Effectiveness of Programming to Enhance Research Mentoring for Diverse Students

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MOTIVATION

Mentoring diverse students has become an important topic at colleges supporting equity, diversity, and inclusion (EDI), as the methods needed for effective interactions with this population could be different from traditional research students. At the University of Wisconsin - Eau Claire EDI is embedded in the 2025 Strategic Pan, creating a framework to enhance the efforts across the entire university. Since one of the pillars of the plan is to integrate undergraduate research, enhancing efforts in diversity mentoring was prioritized through new programming efforts.



Practices Across Campus
UWEC must continue to cultivate campus cultures where EDI is
Integrated into the everyday roles and responsibilities of every division,
department, unit, and program.
UWEC campuses must actively role model EDI.



Provide Support & Empower 10. Successful EDI efforts require infrastructure, resources, budget, time, i financial investment to support, sustain, and increase its impact throughout our campuses.

Excerpt from UWEC's EDI Strategic Plan 2025, Preliminary Report of Trends and Findings - September 4, 2020.

DEFINING EQUITY, DIVERSITY, AND INCLUSION

Equity – The assurance that every member of our community has equal access to the opportunities presented across our broad spectrum of offerings at UW-Eau Claire, including recruitment, hiring, enrollment, academic and non-academic programs, etc.

Diversity – The recognition and appreciation for all of the differences represented within our culture and environment – i.e. – the percentages of minority students in the student body. Inclusion – Characterized by intentionality. Intentional and ongoing efforts to ensure that individuals from diverse and targeted populations are fully able to participate in every aspect of the institution, including decision- making and leadership opportunities.



BACKGROUND

Past research pertaining to EDI research mentoring has studied the effectiveness of the training given to research mentors by measuring their awareness and understanding of EDI issues, and whether they implemented their learning into action in their research practices with research mentes (House et al, 2018; Johnson et al, 2021). In the research by Houe et. al. two four-hour training sessions, centered on six mentoring competency domains: maintaining effective communication, aligning expectations, assessing understanding, addressing diversity, fostering independence, and promoting professional development (Pfund et al., 2013). Over 1/3rd did not describe any change in behavior, almost 50% described an awareness of diversity issues, and 16% reported an implemented change in their behavior +to address diversity in their research mentoring relationships. In the research by Johnson et. al. the training was a twoday workshop and showed a more positive outcome. Respondents indicated that the workshop had lasting positive impact on their mentoring (92%), that they believe themselves to be a more effective mentor (91%), and to be more aware of the need for (82%) and more competent in (82%) addressing diversity, equity, and inclusion in their mentoring. Each of these studies showed some elevation in behaviors and attitudes towards mentoring diverse students. However, research has lacked in studying the effectiveness of EDI training for mentors based on the evaluations and feedback of their mentees.



PURPOSE

In our current study, we are researching the effectiveness of a summer pilot program, *EDI - Mentoring Diverse Students in Faculty/Student Callaborative Research Community of Practice.* It was created to help mentors improve their mentoring skills for diverse populations through readings, discussions, and reflections. This study looks at post-program implementations through surveys, and the effectiveness of the techniques presented, as measured by both the mentees and mentors. We hope that this research will offer insight into the effectiveness of the pilot program, showing the methods that may enhance mentee experiences and outcomes.

TRAINING MODULES

The online course, EDI - Mentoring Diverse Students in Faculty/Student Callaborative Research Community of Practice, was taken by 22 faculty members during the summer of 2021 over 2 months. 5 topics were covered, with each containing readings, videos, and/or examples, along with a discussion board for each topic. Additionally the cohort met via Zoom multiple times throughout the course to discuss the material in real-time

- Getting Started: How mentoring diverse student populations is different. Understanding the mentor mentee relationship. Setting expectations.
 Understanding intersectional identities of students and how identity impacts the research and
- Onderstanding intersectional identities of students and now identity impacts the research and mentoring experience
 Maintaining Effective Communication and Providing Feedback
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 Promoting Mentee Self-Efficacy: understanding imposter syndrome, social and emotional learning,
- supporting the whole student
- Promoting Professional Development & Understanding Institutional and Professional barriers

SURVEY QUESTIONS

Distinct surveys were created to be sent to mentors who participated in the pilot program Community of Practicum course (COP), UWEC research mentors who had not participated in the COP, and UWEC research mentees who worked with the aforementioned mentors. The surveys ask about both research experiences and outcomes, and was developed based on the five modules within the COP, pior research questions and other aspects of the research experience. The goal of the surveys is to analyze correlations between the mentee experience with mentors who did and idd not enroll in the COP course. A sample of the linked questions can be seen below.

Mentor	Mentee
I established and discussed their expectations prior to the start of research	My mentor established and discussed their expectations prior to the start of research
I guided my mentee through the research process	My mentor guided me through the research process
I talked to my mentees about non-research-related topics	I could talk to my mentor about non-research- related topics
I would work with my mentee again	I would work with my mentor again

RECRUITMENT DIFFICULTIES

One of the expectations for the faculty members who participated in this community of practice was that they would employ a student with diversity in order to implement the material learned within the course. A brief survey of the 22 faculty members only yielded 3 student researchers. This caused a re-evaluation of the research and what data could effectively be collected.

NEXT STEPS

Due to the limited numbers of diversity mentees currently performing research with the EDI trained mentors, data collection has been put on hold as the study is reworked to find an effective way to evaluate the effect of EDI programming. Various techniques could include all research students and see if the topics covered by the summer pilot program could be shown to effect all research students.

ACKNOWLEDGEMENTS

Funding for this research was provided for by the UWEC Diversity Mentoring Program.

CITATIONS

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