Agricultural Education, Communications, and Technology
AEED-MS Assessment Report 2018-19

1. **Contact Name:**
George Wardlow
(479) 575-2035
wardlow@uark.edu

2. **Department Mission**

AECT prepares people with the technical expertise in agricultural science and technology-related disciplines with the human science skills necessary to provide transformational leadership in the agricultural industry and within their local communities. Specifically, we prepare educators for both formal and non-formal teaching roles in agriculture, communications specialists for diverse agriculturally related disciplines, agricultural technology managers, and rural community leaders.

3. **AEED-MS Program Goals**

- Develop technology transfer specialists with strong communication skills and problem solving abilities who are prepared to serve diverse populations.
- Stimulate intellectual capacity in students for integrating multi-disciplinary knowledge, technology and values.
- Enhance the leadership skills of future professionals in agriculture, food and natural resource careers.
- Produce graduates with broad technical skills in agricultural science and technology.

Key Expected Outcomes for Graduate Students, 2018-19

Assessment efforts in 2018-19 focused on student's critical thinking skills related to technical agriculture and technology transfer delivery systems, with a special emphasis on graduate students' thesis research.

Student Learning Outcome 1. Students will apply critical thinking skills related to technical agriculture and technology transfer delivery systems.

Assessment Measure 1

- Master's student theses and oral exams will be evaluated for evidence of the application of critical thinking to develop an approach to solving a specific research problem.

Acceptable and Ideal Targets (not required for indirect measures)

- Minimum score for passing is 60 out of 100 possible points
- Acceptable target: 70% of AEEDMS students pass thesis defense
- Ideal target: 100% of AEEDMS students score 70 or above on thesis defense

Key Personnel (who is responsible for the assessment of this measure)

- AECT Graduate faculty (Wardlow, Graham, Johnson, Shoulders, Miller, Rucker, and Cox)

Summary of Findings.
A thesis defense rubric (attached) was applied for the first time this year and was used to evaluate student theses individually as well as in the aggregate. One hundred percent of students' theses earned a score (according to the rubric in Appendix A) higher than 70%. This meets the ideal target for the outcome. According to the scores, areas for improvement in thesis

research include more clearly defining research problems and questions, identifying research assumptions and limitations, and, connecting conclusions and recommendations to previous research and theory.

Recommendations (not required for indirect measures)
This rubric will be further refined as its usefulness is evaluated over the coming year. Areas for improvement, which can be addressed by individual advisors as well as in the department's thesis development seminars and the department's research methods course, include improving students' abilities to clearly articulate research problems and questions/objectives, helping them understand the assumptions and limitations of their research approach, and helping them understand how to better tie their research conclusions and recommendations back to existing literature and theory.

Action Plan
All thesis advisors will make the identified areas for improvement priorities in their discussions with their thesis track students in the coming year. These areas for improvement will also become points of emphasis in the AGED 5001 thesis development seminars (taught by Jeff Miller) as well as in AGED 5463, Research Methodology in the Social Sciences (taught by Kate Shoulders).

Supporting Attachments

- Appendix A: AECT Thesis rubrics

Appendix A
AECT Master's Thesis Project Rubric

Research Project Grading Rubric Name_____

Title is appropriately representative of project	_____ 3 pts
Chapter 1: Introduction	
Need for the Study (brief, use lit. and/or cite problem in the field)	_____ 3 pts
Statement of the Problem	_____ 3 pts
Overview of Literature	_____ 2 pts
Significance of the Problem	_____ 2 pts
Research Questions (or Objectives or Hypotheses)	_____ 3 pts
Assumptions (which underlie the problem)	_____ 2 pts
Limitations (here or chapter 3)	_____ 2 pts
Chapter 2: Theoretical Framework	
Background of the Problem (from the related literature)	_____ 3 pts
Presentation of the Literature (to address the research questions)	_____ 5 pts
Conclusions from the Literature	_____ 3 pts
Chapter 3: Methods	
Statement of the Problem (same as Chapter 1)	_____ xx
Purpose of the Study	_____ 3 pts
Research Questions / Objectives / Hypotheses (if applicable)	_____ 2 pts
Design of the Study – explained / illustrated	_____ 3 pts
Subjects	_____ xx
Subject Selection	_____ 3 pts
Population / Sample	_____ 3 pts
Sampling Procedure/process	_____ 3 pts
Instrumentation	_____ xx
Instrument Development -- explained	_____ 3 pts
Instrument Validity – how established?	_____ 3 pts
Instrument Reliability – how established?	_____ 3 pts
Treatments (if experimental; or variations among subjects)	_____ 3 pts
Conditions of Testing (if experimental; or variations among subjects)	_____ 2 pts
Procedures for Data Collection	_____ 3 pts
Analysis Plans	_____ 2 pts
Chapter 4: Analyses / Findings	
Analyses are appropriate to the study	_____ 3 pts
Analyses match the purpose/objectives	_____ 3 pts
Analyses are detailed and well-presented	_____ 3 pts
Are the findings appropriately interpreted	_____3 pts
Chapter 5: Conclusions / Discussion / Recommendations	
Summary of the findings	_____ 3 pts
Are relevant to the purpose/objectives	_____ 3 pts
Appropriately uses knowledge base / literature to interpret findings	_____ 3 pts
Ties everything together	_____ 3 pts
Identifies strengths and weaknesses of the study	_____ 3 pts
Includes implications for practice	_____ 3 pts
Provides direction for future research	_____ 3 pts

General comments:

Overall Score: _____ 100 pts