essential for students to be trained in cultural competency and understand how it contributes to the evolving landscape of healthcare. Understanding the changing dynamics of patient populations will help ensure that all patients receive enough, and specific care provided by a diverse workforce (Simms, 2013). Hence, a curriculum that emphasizes cultural diversity should be central to medical and health science courses as it may be the key to reducing health disparities in minority and underrepresented populations (Beach, Price, Gary, et al., 2005).

Diversity in the healthcare industry is important because it is a system that directly caters to diverse patients and communities. Healthcare workers and professionals are on the front lines of providing services to patients and ensuring they receive the quality care that they need. A strong relationship between patient and provider is imperative to attaining that care, and that relationship can be strengthened if patients are able to put trust in their providers. This can be initiated in many ways, but the most effective means is by ensuring that there is clear communication and understanding between the patient and the provider, along with advocacy on behalf of the patient by the provider (Simms, 2013). Healthcare

facilities have a responsibility to the communities that they serve and must work to be attentive to the population's needs as it continues to evolve demographically. As the CDC suggests, in order to be effective in public health work, the workforce must reflect the population that they serve (2017). Training current healthcare students in the topic of diversity and hiring university staff and faculty who will mirror the student population is essential.

Hence, diversity inclusion at an organizational level would comprise of hospital staff from minority and diverse backgrounds that are able to relieve cultural or language barriers that may exist (CDC, 2017; Simms, 2013). Studies show that patients feel more at ease if they are in the care of a professional that resembles them and can relate to their background (Simms, 2013; Skaggs & Kmec, 2012). This may increase access to healthcare and produce better health outcomes for patient populations in every community. Patients may feel higher self-efficacy in regards to comprehending health risks and adhering to health regimens (Simms, 2013); primarily due to the established trust that patients have in facilities that are staffed with practitioners they may feel a comradeship with, knowing that these individuals will serve as an ally for them (Skaggs & Kmec, 2012). Additionally, community members and youth from minority and marginalized groups can see themselves represented in healthcare professions, which may inspire them to pursue that as a career path, thus continuing the trend of healthcare facilities that are culturally diverse and culturally competent (Ruggs & Hebl, 2012; Skaggs & Kmec, 2012). Therefore, this study is going to assess an understanding of diversity and what that means in an undergraduate health policy course from a four-year university that is known to serve a high population of minority students. Further, we aim to assess what the students' understanding is of diversity in healthcare. In the end, the authors will provide evidence-based recommendations that foster the work of diversity inclusion in an academic setting as well as in a healthcare field (Ruggs & Hebl, 2012; Simms, 2013).

STUDY METHODOLOGY

In order to draw on undergraduate students' understanding of diversity in the classroom, we employed primarily qualitative methods. These qualitative methods were used to assess their understanding, perception, and experience of what diversity looks like in a health care policy course. According to Strauss and Corbin (1990), qualitative research can be a vehicle to gaining new perspectives on known phenomena or can help to gain more in-depth information that may be difficult to obtain using quantitative methodology. Additionally, Lincoln and Guba (1985) stressed that qualitative data has the ability to tell a story from the perspective of the researcher and of the reader. Therefore, we wanted to tell the story of college students' understanding of diversity in the classroom as well as its practices in the healthcare industry.

As a designated minority serving institution, the university where we conducted this study has a high number of first-generation college students in their families from diverse racial and socio-economic backgrounds. The university resembles the average state university campus with a slightly greater number of women enrollees than men, and health science course offerings very similar to most other programs in the United States. We purposefully selected the health policy course among other public health classes because of its diverse student body. We asked the students in this class three questions that solicit their perceptions regarding diversity in the classroom and how it translates to the healthcare field. We wanted to know what diversity is to them, understand what it looks like from their own perspective, and learn what their understanding of diversity is regarding the healthcare industry. We received responses from 112 students who were enrolled in three different health policy courses during the fall, winter, and spring quarters of 2018 and 2019 respectively.

We used qualitative analytic methods to analyze the responses of our survey by studying emerging themes. We analyzed each question for word order and identified phrases and keywords that the students provided. Further, we paid special attention to phrases and keywords the students used in their responses. We did this by creating word clouds that we closely examined, and color coded into appropriate labels in the context of Diversity Pedagogical Dimensions Theory, which links culture, cognition, and schooling

(Hernandez, 2009; Saldana 2009). There are no public use data for this study. This study was approved by the Institution Review Board of the university being studied.

