Agricultural Education, Communications, and Technology AEED-MS Assessment Report 2017

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, 2017

- 1. Students will apply critical thinking skills related to technical agriculture and technology transfer delivery systems.
- 2. Students will demonstrate advanced problem solving skills in a supporting area of agriculture, education, technology or communications.
- 3. Students will demonstrate written and oral communications skills.
- 4. Students will explain discipline-specific foundational philosophies and principles that undergird formal and non-formal educational delivery systems in agriculture, and develop their own personal philosophy of education.

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

A. 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.
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- B. 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
- Scoring rubrics for Master's thesis defenses are under development
- C. Key Personnel (who is responsible for the assessment of this measure)
 - AECT Graduate faculty

D. Summary of Findings.

A thesis defense rubric (attached) was developed for future use starting in the 2018 academic year.

E. Recommendations (<u>not required</u> for indirect measures) This rubric will be further refined as its usefulness is evaluated over the coming year.

Student Learning Outcome 2. Students will demonstrate advanced problem solving skills in a supporting area of agriculture, education, technology or communications.

A. Assessment measure 1.

- Master's student theses and oral exams will be evaluated for expertise in problem solving related to a specific research problem.
- B. Acceptable and Ideal Targets (not required for indirect measures)
 - Minimum score for passing is 60 out of 100 possible points
 - Acceptable target: 70% of AEDMS students pass thesis defense
 - Ideal target: 100% of AEEDMS students score 70 or above on thesis defense
 - Scoring rubrics for Master's thesis defenses are under development
- C. Key Personnel (who is responsible for the assessment of this measure)
 - AECT Graduate faculty

D. Summary of Findings

An assessment device was developed and tested for graduate thesis defenses.

E. Recommendations (not required for indirect measures)

A detailed rubric with a clearly defined evaluation and scoring system, which will include assessment of critical thinking skills, has been developed and will be implemented in 2018.

5. Action Plan

Action for Outcomes 1 and 2: A more detailed thesis/special problem defense assessment rubric that includes methods to assess students' oral and written communications skills, critical thinking skills, and problem solving skills has been developed and will undergo further modification as the department integrates it into the thesis and oral exam process.

6. Supporting Attachments

• Appendix A: AECT Thesis and Special Problem Written/Oral exam Rubric

AECT-MS Thesis and Special Problem Rubric

Student _____ Chapter 1: Introduction Need for the Study (brief, use lit. and/or cite problem in the field) ____ /5 ____/2 Statement of the Problem **Overview of Literature** ____/2 ____/2 Significance of the Problem ____/5 Research Questions (or Objectives or Hypotheses) ____/2 Assumptions (which underlie the problem) Limitations (here or chapter 3) /2 **Chapter 2: Theoretical Framework** Background of the Problem (from the related literature) /2 Presentation of the Literature (to address the research questions) **Conceptual and Theoretical Frameworks** ____/5 Conclusions from the Literature /2 Chapter 3: Methods Statement of the Problem /2 ____/2 Purpose of the Study ____/2 Research Questions / Objectives / Hypotheses (if applicable) Design of the Study ____/2 ____/2 Subjects ____/2 Subject Selection Population / Sample ____/2 ____/2 Sampling Procedure Instrumentation ____/2 ____/2 Instrument Development ____/2 Instrument Validity ____/2 Instrument Reliability ____/2 Treatments (if experimental) ____/2 Conditions of Testing (if experimental) ____/2 Procedures for Data Collection **Analysis Plans** /2 Chapter 4: Analyses / Findings Is it appropriate to the study ____/2 Are data visuals (tables and figures displayed properly) ____/2 ____/5 Does it match the purpose/objectives It is detailed and well-presented ____/2 ____/5 Are the findings appropriately interpreted Chapter 5: Conclusions / Discussion / Recommendations Summary of the findings ____/2 Is relevant to the purpose/objectives ____/5 ____/2 Appropriately uses knowledge base / literature to interpret findings ____/2 Ties everything together ____/2 Identifies strengths and weaknesses of the study ____/5 Includes implications for practice Provides direction for future research /5

General comments:

Overall Score:

____/100