

Undergraduate Assessment of Student Learning Report
Report for Academic Year: 2022-2023

A. Program Information

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Program: Agricultural Education
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B. Outcome Reporting

1. *The teacher of agriculture provides opportunities for learners who bring unique individual differences to the learning process and provides learners with supportive individual experiential learning opportunities through the National FFA Organization (FFA) and supervised agricultural experience (SAE), to ensure that each student learns new knowledge and skills.*

Assessment Method(s)

Experiential Learning Plan – This is an assignment designed explicitly to meet this SLO. Students must meet 10 criteria to demonstrate their knowledge and skill related to experiential learning, specifically FFA and SAE.

1. Discuss Kolb's Experiential learning model, the purpose, use, and stages of the cycle.
2. Demonstrate how a specific SAE experience flows through the Concrete Experience stage in the cycle.
3. Demonstrate how a specific SAE experience flows through the Reflective Observation stage in the cycle.
4. Demonstrate how a specific SAE experience flows through the Abstract Conceptualization stage in the cycle.
5. Demonstrate how a specific SAE experience flows through the Active Experimentation stage in the cycle.
6. Demonstrate how a specific FFA experience flows through the Concrete Experience stage in the cycle.
7. Demonstrate how a specific FFA experience flows through the Reflective Observation stage in the cycle.
8. Demonstrate how a specific FFA experience flows through the Abstract Conceptualization stage in the cycle.
9. Demonstrate how a specific FFA experience flows through the Active Experimentation stage in the cycle.
10. As a future teacher, how will you ensure students complete all stages of the Experiential Learning Cycle to ensure effective learning.

Students complete this item the fall before they student teach and are scored on a rubric ranging from Distinguished to Unacceptable.

Results

Nineteen students completed this assessment in Fall 2022. Of those students, 4 scored a perfect 40 (scored “distinguished” on each of the 10 items). Fifteen students scored between 32-39 points overall. There were no students who score 31 or below. This is an improvement from the previous year when we had several score at the lowest level.

The average score was 37.84 for the entire student group (N=19) which was an increase from the previous fall.

Overall, we were pleased with the scores on this assessment. Students were able to demonstrate they gained satisfactory skills and knowledge on each of the components.

2. *The teacher of agriculture will possess knowledge of agriculture in the areas of animal systems, plant systems, power, structural and technical systems, agribusiness systems, environmental service and natural resource systems, biotechnology systems, and food products and processing systems.*

Assessment Method(s)

Ag Content Portfolio – The intent of this assignment is to provide students an opportunity to ‘showcase’ their content knowledge/background in preparation for entry into the middle-secondary classroom. It also represents for the Department of Secondary Education a source of data from which to make decisions that are:

- Consistent with a continuous improvement model;
- Consistent with our conceptual framework [Perspectives and Preparation, sub-category “Content and Pedagogy” (i.e., Content Area Knowledge)] and Professionalism, sub-category “Reflects on Practice.”]; and
- Reported to the Kansas State Department of Education (KSDE) as the number of teacher licensure candidates meeting a standard of proficiency.

Successful completion of this assignment required students to submit evidence for each content standard in the subject area(s) they plan to seek KSDE licensure. Evidence to be considered includes:

- A reflective essay written by the teacher candidate for each individual content standard;
- Evidence (or artifacts) from the course(s) identified as contributing to the teacher candidates’ understanding of the content represented by the individual content standard; and
- Grades obtained in the course(s) matched to each individual content standard.

Students complete this assessment during the fall of their senior year, but it is a summary of all their content learning since beginning of their college career. Students completed this assessment in AGED 600 in Fall 2020. To pass this assessment, candidates must score a “Developing (2)” or higher in each review category and have a minimum total of 17 points out of a possible 28 (60%).

Results

There were 19 students enrolled in the course in which the Ag Content Portfolio is assessed in the Fall 2022 semester. The average score for the nineteen students was 25.37 (90.60%) (Max score is a 28). This was a decrease of almost two percentage points from the previous fall.

The content portfolio has seven categories each with a maximum of four points. According to the scoring rubric, those scoring 17 to 24 are “proficient” while those scoring 25 to 28 are “distinguished.”

There were 13 (68%) who achieved scores between 25 and 28 to achieve the “distinguished” category, the other 6 (32%) scored between 19 and 24 to achieve the “proficient” category for this assessment.

Results of this assessment support the finding that students are receiving adequate preparation in terms of their content courses and their ability to apply that learning to the teaching field. The percent in the “distinguished” category was lower for this group of students than the Fall 2021 group. It wasn’t a drastic decline, but one we took note of as we continue to implement practices to assist students with this measure.

3. *Knowledgeable teachers of agriculture are able to integrate reading, writing, mathematics, and science content into instruction in agriculture.*

Assessment Method(s) & Results

Assessment tools for this learning objective were from the Student Teaching Portfolio, Entries 4 and 5. Each entry is described below (as stated in the Spring 2022 Student Teaching Portfolio document from the College of Education). Students complete this assessment during their student teaching experience. We had twenty-seven students in Spring 2022. We expect students to score “Meets Standard” or “Distinguished” on each measure.

Student Teaching Portfolio Entry 4: Content Knowledge

The candidate understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates content-specific learning and literacy experiences that make the discipline accessible and relevant to assure mastery of the content.

