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AGRICULTURAL EDUCATION COMPETENCIES: A COMPARISON OF MASTER'S STUDENTS AT TEXAS TECH AND TEXAS A&M UNIVERSITIES

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Abstract

This study was designed to describe Texas Tech and Texas A&M universities agricultural education master's students' perceived competencies. A survey of active and continuously enrolled master's students was conducted. A 60% response rate was achieved. Data for the study were collected by mailed and online questionnaires. Study findings showed that students at both institutions had similar levels of competencies. Students had highest levels of theories, techniques, and processes that enhance the teacher-learner process for adults and youth; content skills such as reading comprehension and mathematics that provide a foundation for the acquisition of more specific skills; communication abilities such as oral comprehension, written expression, speech clarity, and auditory attention that are needed to focus attention and deliver information and communicate effectively. Students had lowest levels of theories, principles, and practices related to agricultural development in cross-national settings; technical skills such as technology design and operations analysis that are needed to use information technologies effectively; and perceptual, spatial, and memory abilities, such as speed and flexibility of closure, visualization, and recollection, that are needed to identify and make sense of complexly related material and systems. Recommendations include increased professional conversations about our philosophical basis, knowledge bases, and contextual applications.

Introduction

Trends in academic, social, and business environments are reshaping degree programs around the world. Universities are responding by reconstituting curricula, courses, and programs to help students acquire competencies needed to be professionally successful. Students are challenging faculty and administrators to deliver curricula, courses, and programs that are up-to-date, inline with industry standards, socially responsive, and pragmatic. In response to these issues, many colleges of agriculture and departments of agricultural education have developed extensive lists of generic student competencies (California State Polytechnic University, 2001, University of Arizona, 2001; Allewelt, 1995). Little research however has focused on measuring students' level of competence identified in these lists.

A successful agricultural education student and graduate will draw on a variety of academic fields, knowledge bases, and contextual applications to achieve his or her personal and professional goals. Further, he or she will rely on a unique bundle of knowledge, skills, and abilities that are acquired and strengthened through life experiences and education to achieve his or her personal and professional goals. For master's students, graduate school is an opportunity not only to gain new knowledge, but also to acquire and strengthen skills and abilities needed to be professionally successful. Knowledge is a body of information, supported by professionally acceptable theory and research that students use to perform effectively and successfully in a given setting. Skill is a present, observable competence to perform a learned psychomotor act. Effective performance of skills requires application of related knowledge and facilitates acquisition of new knowledge acquisition. Ability is a present competence to perform an observable behavior or a behavior that results in observable outcomes. Collectively,

knowledge, skills, and abilities are referred to as competencies. Competencies are behavioral dimensions that help to identify effective from ineffective performance (Maxine, 1997).

Theoretical Framework

In agricultural education, numerous studies have been conducted to look at specific student competencies within specific contexts. Place and Jacobs (2001) found that Extension employees needed resource management competencies such as time management, workplace management, and stress management to be effective. McCormick and Whittington (2000) found that students needed well-developed abilities to think critically at higher levels of cognition. Dyer and Osborne (1996) found that problem-solving skills were needed and could be taught to agricultural education students. Goecker (1992) stated that agricultural education graduate students needed, but did not possess, very high levels of teaching and learning competencies to be effective and productive professionals. It has also been shown that international graduate students have particular challenges with respect to communication and social competencies (Timko, Linhardt, & Stewart, 1991). Henderson and Shibano (1990) found that international graduate students showed the highest levels of knowledge acquisition in teacher education preparation, research methods and techniques, and program development. Other studies have been conducted to look at learner competencies of various audiences, including undergraduate students (Baker, Rudd, & Pomeroy, 2001); high school teachers (Lockaby, Hogg, & Baker, 2001); Extension audiences (Baker, Rudd, & Pomeroy, 2000); Extension professionals (Baker, Hoover, & Rudd, 1998); and university faculty (Baker, Hoover, & Rudd, 1996).