RESULTS

Analysis of data based on the three questions namely (i) what diversity means to students, (ii) what diversity looks like in the minds of the students, and (iii) the students' understanding of diversity in healthcare produced several themes presented below. To summarize health science students' responses, *diversity is a mixture of different things in life that work together as a group without regard of race, gender, culture, or national origin.*

TABLE 1
COLLEGE STUDENTS' DEFINITION OF DIVERSITY (N = 112)

Question	Trending Responses	Percent
What is Diversity?	Mixture of everything (Color, Religion, Language)	33.5%
	Abundance of different cultures	18.3 %
	Mixture of different races	17.1%
	Social demographics (Age, Gender, Race, Education)	11.8%
	Different people, shapes, color, and sizes	6.4%
	Community, groups, environment	5.6%
	Flexible and open-minded	4.3%
	Different opinion and all others	3%

Table 1 above presents varying definitions of diversity as defined by a sample of college students. The majority of them (33.5%) described it as a mixture of everything, i.e. color, religion, and education; followed by an abundance of cultures (18.3%); a mixture of different races (17.1%); and social demographics, i.e. age, gender race, and language (11.8%).

TABLE 2
COLLEGE STUDENTS' PERCEPTION OF WHAT DIVERSITY LOOKS LIKE (N = 112)

Question	Trending Responses	Percent
What does diversity look like?	Demographics: race, ethnicities, cultures, age, language, gender	28.2%
	Appearance: people, skin color, shape, size, language, background	19.3%
	Communities and societies, we live in	13%
	No specific look, inclusive of everyone	11%
	United States, the world, Southern California	9.4%
	Our campus	8.1%
	Rainbow colors, without discrimination or judgement, all are equal	6%
	All others	5%

Table 2 above presents varying responses on the students' perception of diversity, and what it looks like in their own minds. Many of them perceive it to be associated with demographic characteristics (28.2%) such as race, ethnicities, cultures, age, language, and gender to name a few. Appearance (19.3%) in terms of different people, skin color, shapes, sizes, languages, and different backgrounds was also one

of the major themes presented by a sample of college students. Others described its appearance as it relates to communities and societies that we live in (13%) while others argued that diversity has no specific look as it is being inclusive of everyone (11%). Nine percent of the respondents associate the concept of diversity with a physical location such as the United States, the world, or Southern California to be specific while other respondents refer to it as their own college campus (8.1%). Not to discount, there is a sample of respondents (6%) who perceive diversity to be associated with a rainbow of colors, without any discrimination or judgement.

TABLE 3
STUDENTS' UNDERSTANDING OF DIVERSITY IN HEALTH CARE (N = 112)

Question	Trending Responses	Percent
<i>What is your understanding of diversity in healthcare?</i>	Medical care is available to everyone regardless of their appearance	41.6%
	Training for medical professionals to treat people equally	12.2%
	A variety of professionals i.e. physicians, nurses, therapist, pharmacist	11.1%
	A variety of services available to treat people	10%
	Being culturally competent in serving others	9.3%
	Different types of diseases, illnesses, and risk factors	8.5%
	Coming together to help others in need	4.2%
	All others	3.1%

Table 3 above presents varying responses on the students' understanding of diversity in the healthcare industry whereby nearly half of them (41.6%) thought it is medical care that is available to everyone regardless of their appearance. Other trending themes (11.1%) suggested that diversity in healthcare meant a variety of healthcare professionals such as physicians, nurses, therapists, and pharmacists or a variety of services being available to treat people (10%). On the other hand, participants thought that training (12.2%) or being culturally competent (9.3%) or different types of diseases (8.5%) encompasses what diversity in healthcare is.

CONCLUSION

This study aimed to assess what diversity means in the minds of undergraduate health science college students through a closer look at the Diversity Pedagogical Theory (DPT) that links culture, cognition, and schooling (Hernandez, 2009). A well-designed curriculum with matching content delivery and a solid plan to teach diversity in undergraduate programs will prepare our students to enter the job market more efficiently (Kao & Mao, 2011). Our study has several key findings that warrant further discussion: (1) a large portion of study participants define diversity as a mixture of everything such as different race, age, gender, language, cultures, color, religion, education, shapes, and sizes, (2) more than half of them perceive diversity to look like communities that they live in, having different appearances and different demographic characteristics, (3) half of them understand diversity in healthcare to include medical services that are available to serve everyone regardless of their appearance, and (4) diversity in healthcare involves a training component of different medical professionals with different skill sets that provide a variety of medical services to a diverse group of people with different diseases.

