



Mindful Mentoring:

Student Perspectives on Undergraduate Research Mentoring Practices

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Project Background

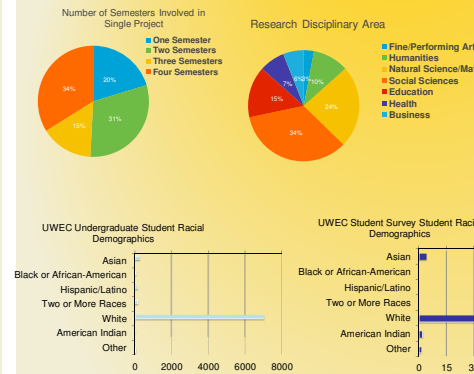
The Mindful Mentoring Project : Student Perspectives is a continuation of a study that focused on the **priorities** and **challenges** of UW-Eau Claire mentors. The previous survey asked mentors about their perceptions about the categories including project design, student recruitment, initial stages, continuing stages, final stages, and scholarly environment. The purpose of the current study was to understand mentoring in undergraduate research from the student's perspective by creating a survey designed to focus on mentoring and the role that the mentor plays regarding student outcomes in research and scholarly activity.

Survey Design

The Student Perspectives Survey was created as an effort to gain insight into student experiences in undergraduate research. Our survey was distributed to students who have received ORSP funding in the past 2 years. This survey focused on the student's evaluation of how their mentor impacted their growth as a student and as a researcher. Students were asked to complete a survey by providing information regarding the **most important qualities of a mentor**, **if their mentor exhibited these qualities**, and several multiple choice questions about **logistical aspects of their research project** as well as **demographic information**. Free response questions directed students to consider the **skills they acquired** as a result of their research or scholarly experience, their **attitudes towards research and scholarly activity**, and the ways in which their **mentor fostered an enriching experience**.

Overview of Results and Demographics

Demographics

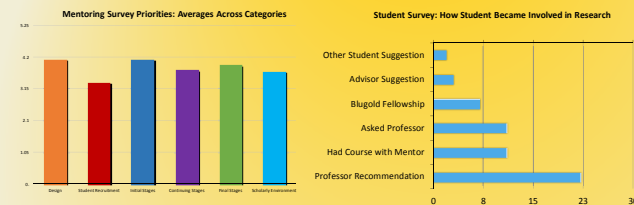


Overview

The results of this study illuminate student perspectives regarding the important characteristic and qualities of mentors. Students reported more **positive experiences** when describing mentoring qualities such as **empathy, communication skills, and organization**. Students described **negative experiences** if the mentor was **unavailable, lacked communication skills, and provided little guidance or support**. Skill development was another area where students indicated teaching and guidance as important to their research experience. Mentors, therefore, need to be aware that **teaching and guiding** are important considerations when working with student researchers, in addition to more personal characteristics. In regards to student demographics, it is important to consider the disciplinary area and the duration of student projects in order to understand the different experiences that students have with both research/scholarly activity and in developing a relationship with their mentor.

The upper left chart indicates the percentage of students participating in single or multiple semester projects. The upper right chart indicates the disciplinary area of student projects. Importantly, students tend to be involved in research over multiple semesters. The chart on the lower left is taken from the UWEC student demographics of undergraduate students. The chart on the right is from our data. There are similar patterns in regards to the amount of researchers responding to our survey match the overall population. Any concerns in regards to lack of diversity speak both to recruitment practices for research and for the university in general.

Results and Comparisons to Mentoring Survey Responses



Mentoring Priorities

The first graph on the left is from previous research detailing the average scores of mentoring priorities. Recruitment of student researchers was the least prioritized, indicating room for change with **more intentional recruitment practices**. The Design and Initial Stages were highly prioritized. The issue of recruitment is reflected in the student responses regarding how they became involved in undergraduate research.

Student Expectations

Students reported on the most desirable qualities of a mentor, the skills they developed as a result of their research/scholarly activity, and the impact that their mentor had on fostering the development of those skills. These chart on the left shows that the most important qualities for students were **empathy** and **logistical management** of the project. In the middle chart, the most important skills developed were **presentation of research, technical/computer aspects, data analysis, and reading research articles**. Mentors most frequently guided students and helped them develop independence when it came to the skills students gained. It is important to note that students often reported that their mentors helped with all aspects of development or that they played a critical role.



Conclusions and Future Considerations for Mentoring at UWEC

Changes at UWEC as a Result of Research on Undergraduate Mentoring

As of Spring 2015, several changes have been made as a result of the culmination of various research projects focusing on mentoring at UWEC. Focus groups aimed at faculty researchers seeking to improve their methods or who are interested in mentoring participate in focus groups to analyze their strengths and areas of improvement. A Mentoring Award, based on nominations and determined through evidence of best-practice was developed and will be presented following CERCA (Celebration of Excellence in Research and Creative Activity).

Similarity to ROLE (Research on Learning and Education) Survey

In spring of 2013 a study of UWEC undergraduates was conducted in order to provide information on student experiences within research. Both the ROLE survey (available on ORSP's website) and our Student Perspectives survey explored the relationship between students and research. The current study focuses on mentors and mentoring practices and the ways in which these factors impact students throughout the research process. Both the ROLE Survey and the Student Perspectives survey illustrate the importance of mentoring and how mentors help to facilitate positive (or negative) student outcomes.

Future Considerations:

The combined efforts of many individuals across disciplinary areas and organizations have culminated to provide a detailed look at Mentoring Practices at UWEC. It is important to continue to develop and evaluate mentoring resources and mentors themselves. Conducting research and scholarly activity is not unlike teaching, and it is important to apply best practices in teaching to mentoring. Although mentoring is a different responsibility and often creates a different relationship than teaching, it is still a professional endeavor that provides important benefits to faculty and students alike. These results, coupled with resources to foster a positive mentoring environment will help to support these practices in the future.

Acknowledgements

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