Fewer studies have focused on the compilation of knowledge, skills, and abilities that influence student success (Garton, Spain, Lamberson, & Spiers, 1999). Drawbaugh (1972) noted that students must be made aware of their unique competencies and subsequently should be provided opportunities for growth as they progress in their education. Newcomb (1974) noted that numerous lists of competencies in agricultural education exist, but little is known about which competencies are related to success. For example, Shippy (1981) identified 246 competencies in 10 categories needed by agricultural education graduates including program planning, development, and evaluation; planning of instruction; execution of instruction; evaluation of instruction; student vocational organization; supervised occupational experience; management; guidance; school-community relations; and professional role and development. Other studies have focused on a compilation of competencies needed by agricultural teachers to be successful (Stewart, Lighari, & Gott, 1983).

Findlay (1992) found that agricultural education teachers acquired high levels of competencies through formal education, on-the-job experience, and self-directed study. Lower levels of competency acquisition were achieved through teaching-internships and laboratory experiences. Low levels of student knowledge, skills, and abilities may result in frustration, demotivation, impeded learning, and ultimately failure for students (Lindner, Dooley, & Murphy, 2001). Further, faculty may similarly become frustrated in developing and delivering course material if they are challenged by students who do not possess the requisite competencies to master course material; conversely, faculty may be able to use this information to improve curricula, teaching materials, and instructional delivery methods.

Lindner and Dooley (2002) developed and tested an Agricultural Education Competency Model for doctoral students. In this model, they identified 83 competencies, classified them as 18 subcategories, and documented changes in doctoral students' levels of competence as they progressed toward a degree. These authors further found that doctoral students had the highest levels of teaching strategies knowledge and lowest levels of international knowledge; highest levels of social skills and lowest levels of technical skills; and highest levels of verbal abilities and lowest levels of perceptual abilities.

Identifying competencies associated with higher levels of performance or goal attainment is known as competency modeling (Stone, 1997). For competency models to be effective, and because competencies can be influenced by a student's personality type, learning style, social style, and/or personal styles and values, competency models must be broad enough to allow for students to offset weaknesses on certain competencies with strengths on others (Parry, 1998). Competency models can be used as a student recruitment and selection tool; as a student assessment and development tool; as a tool to develop curricula and other teaching material; as a coaching, counseling, and mentoring tool; as a career development tool; and as a behavioral requirement benchmarking tool (Yeung, Woolcock, & Sullivan, 1996).

Many models and methods can be used for collecting the information necessary to establish a competency model. The competency model used in this research was based on Lindner and Dooley's (2001) Agricultural Education Taxonomy. This model has been shown to be a valid and reliable model for collecting data on agricultural education competencies (Lindner & Dooley, 2002; Lindner, Dooley, & Murphy, 2001). The knowledge category of their original model was based on a census of graduate course offerings at Texas A&M University and Texas Tech University. The use of a standard inventory of graduate courses to measure knowledge would be specific to each institution and content area. Lindner and Dooley's (2001) skill and ability competencies were originally based on the United States Department of Labor's Occupational Information Network taxonomy (O*Net, 2001).

As noted previously, various competencies needed by agricultural education graduates to be professionally successful in a given field have been identified in the literature. Further, master's students rely on a unique bundle of knowledge, skills, and abilities to be successful in the classroom and life. Little research, however, has focused on the compilation of unique competencies possessed by agricultural education master's students, and which competencies are related to successful completion of a master's program of study. Such information can help students identify and understand their unique competencies that will help them be successful, and subsequently use this understanding to develop opportunities for personal growth and development. An understanding of a student's unique competencies can help faculty develop individualized learning sequences and plans.

Purpose

The purpose of this study was to describe and explore perceived knowledge, skills, and abilities of current Agricultural Education master's students at Texas Tech University and Texas A&M University. This study further attempts to gather baseline data that can later be compared with successful and unsuccessful master's students to gain additional insight between specific levels competence and attainment of a master's degree. The objectives of the study were to: 1) describe and explore perceived knowledge and examine competencies by institution; 2) describe and explore perceived ability and examine competencies by institution; and 3) describe and explore perceived skill and examine competencies by institution.

Methods

The research design used for this study was descriptive and exploratory in nature. The target population was Texas Tech University's Department of Agricultural Education and Communications and Texas A&M University's Department of Agricultural Education master's students. There were 69 master's students in the population. The population consisted of 24 Texas Tech students and 45 Texas A&M students who were actively and continuously enrolled in a master's program. Students had progressed to various levels in the respective programs, from first semester enrolled in courses to last semester enrolled in courses.

