

# Early Medical Education Exposure to Diversity, Equity, Inclusion, and Justice

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## Introduction

The US Census predicts that by 2044, racial and ethnic minority populations will make up more than half of the population- becoming the majority (Colby & Ortman, 2015). As medical practice becomes more person-centered, holistic, and less about disease-centered approaches, there is an ever growing need for healthcare professionals to understand and utilize diversity, equity, inclusion, and justice (DEIJ) in practice. Improving what was previously known as the cultural competency of healthcare providers through DEIJ education is just one example of proposed solutions to providing the highest quality care to all patients, in hopes of reducing health inequities and improving overall outcomes (Alizadeh & Chavan, 2015). Addressing this need in early medical education is one proposed mechanism for educational DEIJ intervention. Based on dimensional analysis of DEIJ education within health professional curriculum, the model developed here utilizes a mixed approach to learning, using both in-person and virtual instruction and feedback mechanisms within the framework of addressing various topics within DEIJ and simultaneous cultural humility training (Buchanan, D.T. & O'Connor, M.R., 2020).

## Objective

The predominant objective of this project was to recognize the impact of incorporating diversity, equity, inclusion, and justice in medical education in parallel to pre-clinical science.

## Methods

The domains of diversity, equity, inclusion, and justice were incorporated into the first-year Biomedical Sciences Anatomy curriculum through multiple learning modalities.

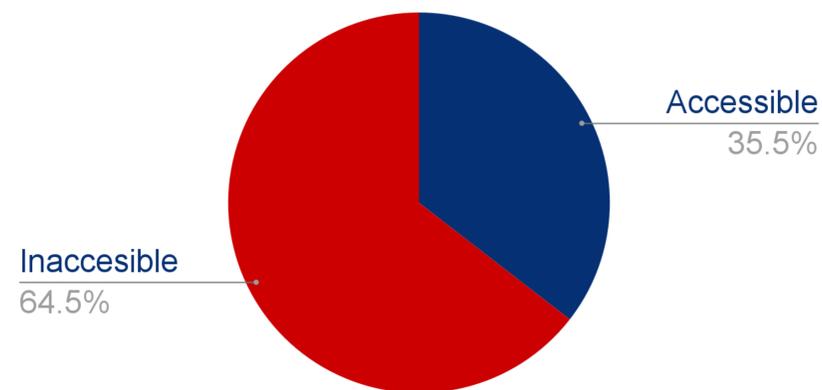
**Asynchronous Lecture Material:** Utilizing the virtual TopHat platform, students completed self-guided coursework. This included a scientific research article addressing health inequities relevant to the lecture topic and a subsequent open ended community conversation prompt.

**Synchronous Lecture:** A clinical vignette addressing anatomical lecture material was presented and followed by the implementation of brave spaces. Through professor instruction, students were presented with real-world implications of health inequities commonly seen in practice and the opportunity to engage in equal participation conversation. Topics included, but were not limited to, the Americans with Disabilities Act, social determinants of risk for cardiovascular disease, and race norming in traumatic brain injuries.

**Student Feedback Surveys:** Students completed a survey indicating ability to partake in further discussion outside scheduled course curriculum. See figure 1. At the conclusion of the course, students completed an anonymous survey indicating their experiences in regard to the course curriculum. See figure 2.

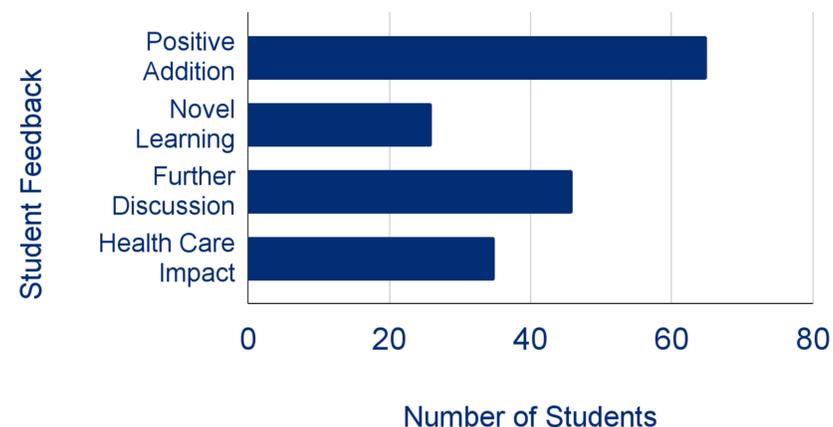
## Results

Student Participation Outside Scheduled Course Curriculum



**Figure 1:** Of the 76 student responses to the survey inquiring availability to partake in a supplemental outside of classroom journal club, 27 students indicated an ability to participate. Subsequently, the vast majority of 49 students indicated that they would be unable to participate in discussion outside of scheduled course curriculum due to prior work and personal commitments or scheduling discrepancies.

Student Survey Reports



**Figure 2:** Responses to a qualitative survey to gauge the effectiveness of interventions employed during the Biomedical Sciences Anatomy course.

- Overall, over 95% of students surveyed demonstrated a majority positive response to DEIJ implementation.
- Over 67% of students indicated interest in further conversation in the classroom and over half of students expressed a belief that it would directly impact their experiences as future health care providers.
- 38% of students indicated they learned novel information regarding current healthcare inequities that they were previously unaware of.

## Discussion

Based on prior research, the U.S. is one of the most diverse nations in the world which is further indicative of the similar diversity present amongst students in its academic institutions (Futrell, Gomez, Bedden, 2003). With this knowledge, it is crucial that diversity, equity, inclusion, and justice education be incorporated into early medical training and curriculum. Using an open forum discussion model for evaluative feedback, students indicated that DEIJ is a positive addition to their supplemental learning and valuable as future healthcare professionals.

**Limitations:** Although our work provided a basic framework for which exposure to DEIJ can be implemented in the classroom, there are additional variables to note.

- Implementation to Biomedical Sciences pre-health curriculum
- Time constraint during synchronous lecture activity
- Variation in individual prior student knowledge

**Future Directions:** More information and institutional research is needed in order to fully understand and implement the DEIJ agenda laid out here.

- The research and background information needed to implement a full DEIJ curriculum into medical education does not yet exist specifically for healthcare students at an osteopathic institution and needs to be explored further
- It would be significant to conduct further study and qualitative assessment to better understand the impact of DEIJ training on direct patient care outcomes

## Conclusions

- Implementation of actionable change intervention during scheduled course curriculum, as opposed to time allotted outside of course curriculum alone, allows for increased accessibility and equal opportunity for student participation
- Our work supports that incorporating DEIJ in course curriculum can positively supplement student learning in preparation for their role as future health care providers

## References

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