

Teaching, Learning, and Assessment

Learning Outcomes

Impact Statement

Title

Assessing the Agriscience Education Preservice Teacher Preparation Program

Collaborators

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Summary

The preservice Agriscience Education (ASE) program prepares postsecondary students for teaching in 21st century classrooms. The ASE program leads to an initial state license in teaching agriscience education to grades 4-12 in Ohio. Preservice students are prepared through innovative, student centered, and engaging curriculum to provide learning opportunities in and outside the classroom. A need for curriculum review was identified by ASE faculty as a result of quantitative and qualitative assessment data collected by the ASE program. An initial need for programmatic change was identified as a result of decreasing pedagogical and content licensure scores, evolving student needs and demographics, feedback from cooperating educators, and the use of a longstanding curriculum. The result of the program assessment led to a programmatic curricular change that will better align with student needs, and state requirements for licensure; and will enhance teacher preparation.

Situation

The ASE program is committed to preparing teachers for careers in classrooms. To address the challenges of preparing teachers, an assessment of the program was conducted that resulted in an extensive curriculum revision. Using programmatic data collected from stakeholders, students, alumni, practicing agriscience educators, and faculty the ASE program was assessed from various lenses. Quantitative data were collected through licensure required assessments and surveys completed by preservice students and cooperating educators.

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Situation (Continued)

Additional licensure assessment data were collected from other OSU and agriscience education teacher preparation programs to serve as comparison. Qualitative data were collected through structured interviews and informal conversations with ASE students, cooperating teachers, inservice agriscience teachers, Ohio Department of Education staff, and other teacher preparation faculty. The quantitative and qualitative results identified the need for a holistic curriculum revision. Additionally, the ASE faculty analyzed the quantitative data to identify specific pedagogical and content areas of concern. The data analysis guided the ASE faculty's work to revise the curriculum.

Outcome

In response to the data analysis process, the ASE program updated curriculum to implement more content specific courses in the areas of: agricultural systems management, plant sciences, and food science. These courses will provide students the agricultural content necessary to teach the breath of agricultural standards within 7 – 12 grade classrooms. Additionally, required courses within the major were revised for more pedagogical content development and best teaching practices supported by research. These changes will allow students to gain more in-depth content related to lesson planning, classroom management, working with diverse learners, implementation for classroom instruction, and data driven assessments. From the analysis, we found that we needed to modify field experiences to enhance the quality and depth of experiential learning across the program. Expanded field experience opportunities will occur throughout the 4-year program; and will allow students to engage with practicing teachers to promote reflection on their learning and experiences from field placement to field placement. The updated curriculum within the ASE program will provide engaging and enriching learning opportunities for students.

Impact

The Agriscience Education preservice teacher preparation program at Ohio State increases teacher capacity by preparing teachers who think critically and are reflective practitioners as a result of the curriculum and field experiences provided throughout their OSU experience. As a result of the assessment and revision of the curriculum, preservice students will now be engaging in coursework, field experiences, and reflective practices that best prepare them to teach technical agriculture content in a 21st century. Additionally, preservice students will be able to manage diverse learners in a safe and respectful learning environment. Through purposeful field experiences that are embedded throughout the coursework, content will be reinforced in an authentic learning environment; and students can apply concepts through experiential learning opportunities. Providing more opportunities for purposeful field experiences also strengthens stakeholder relationships by collaborating with more teachers and schools across the state. As a result of a more cohesive curriculum and overall preparation program, preservice teachers will build excitement and community within the profession, and be committed to remaining in the field with a support structure in cohort members to encourage their success.