The instrument was based on Lindner and Dooley's (2001) Agricultural Education Competency Taxonomy and was designed to measure participants' perceptions of behavioral dimensions used to assess knowledge, skills, and abilities. The instrument has been shown to be a valid and reliable model for collecting data on agricultural education graduate student knowledge, skills, and abilities (Lindner & Dooley, 2002; Lindner, Dooley, & Murphy, 2001). Additional evidence of instrument reliability was estimated by calculating a Cronbach's alpha coefficient on the final sample. Reliability for the scales on knowledge (.84), skills (.92), and abilities (.92) were calculated. Reliability estimates for corresponding subcategories are presented in Tables 1, 2, and 3. The alpha level for statistical significance was set a priori at .05.

Participants were asked to indicate their current level of competence in each dimension using a five-point Likert-type scale. The points on the scale are as follows: 1=Very Low; 2=Low; 3=Average; 4=High; and 5=Very High. A limitation of this study is that competencies are self-reported perceptions and not a test measurement of the variables themselves. Data for this study were collected using a mixed mailed/Internet questionnaire. Dillman's (2000) general procedures for mailed/Internet questionnaires were followed. A response rate of 67% (N=46) was obtained for the study. Seventy-five percent of Texas Tech students and 62% of Texas A&M students participated in the study. To control for non-response error, primary variables of interest were regressed on the variable "days to respond." No relationship between "days to respond" and primary variables of interest were found; therefore, the results of the study were generalizable to the target population (Lindner, Murphy, & Briers, 2001).

Findings

Objective 1

The first objective of this study was to describe and explore perceived knowledge and examine competencies by institution. Participants were asked what level of knowledge they possessed on 15 items. Knowledge items were classified into four subcategories. Mean scores of subcategories were computed. Teaching Strategies Knowledge was defined as theories, techniques, and processes that enhance the teacher-learner process for adults and youth. This dimension included statements on learning theories, youth leadership, adult education and your guidance and counseling. The learning theories statement, for example, was described as "learning theories, techniques, and procedures to enhance the teaching-learning process; methods to evaluate learning." The Agricultural Education Competency Taxonomy, on which this study was based, describes each statement in detail (Lindner & Dooley, 2001). Applications Knowledge was defined as current trends, practices, and applications that facilitate change and technology transfer. This dimension included statements on history and philosophy, research theory, research methods, and policy development. Foundations Knowledge was defined as methods, theories, principles, and practices that provide a foundation for and guide the field of agricultural education. This dimension included statements on distance education, technology transfer, contemporary issues, and technology application. International Knowledge was defined as theories, principles, and practices related to agricultural development in cross-national settings. This dimension included statements on international agricultural advising, international project management, and international agricultural development.

Table 1 shows participants' levels of Overall Knowledge (M=2.83), Teaching Strategies Knowledge (M=3.01), Applications Knowledge (M=2.88), Foundations Knowledge (M=2.81), and International Knowledge (M=2.27). When subjected to a t-test, Overall, t (44)=0.97, p>.05, Teaching Strategies, t (44)=1.80, p>.05, Applications, t (44)=0.85, p>.05, Foundations, t (44)=1.20, p>.05, and International knowledge, t (44)=0.90, p>.05, were not significantly related to institution.

Table 1
Master's Student Perceived Level of Knowledge by Institution

Institution	Alpha[a]	*N*	*M*[b]	*SD*	*t*[c]
Overall Knowledge	**.84**	**46**	**2.83**	**0.51**	
Texas Tech University		18	2.92	0.46	.97
Texas A&M University		28	2.77	0.54	
Teaching Strategies Knowledge	**.65**	**46**	**3.01**	**0.65**	
Texas Tech University		18	3.22	0.49	1.80
Texas A&M University		28	2.88	0.72	
Applications Knowledge	**.57**	**46**	**2.88**	**0.58**	
Texas Tech University		18	2.97	0.51	.85
Texas A&M University		28	2.82	0.63	
Foundations Knowledge	**.77**	**46**	**2.81**	**0.67**	
Texas Tech University		18	2.96	0.63	1.20
Texas A&M University		28	2.71	0.68	
International Knowledge	**.84**	**46**	**2.27**	**0.84**	
Texas Tech University		18	2.13	0.80	.90
Texas A&M University		28	2.36	0.87	

