

The Update and Validation of the Professional Education Competencies in  
Agricultural Education at the University of Arizona

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Need for the Study

The pre-service teacher education program for the Department of Agricultural Education at the University of Arizona is the only one of its kind in the state. The program has utilized a Competency Based Teacher Education (CBTE) approach for almost four decades. CBTE allows a program to grow and evolve while maintaining a standard that prepares students to enter the real world of secondary education with relevant understanding of the key components needed for their chosen profession. As the profession continues to grow and evolve it is essential that the pre-service teacher education program reflect the new demands and relevant preparation opportunities for the next generation of agricultural education professionals.

The original list of pedagogical competencies, needed to prepare individuals as effective educators, has been re-evaluated. Review and validation of the current list of professional education competencies by secondary school agricultural education teachers has both enhanced the quality of the program and ensured a consistent experience for individuals entering the program.

Methodology

The panel of experts for this DELPHI Study was selected based on the following criteria: Each of the members on the panel must have graduated from the University of Arizona, Department of Agricultural Education program and had to be teaching high school Agriscience in the State of Arizona at the time of the study.

A total of 25 agricultural education instructors took an active role as a member of the panel for this study. The years of teaching experience ranged from 1 – 30 years and the teacher ratio was 1 female teacher to every 3 male teachers. This gender ratio is consistent with the teaching population of agricultural educators in the State of Arizona.

After the panel of experts was selected the review of literature was conducted and the following research objectives were created:

- Evaluate the quality and effectiveness of the 85 competencies using an expert review team.
- Develop a means by which field based competencies may be added or deleted as the experts see fit.
- Incorporate the information gathered via the study in the future content and delivery within the agricultural education program at the University of Arizona.

The instrument was developed utilizing the web based software marketed as SurveyMonkey and the data was analyzed using the statistical computation software program SPSS 13.0. Upon completion of the preliminary DELPHI study, the instrument was pilot tested and final revisions were made according to the recommendations of the evaluators. The instrument was administered over an eight week period culminating in the data collection and analysis phases.

### Results

The results concluded that each of the 85 competencies currently used to guide the teacher education program were essential to the successful training of future agricultural educators. During the study, six new competencies were introduced for approval and adoption into the CBTE program. Each of the six new competencies went through the evaluation process and have been added to the list of competencies that will guide future curriculum and instruction within the Department of Agricultural Education at the University of Arizona.

### Conclusion

The CBTE format has successfully been applied to pre-service teacher education at the University of Arizona for over four decades and was highlighted as a key to the success of the AGED program during the Arizona Department of Education State Review of Teacher Preparation Programs in the State of Arizona. The CBTE design provides a means for adaptation and flexibility of the curriculum and instruction within the Agricultural Education program that is driven by the input of key stakeholders within the profession. The process also serves as a vehicle to stay current and viable in the ever changing world of education. Future review of the program via similar projects was recommended in order to continue serving future Agricultural Education Pre-Service Teachers at the highest level possible.

### References

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