Students vs. Teachers: Cultural Diversity Awareness in Online Learning

Estudantes versus Professores: Conscientização da Diversidade Cultural na Aprendizagem On-line

AMBIDA, Melvin N.

0009-0007-9024-6491; Rizal Technological University. Mandaluyong City, Metro Manila, Philippines. mnambida@rtu.edu.ph

The content expressed in this article is the sole responsibility of its authors.

A B S T R A C T

In an increasingly interconnected world, the importance of cultural diversity awareness within educational contexts cannot be overstated. Online learning environments, which transcend geographical boundaries, bring together students and educators from diverse cultural backgrounds. This study seeks to compare the levels of cultural diversity awareness between students and teachers, examining how these awareness levels influence educational practices and interactions. Utilizing a quantitative approach, the study surveyed a representative sample of students and teachers, finding that students exhibit a high level of cultural diversity awareness with a general weighted mean of 3.87, while teachers display an even higher level with a general weighted mean of 4.20. An independent t-test revealed a significant difference between the two groups (t=-4.32, p<.05), indicating that teachers possess significantly greater cultural diversity awareness. Factors influencing these levels were explored, highlighting the importance of exposure to diverse cultures, training in cultural competence, and institutional support. The findings suggest that higher cultural diversity awareness among teachers likely enhances inclusive teaching practices, thereby positively impacting student engagement and learning outcomes in online environments. These insights underscore the necessity of fostering cultural diversity awareness to create more equitable and effective online educational settings.

R E S U M O

Num mundo cada vez mais interligado, a importância da conscientização da diversidade cultural nos contextos educacionais não pode ser exagerada. Os ambientes de aprendizagem on-line, que transcendem fronteiras geográficas, reúnem estudantes e educadores de diversas origens culturais. Este estudo procura comparar os níveis de consciência da diversidade cultural entre alunos e professores, examinando como esses níveis influenciam as práticas e interações educacionais. Usando uma abordagem quantitativa, o estudo pesquisou uma amostra representativa de alunos e professores, constatando que os alunos apresentam um alto nível de consciência da diversidade cultural com uma média ponderada geral de 3,87, enquanto os professores apresentam uma média mais elevada com uma media ponderação geral de 4,20. Um teste t independente revelou uma diferença significativa entre os dois grupos (t=-4.32, p<.05), indicando que os professores possuem uma consciência significativamente maior da diversidade cultural. Foram explorados os fatores que influenciam esses níveis, destacando a importância da exposição a culturas diversas, formação em competências culturais e apoio institucional. Os resultados sugerem que uma maior conscientização da diversidade cultural entre os professores provavelmente melhora as práticas de ensino inclusivas, influenciando positivamente o envolvimento dos alunos e os resultados de aprendizagem em ambientes on-line. Esses insights sublinham a necessidade de promover a conscientização da diversidade cultural para criar ambientes educacionais on-line mais justos e eficazes.

Introduction

While it was once widely believed that the most effective learning takes place in formal settings under the guidance of a teacher within the confines of a classroom, this notion has gradually given way to the understanding that learning is not confined to specific spaces and times, but is pervasive across various contexts. Over the past two decades, digital technology has revolutionized education, enabling asynchronous and synchronous learning through online platforms, enhancing immersive, high-level learning experiences (Al-Adwan et al., 2023). This new form of online learning is a stepping stone toward generating insurgence in the educational sector and furnishing hands-on solutions to issues pertaining to technological reforms in education (West as cited in Precones et al., 2023).

This shift towards online learning environments makes understanding cultural diversity even more critical. This understanding is critical for fostering a truly inclusive educational experience. As cultural diversity becomes a defining characteristic of global education, the emergence of e-learning becomes more pivotal than ever, ensuring diverse perspectives are woven into modern learning environments. This virtual environment fosters a "global village" (McLuhan as cited in Ersoy, 2018), where individuals can interact and share information regardless of geographical barriers. Understanding the backgrounds of individuals participating in these online networked learning spaces is crucial.

As numerous studies suggest, cultural diversity necessitates an ongoing pursuit of awareness to build empathy and understanding between people. Accordingly, the present study highlights cultural diversity awareness that pertains to the capacity of selected students and teachers to perceive and appreciate the presence of different cultural backgrounds. Al-Obaydi (2019) defined this awareness as the extent to which students are conscious of diverse cultures, enabling them to respond appropriately and prevent potential conflicts within the educational environment.