Note. [a]Overall and subscale reliability was estimated by calculating a Cronbach's alpha coefficient; [b]1=Very Low, 2=Low, 3=Average, 4=High, 5=Very High; [c]$p>.05$

Objective 2

The second objective of this study was to describe and explore perceived ability and examine competencies by institution. Participants were asked what level of ability they possessed on 16 items. Ability items were classified into four subcategories. Mean scores for subcategories were computed. Communication abilities, such as oral comprehension, written expression, speech clarity, and written expression, are needed to focus attention and deliver information and communicate effectively. Idea Generation and Reasoning Abilities, such as inductive reasoning, deductive reasoning, fluency of ideas, and information ordering are needed to formulate logical conclusions. Attentiveness and Quantitative Abilities, such as time-sharing, number facility, arithmetic reasoning, and originality are needed to handle multiple tasks, concentrate on single tasks, and use mathematical methods to solve problems. Perception, Spatial, and Memory Abilities, such as speed of closure, flexibility of closure, visualization, recollection, are needed to identify and make sense of complexly related material and systems.

Table 2 shows participants' levels of Overall Ability (M=3.56), Communication Abilities (M =3.77), Idea Generation and Reasoning Abilities (M =3.58), Attentiveness and Quantitative Abilities (M =3.57), and Perceptual, Spatial, and Memory Abilities (M =3.15). When subjected to a t-Test, Overall, t (44)=1.85, $p>.05$, Communication, t (44)=1.07, $p>.05$, Idea Generation and Reasoning, t (44)=1.96, $p>.05$, Attentiveness and Quantitative, t (44)=-1.46, $p>.05$, and Perceptual, Spatial, and Memory abilities, t (44)=1.71, $p>.05$ were not significantly related to institution.

Table 2
Master's Student Perceived Level of Ability by Institution

Institution	Alpha[a]	*N*	*M*[b]	*SD*	*t*[c]
Overall Ability	**.92**	**46**	**3.56**	**.58**	
Texas Tech University		18	3.37	.67	1.85
Texas A&M University		28	3.68	.48	
Communication Abilities	**.81**	**46**	**3.77**	**.72**	1.07
Texas Tech University		18	3.63	.86	
Texas A&M University		28	3.86	.62	
Idea Generation & Reasoning Abilities	**.83**	**46**	**3.58**	**.67**	1.96
Texas Tech University		18	3.35	.71	
Texas A&M University		28	3.73	.61	
Attentiveness & Quantitative Abilities	**.64**	**46**	**3.57**	**.68**	1.46
Texas Tech University		18	3.39	.76	
Texas A&M University		28	3.69	.62	
Perceptual, Spatial, & Memory Abilities	**.84**	**46**	**3.15**	**.74**	1.71
Texas Tech University		18	2.92	.73	
Texas A&M University		28	3.29	.71	

Note. [a]Overall and subscale reliability was estimated by calculating a Cronbach's alpha coefficient; [B]1=Very Low, 2=Low, 3=Average, 4=High, 5=Very High; [c]$p>.05$

Objective 3

The third objective of this study was to describe and explore perceived skill and examine competencies by institution. Participants were asked what level of skill they possessed on 28 items. Skill items were classified into seven subcategories. Mean scores of subcategories were computed. Content Skills, such as reading comprehension, active listening, speaking, and writing, provide a foundation for the acquisition of more specific skills. Process Skills, such as critical thinking, active learning, learning strategies, and monitoring contribute to increased acquisition of additional competencies. Social Skills, such as persuasion, social perceptiveness, coordination, and negotiation are developed capacities that help individuals achieve objectives. Resource Management Skills, such, as time management, management of material resources, management of personnel resources, and management of financial resources, are needed to effectively and efficiently allocate resources. Complex Problem-Solving Skills, such as information organization, implementation planning, idea generation, and idea evaluation, are necessary to solve real-world problems. Systems Skills, such as identification of key causes, systems perception, identifying downstream consequences, and systems evaluation, are needed to for people to work with others. Technical Skills, such as installation, testing, equipment maintenance, and repairing are needed to use information technologies effectively.

