

PMC in Educational Statistics and Research Methods

Post-Master's Certificate (EDST)

The University of Arkansas Graduate Certificate program in educational statistics and research methods prepares graduates for conducting applied research in social science, behavioral science, and education-related fields. Completion of the certificate program is designed to strengthen professionals' quantitative research methods skills for the purposes of designing studies, analyzing and interpreting data, and critically evaluating other research studies. The primary learning goals of the EDST certificate program are centered around the identification of statistical procedures, analyses of data, critiquing research studies, and collaborating effectively with others.

An assessment of the effectiveness of the program would include students' ability to:

1. Identify appropriate research designs for research questions
2. Conducting statistical analyses for research hypotheses
3. Understand the strengths, weaknesses, and appropriateness of different statistical procedures
4. Critique statistical analyses completed by others
5. Submit research proposals or manuscripts to professional conferences and journals
6. Complete oral research presentations

In order to assess the effectiveness of the student training in the EDST graduate certificate program this year, we aggregated student data from research projects, professional conference presentations, journal articles, grant submissions, and academic or professional awards.

Assessment Information

Course-Based Data:

The quality of course-based research projects and components of take-home exams provided data for the learning outcomes of identifying appropriate designs, conducting statistical analyses, and identifying strengths, weaknesses, and appropriateness of statistical procedures. Student projects and take-home examinations have been averaged (i.e., their final grades) for coursework and were rated a 4 if they earned a mastery level of 90% or higher on their project, 3 for 80-89%, 2 for 70-79%, 1 for 60-69%, and a 0 for less than 60%.

From the university record system, two students completed the certificate in the 2019-2020 academic year. Three students switched to pursue STAN master's degree because they completed more courses than this certificate's requirements. At least a couple of students will get this certificate with their doctoral degrees by the end of this summer. Students informed ESRM faculty members that they would wait to apply for this certificate after they completed all required coursework because the EDST certificate requires continuous enrollment. If students did not take any EDST courses in a semester, the students' records would automatically change from active to in-active status. Therefore, they need to re-apply later when they finished coursework.