

Reducing Linguistic and Cultural Bias in Exam Items: A Capstone Project Promoting Inclusive Nursing Education

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Introduction

- An exam task force was developed in the Undergraduate (UG) nursing department at the University of North Dakota (UND) to ensure utilization of best practices in development, administration, and analysis of course exams for prelicensure nursing students preparing for the NCLEX® and professional nursing practice.
 - Exam policies and procedures were developed regarding item writing, test blueprinting, and item analysis.
 - Item writing procedures included recommendations to avoid linguistic, cultural, and/or gender-specific bias in exam items.
 - Faculty development was provided.
- Through faculty development activities, it became apparent that “bias” in a nursing exam item was not clearly defined or fully understood by many nursing faculty.

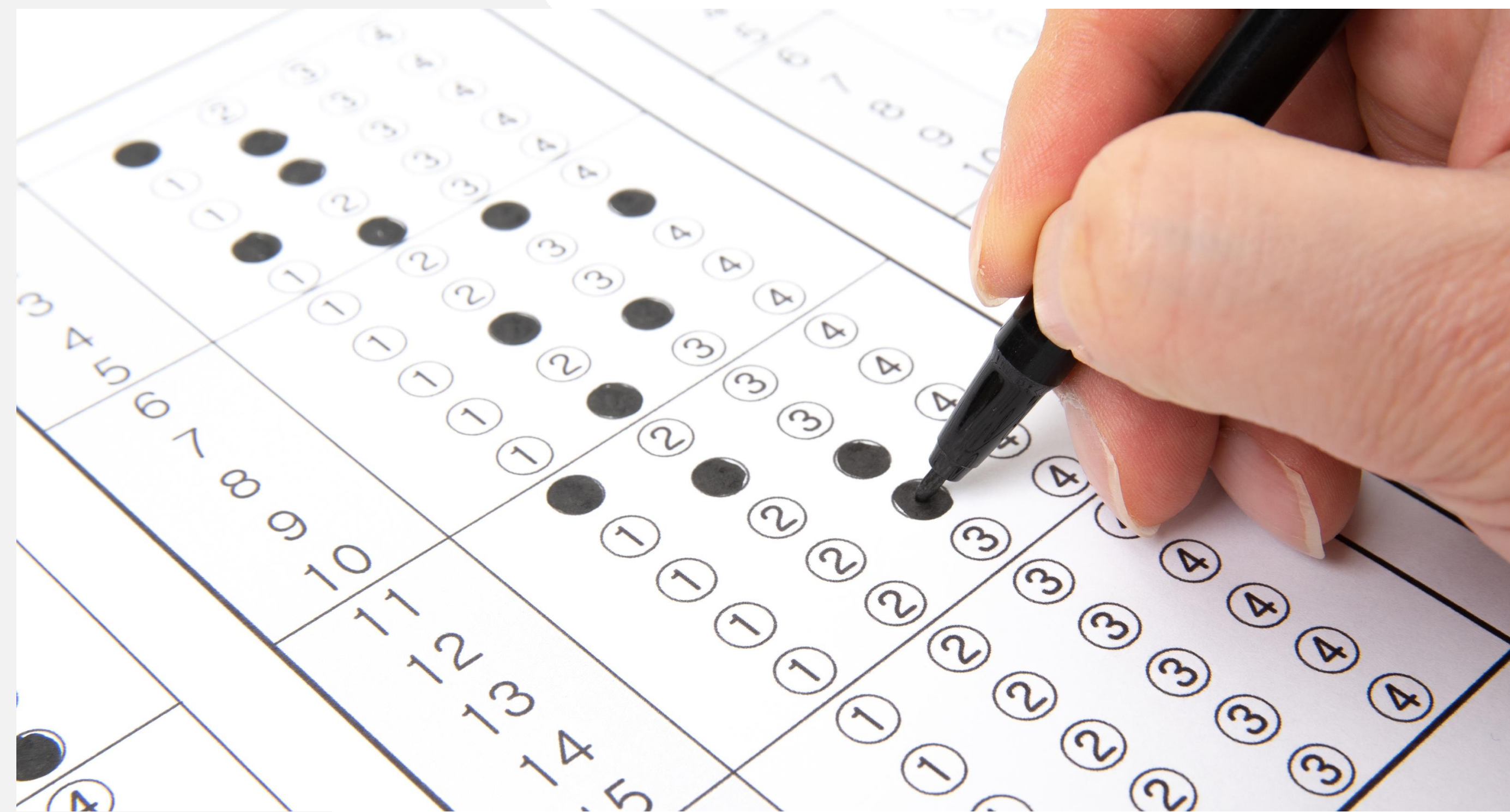
Purpose

- The purpose of this **Diversity Leadership Institute Capstone Project** is to reduce linguistic and cultural bias in nursing exam items in order to provide high quality, equitable, and inclusive nursing education.

Project Objectives

1. Develop evidence-based tools for faculty to use to help identify bias in nursing exam items.
2. Support faculty in developing awareness and understanding of cultural and linguistic bias.
3. Implement a process for peer review of exam items that incorporates reducing bias.
4. Establish an environment for collegial dialogue on recognizing and mitigating bias.

“Nursing faculty members have an obligation to ensure that course examinations are unbiased measures of learning for students in all cultural groups” (Hicks, 2011)



Implementation Plan



Develop: evidence-based faculty resources, peer review process



Deliver: presentations, trainings, workshops



Dialogue: awareness, engagement, discussion

Review of Literature

- NCLEX® items are analyzed for potential bias related to gender and ethnicity, language sensitivity, and readability.^{3, 5}
 - **“Free” of bias:**
 - Means students of the same ability have equal ability to answer an item correctly, providing equal opportunity for all students.^{2, 3, 6}
 - **Language bias:**
 - Defined as: “words or phrases that are considered prejudiced, offensive, and hurtful”.⁴