Table 3 shows participants' levels of Overall Skill (M=3.37), Content Skills (M =3.79), Process Skills (M =3.54), Social Skills (M =3.53), Resource Management Skills (M =3.51), Complex Problem-Solving Skills (M =3.35), Systems Skills (M =3.07), and Technical Skills (M =2.60). When subjected to a t-test, Overall, t (44)=0.27, $p>.05$, Content, t (44)=0.11, $p>.05$, Process, t (44)=0.36, $p>.05$, Social, t (44)=0.04, $p>.05$, Resource Management, t (44)=0.22, $p>.05$, Complex Problem, t (44)=0.41, $p>.05$, Systems, t (44)=1.40, $p>.05$, and

Technical skills, t (44)=0.47, p>.05 were not significantly related to institution.

Table 3
Master's Student Perceived Level of Skill by Institution

Institution	Alpha[a]	*N*	*M*[b]	*SD*	*t*[c]
Overall Skill	**.92**	**46**	**3.37**	**.48**	
Texas Tech University		18	3.35	.56	0.27
Texas A&M University		28	3.38	.43	
Content Skills	**.71**	**46**	**3.79**	**.59**	
Texas Tech University		18	3.81	.74	.11
Texas A&M University		28	3.79	.49	
Process Skills	**.66**	**46**	**3.54**	**.53**	
Texas Tech University		18	3.51	.60	.36
Texas A&M University		28	3.57	.49	
Social Skills	**.76**	**46**	**3.53**	**.61**	
Texas Tech University		18	3.53	.73	.04
Texas A&M University		28	3.54	.53	
Resource Management Skills	**.85**	**46**	**3.51**	**.74**	
Texas Tech University		18	3.54	.73	.22
Texas A&M University		28	3.49	.76	
Complex Problem-Solving Skills	**.75**	**46**	**3.35**	**.56**	
Texas Tech University		18	3.31	.64	.41
Texas A&M University		28	3.38	.51	
Systems Skills	**.82**	**46**	**3.07**	**.60**	
Texas Tech University		18	2.92	.62	1.40
Texas A&M University		28	3.17	.59	
Technical Skills	**.96**	**46**	**2.60**	**1.11**	
Texas Tech University		18	2.69	1.15	.47
Texas A&M University		28	2.54	1.10	

Note: [a]Overall and subscale reliability was estimated by calculating a Cronbach's alpha coefficient; [b]1=Very Low, 2=Low, 3=Average, 4=High, 5=Very High; [c]p>.05

Conclusions, Implications, and Discussion

Conclusion and Implication 1

Of the four knowledge categories used in this study, master's students had the highest levels of competency in the acquisition and development in theories, techniques, and processes that enhance the teacher-learner process for adults and youth as they progressed toward a degree (Teaching Strategies Knowledge). These findings, unlike those of Lindner and Dooley (2002), showed that master's students perceived their teaching and learning competencies to be average. These findings support Goecker (1992), who found graduate students did not possess very high levels of teaching and learning competencies. Findlay's (1992) findings would suggest that such competencies more likely would be acquired through a combination of previous degree programs, experiences, and self-directed study.

More research, however, is needed to

explore these relationships and to determine whether perceived levels of knowledge meet minimally acceptable standards for master's students. Longitudinal comparisons with students completing and not completing a master's degree, and with professionally successful and unsuccessful graduates, is needed to gain additional insights into specific levels of competence needed to complete a master's degree and be professionally successful. For example, knowledge of computers and information technology (Applications Knowledge) is critical to the completion of a master's program and is necessary for one to be professionally successful. Lower levels of Applications Knowledge may result in frustration, demotivation, impeded learning, and ultimately failure for students. Faculty may similarly become frustrated in the development and delivery of course material if they are challenged by students who do not possess the requisite knowledge to master course material; or faculty may be able to use this information to improve curricula, teaching materials, and instructional delivery methods.

Participants in this study perceived that their lowest levels were of International Knowledge. This finding supports Lindner and Dooley (2002), who found doctoral students perceived that they had low levels of International Knowledge. An implication exists that low levels of knowledge related to theory of agricultural development in cross-national settings (International Knowledge) may cause negative consequences for master's students engaged in international agricultural development.

Conclusion and Implication 2

Of the four ability-categories used in this study, participants had the highest perceived levels of oral comprehension, written expression, speech clarity, and auditory attention needed to focus attention and deliver information and communicate effectively (Communication Abilities) and lowest perceived levels of time-sharing, number facility, and arithmetic reasoning needed to handle multiple tasks, concentrate on single tasks, and use mathematical methods to solve problems (Attentiveness and Quantitative Abilities). Again, the problems and opportunities discussed in the first two conclusions apply here, and little is known about acceptable ability standards for success in a master's program.