Using the DPT framework, we recommend instructors understand and teach culture competency in their curriculum for health science undergraduate students to prepare them for the practical experiences they will come to terms with when they start their careers. Our study shows that over 23.3% of the

participants understand diversity to involve the training of healthcare professionals from different backgrounds in different skill sets. This supports the concept of schooling as presented by DPT theory as well as other studies that have specifically focused on nursing or medical students where cultural competency training has been proven to improve knowledge, attitudes, and skills of health professionals (Beach, Price, Gary, et al., 2005). Since 18% of the respondents defined diversity to be associated with an abundance of culture, the inclusion of culturally appropriate pedagogy as an analytical tool to help instructors explain the concept of diversity to maximize student learning outcomes is essential (Milner, 2010).

Cognition is a 3rd element of the DPT theory that this study is recommending while studying the three categories of: diversity definition, perception, and what diversity means in healthcare. Many of the participants have a good sense of what diversity entails (provision of services to everyone 41.6%, staffed with different professional backgrounds 11.1%) and what it looks like (demographics 28%, appearance 19%, and communities we live in 13%), however a defined curriculum that teaches the meaning of diversity and how it is practiced in the workforce will fulfill the goal of preparing health science undergraduate students with a skillset that will benefit their practical experience (Hernandez, 2009, Kao & Mao, 2011).

In this study, we stated that the fundamental objectives of health science education is to prepare students to practice in the workforce, given the competitive nature of the healthcare workforce. It was important to learn from a sample of students how they understand, perceive, and envision diversity in the healthcare setting. We recommended a framework that is derived from the Diversity Pedagogy theory that suggest linking culture, cognition, and schooling while teaching and preparing health science students to become effective professionals in the field. Although major themes emerged implying a good understanding of the concept of diversity, more empirical work will have to be done to determine how other institutions are preparing health science students before they enter the workforce competitively.

REFERENCES

- Beach, M., Price, E., Gary, T., Robinson, K., Gozu, A., Palacio, A., . . . & Cooper, L. (2005). Cultural Competency: A Systematic Review of Health Care Provider Education Interventions. *Medical Care*, 43(4), 356-373.
- California State University Campuses (CSU). (2019). *About CSU Campuses*. Retrieved from: <https://www2.calstate.edu/>
- Centers for Disease Control and Prevention (CDC). (2017). *Health Equity: Diversity and Inclusion Management*. Retrieved from <https://www.cdc.gov/minorityhealth/diversityandinclusion/index.html>
- Creswell, J.W. (2006). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: SAGE Publications.
- Hernandez, R. (2009). What is diversity pedagogy? *Multicultural Education*, 16(3), 11-17.
- Humphrey, N., Bartolo, P., Ale, P., Calleja, C., Hofsaess, T., & Janikova, V. (2006). Understanding and responding to diversity in the primary classroom: an international study. *European Journal of Teacher Education*, 29(3), 6305-318.
- Hurtado, S. (2001). *Linking Diversity and Educational Purpose: How Diversity Affects the Classroom Environment and Student Development*. Retrieved from <https://files.eric.ed.gov/fulltext/ED456199.pdf>
- Kao, D., & Mao, T. (2011). A framework for Aligning Business Education with Dynamic Change in Global Competition. *Journal of Higher Education Theory and Practice*, 11(1), 9-20.
- Milner, R. (2010). Culturally Relevant Pedagogy in a Diverse Urban Classroom. *The Urban Review*, 43, 66-89.
- Ruggs, E., & Hebl, M. (2012). *Diversity, Inclusion, and Cultural Awareness for Classroom and Outreach Education. Apply Research to Practice (ARP) Resources*. Retrieved from <http://www.engr.psu.edu/AWE/ARPRResources.aspx>

- Saldana, J. (2009). *The Coding Manual for Qualitative Researchers*. Thousand Oaks, CA. Sage Publications Ltd.
- Simms, C. (2013). Voice: The importance of diversity in healthcare. *International Journal of Clinical Practice*, 67(5), 391-396.
- Skaggs, S. L., & Kmec, J. A. (2012). Checking the Pulse of Diversity among Health Care Professionals: An Analysis of West Coast Hospitals. *The ANNALS of the American Academy of Political and Social Science*, 639(1), 236–257.