Byrd (2016) further emphasized the necessity of recognizing the ethnic backgrounds of students and establishing secure environments for connection. This awareness is significantly promoted by teacher education (Civitillo et al., 2018; Hachfeld et al., 2015). This is especially important in online learning environments to resolve obstacles and enhance minority student engagement. Acquah et al. (2016) insisted upon that educators should cultivate culturally sensitive strategies and be acquainted with pertinent instructional design models. Additionally, in order to foster more inclusive teaching and increased student engagement, it is imperative to dismantle pedagogical assumptions and address resistance (Gay, 2013) and to acknowledge and respect the diverse identities of students (Rissanen et al., 2016).

Given the crucial role of cultural diversity awareness in online learning environments, this study focuses on determining the levels and variations of awareness among students and teachers. To grasp cultural diversity in the context of online learning, it is vital to examine relevant theories and concepts from the field of educational research. Hence, the present study

adopts the principles of Multicultural Education (Banks, 2014). This concept allows for an exploration of the challenges and opportunities that arise when learners and teachers from diverse cultural backgrounds come together in a virtual learning space. By investigating these topics, this research aims to contribute to a better understanding of how cultural diversity awareness impacts online learning experiences for both students and teachers. This knowledge can inform the development of inclusive and functional online learning spaces that cater to a diverse student and teacher population and promote a genuinely global learning experience for everybody.

Specifically, this study aims to assess the level of cultural diversity awareness among students and teachers in online learning environments, examine the significant differences between their awareness, and identify the factors contributing to this awareness in these settings.

Methodology

Utilizing a quantitative approach, this study investigated cultural diversity awareness among participants in online learning environments. Participants were strategically selected from the graduate programs of State Universities and Colleges (SUCs) in the Philippines. Stratified random sampling ensured a diverse group of 169 students participated. For teachers, purposive sampling identified 52 key individuals with experience in online learning.

Data collection relied on a standardized survey instrument, the Cultural Diversity Awareness Questionnaire (CDAQ) by the Special Populations and CTE Illinois Project (2016) and Northouse (2021), administered to both students and teachers. This tool, validated by local experts for contextualization, provided a means to compare their cultural sensitivity levels. The survey was converted into Google Forms for convenient online access. This method facilitated data gathering and overcame geographical challenges associated with participant recruitment.

A weighted mean was used to calculate the scores for the five-point Likert scale for cultural diversity awareness for both students and teachers. A two-sample t-test was subsequently conducted using the Statistical Package for the Social Sciences (SPSS) software. This statistical test analyzed the survey data to reveal any significant differences in cultural diversity awareness between students and teachers.

Results and Discussion

Students' Cultural Diversity Awareness

The study implies that the majority of students agreed with the statements listed in the CDAQ. They tend to realize that people of other cultures need to support one another and connect as a group (WX = 4.40), accept that people's experiences and background impact how

they interact others ($W\overline{X}$ = 4.25), and include people who are culturally different from themselves in team decision-making processes that impact them ($W\overline{X}$ = 4.22). The students claimed that they are open to learn about and appreciate the richness of other cultures ($W\overline{X}$ = 4.22) and have good intent by asking for clarification when they seem to misunderstand what others say ($W\overline{X}$ = 4.20).

The students seem to have a knowledge about stereotypes associated with ethnicities ($W\overline{X}$ = 3.47). Their moderate awareness of cultural diversity could manifest on their avoidance to participate in jokes that are derogatory to any individual or group ($W\overline{X}$ = 3.36) and engagement to challenge others when making racial/ethnic/sexually offensive comments ($W\overline{X}$ = 3.25). Likewise, the results of their CDAQ scores in understanding that a lack of diversity in their peer groups may be perceived as excluding others ($W\overline{X}$ = 3.18) and believing that being friends with someone from another culture equates to cultural competency ($W\overline{X}$ = 3.04) appear to be moderate.

The findings indicate that the students surveyed possess a high awareness of cultural diversity, as demonstrated by their accumulated general weighted mean ($G W\overline{X}$) of 3.87, described as "almost always" and interpreted as "high."

The CDAQ results suggest that students have a good grasp of cultural diversity concerns and are making efforts to solve them. However, there is still potential for further progress. Several scholars, including Al-Obaydi (2019) and Byrd (2016), highlight the critical role of cultural diversity awareness among learners. Al-Obaydi defines this awareness as the extent to which students are conscious of diverse cultures, enabling them to respond appropriately and prevent potential conflicts within the educational environment.