For example, students need well-developed abilities, such as perceptual abilities, to think critically at higher levels of cognition (McCormick, & Whittington, 2000). Participants in this study perceived their perceptual abilities as average. Perceptual Abilities, however, was the lowest rated ability category. Whether students with higher Perceptual Abilities are more likely to be successful in a master's program is not known. More research is needed to explore these relationships.

Conclusion and Implication 3

Of the seven skills categories used in this study, participants had highest perceived levels of persuasion and social perceptiveness needed to help students achieve objectives (Social Skills), and lowest perceived levels of technology design and operations analysis needed to use information technologies effectively (Technical Skills). As educational and informational technologies expand, students will need to learn and apply such technologies not only in the classroom, but also in the field to be successful. Many faculty, including these authors, provide students with technology assistance as needed to complete assignments. A need exists to ensure master's students have strong technical skills. This can be accomplished by developing curricula, courses, modules, and programs with the specific objective of helping agricultural education graduate student attain higher levels of technical skills. Or, this can be accomplished by recruiting graduate students with stronger technical skills.

Minimally acceptable skill standards for success in a master's program are not known, and the problems and opportunities listed above also apply here. For example, will international students who have been shown to have lower levels of social skills than domestic students (Timko, Linhardt, & Steward, 1991) be disadvantaged in completing a master's program? Or, will international students rely on different competences to perform an observable

behavior in order to be successful? If higher levels of social skills are necessary for one to complete a master's program, then international students are at a distinct disadvantage for completion. More research is needed to explore these relationships.

Discussion

These results address the need, as described by Garton, et al. (1999), Newcomb (1974), and Drawbaugh (1972), for information with respect to identifying and understanding agricultural education student competencies. Study findings showed that agricultural education master's students at Texas Tech University and Texas A&M University had similar levels of competencies. The results further build upon Lindner and Dooley's (2002) findings that showed as doctoral students progressed toward a degree, they acquired and strengthened unique bundles of competencies. Study findings suggest that master's students have lower levels of knowledge, skills, and abilities than doctoral students, as described by Lindner and Dooley (2002).

As noted earlier, a limitation of self-administered rating scales, such as the one used for this study, is that they measure perceptions of the person making the judgment. Additional research is needed to verify the validity of such judgments. Further, replication of this study with other student populations is needed to evaluate the extent to which the results presented here would be similar and recommendations applicable. One procedure for gathering these data would be to conduct authentic assessments of student competencies through testing, faculty assessment, peer assessment, or other forms of external assessment. This procedure would result in larger samples of ratings, which may lead to higher reliability.

Longitudinal research is needed to verify these results as new students join the program, and as students achieve or fail to achieve success. It would be useful also to correlate these findings with quantitative, verbal, and analytical scores from the Graduate Record Exam. Master's students can use these results to help identify and understand their unique bundles of knowledge, skill, and abilities that will help them achieve success, and can use these results to develop opportunities for competency acquisition and growth (Drawbaugh, 1972). Faculty members can use these results now in limited and expanded capacities to take advantage of a student's unique bundle of knowledge, skill, and abilities. Faculty can create individual learning plans for students by authenticating these results. We have used this approach to help students use strengths on certain competencies to overcome weaknesses in others. Authentication of these results by faculty can also provide direction in development, refinement of courses, and curricula.

The findings of this study provide new information on the compilation of competencies possessed by agricultural education master's students. Research findings, like those presented here, should be scrutinized against strategic objectives to ensure that departments of agricultural education are fulfilling their missions. For example, students' perceptions of their level of theories, techniques, and processes that enhance the teacher-learner process for adults and youth should be compared against a department's strategic objectives with respect to Teaching Strategies Knowledge to ensure that desired levels are acquired. That is, are our students learning and growing in specified agricultural education content and context areas (Shinn, 2001)?

The authors challenge ourselves and our colleagues to engage in research and conversation about student competencies and the philosophical basis for agricultural education, our professions knowledge bases, and contextual applications. For example, professional development committees of the American Association for Agricultural Education and the Association of International Agricultural and Extension Education could use these results as a springboard for professional discussions about what our graduates "look like" and what they should "look like."

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