

ASSESSMENT OF TEACHERS' ABILITY TO INTEGRATE SCIENCE CONCEPTS INTO SECONDARY AGRICULTURE PROGRAMS

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ABSTRACT

For the past two decades, the idea of integrating more science concepts into the agricultural education curriculum has been gaining support. The purposes of this study were two fold: 1) To assess the knowledge base and interest levels among agriculture instructors in teaching concepts related to science; 2) To assess how such a change in the curriculum would impact current agricultural education programs. The sample was derived from the population of agriculture instructors teaching in Missouri secondary schools. For this descriptive correlational research, an instrument was developed to assess the instructors' perceived level of competence to teach selected science grade level expectations (GLE) and their relationship to the agricultural education curriculum and programs. A second instrument, solicited from the American Board for Certification in Teacher Excellence, was used to assess the general biological science knowledge of the teachers.

Agriculture instructors perceive that they are competent to teach and integrate science GLEs into the agriculture curriculum. However, their scores on the examination of knowledge of biological science brings into question their competence to teach this subject matter. Teachers believe integrating science into the agriculture curriculum will benefit their program and their students; however, they are unsure if their classes should count for science credit or if FFA programs and activities are a good match for a more science-based curriculum.