This high CDAQ score may be due to the fact that younger generations have grown up in a diverse world, fostering a more inclusive mindset. Parker et al. (2019) confirm this by indicating that today's learners are diverse and open to emerging social trends, influenced significantly by globalization, digitalization, and cultural diversity from childhood. The literature suggests a growing global focus among learners due to the integration of technology like Google, YouTube, and Facebook into their lives (McCrindle, 2018).

Northouse (2021) suggests that obtaining a high score in the CDA self-assessment could mean that the individual is a change agent who possesses self-awareness regarding their own prejudices and those of others. They are also capable of identifying the harmful consequences of acting upon such biases. This study implies that the rise in cultural diversity awareness among younger generations is crucial for the future of education.

Teachers' Cultural Diversity Awareness

The study indicates that teachers seem to suggest that they see themselves as someone who knows and accepts that people's experiences and background impact how they interact

and trust people (WX = 4.62); realizes that people of other cultures need to support one another and connect as a group (WX = 4.56); and understands the definition of internalized racial/ethnic discrimination and how it impacts people of different cultures (WX = 4.56). It is also apparent that teachers believe that race is a social construct (WX = 4.54) and a product of their upbringing and that there are valid opinions held by people other than themselves (WX = 4.46). It may be perceived that they never take physical characteristics into account when interacting with others or when making decisions about others' competence or ability (WX = 4.46).

The teachers appear to believe that racial/ethnic classification is counterproductive and devalues a person's culture or history (WX = 3.90). It also seems evident that they have multiple friends from a variety of ethnicities and abilities (WX = 3.85). Seemingly, they are inclined to challenge others when making racial/ethnic/sexually offensive comments or jokes (WX = 3.71). They claimed that they understand that the lack of diversity in their social circle may be perceived as excluding others (WX = 3.52). They did not seem to think that being friends with someone from another culture equates to cultural competency (WX = 3.27).

Based on the accumulated general weighted mean (GWX) of 4.20 with a verbal description of "almost always" and interpretation of "high," the findings reveal that the teacher respondents have a relatively higher cultural diversity awareness than the student participants.

The CDAQ results indicate that teachers are on the right track in understanding and addressing cultural diversity issues highlighted by the aforementioned constructs. The studies conducted by Civitillo et al. (2018) and Hachfeld et al. (2015) collectively underscore the crucial role of teacher education in fostering educators' cultural diversity awareness. Civitillo et al. stress the importance of educators recognizing and examining their own ideas regarding cultural diversity. Hachfeld et al. (2015) argue that teachers exhibiting heightened cultural diversity awareness are more likely to achieve positive outcomes, suggesting a direct correlation between cultural diversity awareness and teaching effectiveness. Acquah et al. (2016) also articulate the necessity for teachers to develop strategies sensitive to diverse learners, highlighting the pivotal role of teacher training in this process.

Having obtained a high score in the CDA self-assessment indicates that the person can be considered a change agent who is aware of one's own biases and those of others, and is able to recognize the negative impact of acting on such biases (Northouse, 2021). The study implies that teachers with high cultural diversity awareness could practically impact students and education institutions in general. To further address biases and enrich learning, they can make use of culturally responsive pedagogies and inclusive curriculum. They can also contribute to research on teaching effectiveness and assessment tools.

Students vs. Teachers Cultural Diversity Awareness

Table 1.

Independent Samples Test for Students and Teachers Cultural Diversity Awareness

t-value	p-value	α	Decision	Remarks
- 4.32	.000	.05	Reject H_0	Significant

An independent samples t-test was performed to explore differences between the cultural diversity awareness of students and teachers. The study indicates that there is a statistically significant difference in the two groups of respondents in terms of awareness.

The value of the independent t-test is t=-4.32, p < .05. Thus, this study rejects the null hypothesis, indicating that evidence is not sufficient to support the claim that there is no difference in the groups' cultural diversity awareness. It can be inferred that there is a significant difference between students and teachers in terms of cultural diversity awareness. A possible explanation could be that teachers may have more exposure or opportunities to interact with people from different cultures, or may have received more training in cultural diversity awareness. This further suggests that they play a crucial role in addressing cultural diversity in the learning environment.