 - **Cultural bias:**
 - Includes items that are “unfair” or “insensitive” containing: *inappropriate terminology; stereotypes or generalizations; underlying assumptions; or ethnocentrism.*⁶
- **Linguistic modification of exam items:**^{1, 2, 3}
 - Improves understanding and comprehension,
 - Reduces complexity of the language but retains key content vocabulary and terms.
 - Increases validity, reliability, and rigor of exams.
 - Functions to “level the playing field” without giving unfair advantage.
- **Strategies to reduce language bias:**
 - *identifying standard terminology; creating a test review committee; and utilizing inclusive language in teaching strategies.*⁴

Conclusion

- Nursing faculty spend considerable time on writing exam items and need ongoing development.³
- Ethical implications exist when using poorly worded questions.^{1, 2, 3}
- Improving retention rates and increasing nursing school success rates will bring more diversity to the nursing workforce.^{1, 3}

References:

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4. Sommer, S., Beitzel, T., Osuri, P., & Rosfeld, E. (2019). Reducing language bias in nursing education: Equipping educators. *Teaching and Learning in Nursing*, 14(2019), 30-34. <https://doi.org/10.1016/j.teln.2018.09.002>
5. Woo, A. & Dragan, M. (2012). Ensuring validity of NCLEX® with differential item functioning analysis. *Journal of Nursing Regulation*, 2(4), 29-31.
6. Wendt, A., Kenny, L., & Riley, M. (2009). NCLEX® fairness and sensitivity review. *Nurse Educator*, 34(5), 228-231.

UND Land Acknowledgement Statement: Today, the University of North Dakota rests on the ancestral lands of the Pembina and Red Lake Bands of Ojibwe and the Dakota Oyate - presently existing as composite parts of the Red Lake, Turtle Mountain, White Earth Bands, and the Dakota Tribes of Minnesota and North Dakota. We acknowledge the people who resided here for generations and recognize that the spirit of the Ojibwe and Oyate people permeates this land. As a university community, we will continue to build upon our relations with the First Nations of the State of North Dakota - the Mandan, Hidatsa, and Arikara Nation, Sisseton-Wahpeton Oyate Nation, Spirit Lake Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa Indians.