In view of the teacher's role, Byrd (2016) emphasizes the importance of recognizing students' racial backgrounds as a fundamental component of their identity, underlining the need to avoid neglecting this aspect for meaningful connections within the diverse student body. In relation, teachers can create a safe space by identifying cultural cues and framing questions that resonate with students' backgrounds (Milheim, 2017).

The studies conducted by Civitillo et al. (2018) and Hachfeld et al. (2015) also underscore the crucial role of teacher education in fostering educators' cultural diversity awareness. Civitillo et al. stress the importance of educators recognizing and examining their own ideas regarding cultural diversity. Hachfeld et al. (2015) find that teachers exhibiting heightened cultural diversity awareness are more likely to achieve positive outcomes, suggesting a direct correlation between cultural diversity awareness and teaching effectiveness.

Furthermore, the findings in this study corroborate the study by Evanick (2023), underlining the critical importance of cultural sensitivity in establishing an inclusive online learning environment. Kumi-Yeboah et al. (2019) further contribute by asserting that integrating cultural diversity into online environments is essential for addressing challenges related to cultural differences and enhancing the engagement of minority students.

Moreover, this study is supported by Acquah et al. (2016), emphasizing the necessity for teachers to develop strategies sensitive to diverse learners, highlighting the pivotal role of teacher training in this process. Besides, teachers need to be aware of relevant instructional design models that are culturally inclusive and sensitive (Milheim, 2017).

Besides, Gay (2013) identifies inherent differences in ethnic, cultural, and social backgrounds between teachers and students as obstacles to effective teaching. To address this, Gay (2018) suggests dismantling pedagogical assumptions and countering opposition. In connection, Warren (2017) highlights the necessity of exposure to information about diverse populations in teacher training, while Rissanen et al. (2016) stress the importance of recognizing and respecting students' varied identities.

This study's own findings and supplementary literature imply that teachers with higher cultural diversity awareness are more likely to promote tolerance and understanding of different cultures. If teachers and education institutions leverage this opportunity, this could lead to improved learning outcomes for all students.

Overall, potential factors influencing cultural diversity awareness include the extent of exposure to diverse cultures, training in cultural competence, personal experiences, and institutional support for diversity. It can be inferred that higher cultural diversity awareness likely leads to more inclusive teaching practices and better student engagement. Teachers with higher awareness may implement more culturally responsive pedagogy, and students with high awareness may feel more included and respected, positively impacting their learning experiences.

Conclusion

The study shows that teachers exhibit a high level of cultural diversity awareness, recognize the impact of cultural backgrounds on interactions, and acknowledge the need for inclusive support. They understand issues like racial/ethnic discrimination but need to further develop their approach to challenging racial classifications and expanding personal diversity networks. The findings support theories of culturally responsive pedagogy, which emphasize the role of teacher self-awareness and diverse perspectives in teaching.

Students demonstrate a strong understanding of cultural diversity, show openness to learning about other cultures, and recognize the importance of inclusion. However, they need to develop a deeper awareness of cultural competency and strengthen their ability to challenge offensive comments. The findings suggest that exposure to diverse cultures, especially through digital media, enhances students' cultural diversity awareness.

A significant gap separates the cultural diversity awareness of students and teachers, with teachers showing higher awareness. This difference likely results from teachers' greater exposure to and training in cultural diversity. Teachers with higher awareness are more likely to foster inclusive classrooms, which positively impact student engagement.

The study underscores the importance of cultural diversity awareness for both teachers and students. Greater cultural diversity awareness leads to more inclusive and engaging learning environments and correlates with better teaching and learning outcomes.

Recommendations

It is recommended to prioritize the implementation of comprehensive cultural diversity initiatives within educational institutions. This includes establishing and integrating cultural diversity training programs for both students and teachers to enhance awareness and foster inclusive learning environments. These training programs may be designed based on the needs of the target participants as far as cultural sensitivity is concerned.

Additionally, incorporating culturally diverse materials and perspectives into the curriculum can significantly enrich students' understanding of various cultures. Encouraging intercultural exchanges and collaborations among students further facilitates mutual respect and understanding.

Furthermore, providing ongoing support and resources for teachers to develop culturally responsive teaching practices is essential in ensuring effective implementation of diversity initiatives. Lastly, fostering a campus culture that values and celebrates diversity through events, workshops, and initiatives may create a sense of belonging and unity among students and faculty.

Limitations and Future Directions

This study is limited by its focus on the difference in cultural diversity awareness between students and teachers of graduate programs. The study does not delve into the influence of demographic variables on cultural diversity in online learning environments, recognizing that these factors may play a role but are not within the scope of this research. Further research is needed to explore the generalizability of these findings to other contexts and populations. The study's reliance on a single survey instrument for data collection may limit the breadth of insights gained. Future studies could employ multiple data collection methods and include a broader range of participants to provide a more comprehensive understanding of the factors influencing cultural diversity awareness among students and teachers.

Acknowledgment

Disclosure of Conflict of Interests

The author declares no conflict of interests.

Ethical Considerations

This research involved informed consent and voluntary participation from participants, who were provided with a detailed explanation of the study's purpose and data collection process. The participants' anonymity and confidentiality were kept by not revealing their true names during data collection and analysis. Responses were meticulously handled, secured, and stored in an encrypted device. At their discretion, they could withdraw their participation at any time. The study was conducted judiciously, ensuring no harm to individuals or organizations involved.

REFERENCES

Al-Obaydi, L. H. (2019). Cultural Diversity, Awareness and Teaching: A Study in an EFL context. *The Journal of Asia TEFL, 16*(3), 987–995. https://doi.org/10.18823/asiatefl.2019.16.3.15.987

Byrd, C. M. (2016). Does culturally relevant teaching work? An examination from student perspectives. *SAGE Open, 6*(3), 215824401666074. https://doi.org/10.1177/2158244016660744

Civitillo, S., Juang, L. P., & Schachner, M. K. (2018). Challenging beliefs about cultural diversity in education: A synthesis and critical review of trainings with pre-service teachers. *Educational Research Review, 24*, 67–83. https://doi.org/10.1016/j.edurev.2018.01.003

Ersoy, N. (2018). Towards a transcultural approach in online learning. *IGI Global* [PDF].

Evanick, J., EdD. (2023, April 28). *The importance of feedback in personalized learning*. eLearning Industry. https://elearningindustry.com/the-importance-of-feedback-in-personalized-learning

Gay, G. (2013). Teaching to and through cultural diversity. *Curriculum Inquiry, 43*(1), 48–70. https://doi.org/10.1111/curi.12002

Gay, G. (2018). *Culturally Responsive teaching: Theory, Research, and Practice*. Teachers College Press.

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education, 48*, 44–55. https://doi.org/10.1016/j.tate.2015.02.001

Kumi-Yeboah, A. (2019). Designing Cross-Cultural Collaborative online learning framework for online instructors. *Online Learning, 22*(4). https://doi.org/10.24059/olj.v22i4.1520

Kumi-Yeboah, A., Dogbey, J., Yuan, G., & Amponsah, S. (2019). Cultural diversity in online learning. In *Advances in educational technologies and instructional design book series* (pp. 230–251). https://doi.org/10.4018/978-1-5225-7802-4.ch012

McCrindle, M. (2014). *The ABC of XYZ: Understanding the Global Generations*.

Milheim, K. (2017). A fundamental look at cultural diversity and the online classroom. *ELearn Magazine*, *2017*(2), 20170201. https://doi.org/10.1145/201702.3041614

Northouse, P. G. (2021). *Introduction to leadership: concepts and practice*. Thousand Oaks, California, SAGE Publications, Inc.

Parker, K., Graf, N., Igielnik, R. (2019). Generation Z Looks a Lot Like Millennials on Key Social and Political Issues. *Pew Research Center*. https://www.pewresearch.org/social-trends/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/

Precones, M. C. D., Orlando Jr, A., Iglesia, J. I., Moreno, J. M. D., Royo, M. C. R., Saba, P. P. I., & Gumiran, I. C. (2023). *The utilization of RTU flexible learning system (e-RTU) in relation to the academic performance*.

Rissanen, I., Laine, S., Puusepp, I., Kuusisto, E., & Tirri, K. (2021). Implementing and Evaluating Growth Mindset Pedagogy – A study of Finnish Elementary school teachers. *Frontiers in Education*, *6*. https://doi.org/10.3389/feduc.2021.753698

Special Populations and CTE Illinois Leadership Project. (2016). *Cultural diversity self-assessment*. Retrieved on August 2022 from https://edge.sagepub.com/sites/default/files/9.3_cultural_diversity_awareness_questionnaire.pdf

Warren, C. A. (2017). Empathy, teacher dispositions, and preparation for culturally responsive pedagogy. *Journal of Teacher Education*, *69*(2), 169–183. https://doi.org/10.1177/0022487117712487