Student Teaching Portfolio Entry 5: Application of Content

The candidate understands how to engage learners through interdisciplinary lessons that utilize concept based teaching and authentic learning experiences to engage students in effective communication, collaboration, outside resources, reading, technology, and in critical and creative thinking.

For each entry students had to complete a reflective essay highlighting their learning in the specific area. They also had to include artifacts to demonstrate their learning. Example of artifacts included: unit plans, lesson plans, course plans, class syllabi, teacher observations, and teacher evaluations, student feedback, student evaluations, assignments, and student work.

Results

The 19 students completed each entry during their student teaching experience in Spring 2023 (due April 29, 2023). We received data for 18 students from the College of Education. (We believe the missing entry is for the one Master’s student completing the TLERN certificate.)

For Entry 4, ten students scored at the “distinguished” level with 6 students scoring at the “meets standard” level. There were two students who scored at the “developing” level. For Entry 5, seven students scored at the “distinguished” level and 10 students at the “meets standard” level. There was one student who scored at the “developing” level. Neither entry had students scoring in the “unacceptable” level.

There were more students in the “meets standards” level than in “distinguished” for portfolio entry 4. This item relates back to content knowledge they could have missed or felt unfamiliar with due to courses they were enrolled in during the time of COVID mitigation strategies. Each student had to navigate their own learning experience which may have been impacted by changes in the course design (i.e. more online laboratories, flipped classrooms, etc).

We would like to see more students in the “distinguished” level. We continue to offer support to students leading up to the student teaching experience and during the semester. Helping students recognize their own pedagogical content knowledge is an item we are working to improve.

The faculty continue to meet on a regular basis during the spring semester to identify ways to support our students and their growth in these areas. We continue to offer them the opportunity

to submit portfolio entries to us for feedback a few weeks before they are due. We also offered the “Portfolio Workday” for students to come to campus or Zoom in to get their questions answered about the portfolio entries. Not all students took advantage of this opportunity, but those who did benefited in their portfolio preparation process.

4. *Knowledgeable teachers of agriculture are able to apply knowledge in real world agricultural settings and address life and career skills, critical thinking and communication skills, and information, media and technology skills to assure learner mastery of the content.*

Assessment Method(s)

Assessment tools for this learning objective were the same as SLO #4. (*We realize this is not ideal or recommended, but these are the best tools to assess this SLO and connect to accreditation criteria). They are from the Student Teaching Portfolio, Entries 4 and 5. Each entry is described below (as stated Spring 2023 Student Teaching Portfolio document from the College of Education). Students complete this assessment during their student teaching experience. We had 19 students in Spring 2023. We expect students to score “Meets Standard” or “Distinguished” on each measure.

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For each entry students had to complete a reflective essay highlighting their learning in the specific area. They also had to include artifacts to demonstrate their learning. Example of artifacts included: unit plans, lesson plans, course plans, class syllabi, teacher observations, and teacher evaluations, student feedback, student evaluations, assignments, and student work.

RESULTS

The 19 students completed each entry during their student teaching experience in Spring 2023 (due April 29, 2023). *We received data for 18 students from the College of Education. (We believe the missing entry is for the one Master’s student completing the TLERN certificate.)

For Entry 4, ten students scored at the “distinguished” level with 6 students scoring at the “meets standard” level. There were two students who scored at the “developing” level. For Entry 5, seven students scored at the “distinguished” level and 10 students at the “meets standard” level. There was one student who scored at the “developing” level. Neither entry had students scoring in the “unacceptable” level.

There were more students in the “meets standards” level than in “distinguished” for portfolio entry 4. This item relates back to content knowledge they could have missed or felt unfamiliar with due to courses they were enrolled in during the time of COVID mitigation strategies. Each student had to navigate their own learning experience which may have been impacted by changes in the course design (i.e. more online laboratories, flipped classrooms, etc).

**Same comments as SLO #3: We would like to see more students in the “distinguished” level. We continue to offer support to students leading up to the student teaching experience and during the semester. We had several students who scored very low in certain areas but were still able to graduate from the program. The faculty continue to meet on a regular basis to identify ways to support our students and their growth in these areas. One of the strategies we started a few years ago is to offer them the opportunity to submit portfolio entries to us for feedback a few weeks before they are due. We also started a “Portfolio Workday” for students to come to campus or Zoom in to get their questions answered about the portfolio entries. Not all students took advantage of this opportunity.*

5. *Effective instructional practice requires that teachers of agriculture are able to: plan for classroom and laboratory learning, create valid and reliable assessments of learning, and practice instructional strategies in classroom and laboratory settings within the areas of animal systems, plant systems, power and technical and structural systems, agribusiness systems, natural resources and environmental service systems, biotechnology systems, and food products and processing systems.*

Assessment Method(s)

This is a large learning objective and therefore requires multiple assessments. The majority of assessment tools are from the student teaching portfolio for the 19 Spring 2023* student teachers. *We received data for 18 students from the College of Education. (We believe the missing entry is for the one Master’s student completing the TLERN certificate.) We also use the Praxis scores and final student teaching evaluation.

Below is a short explanation of each instrument used to assess this learning objective.

Student Teaching Portfolio Entry 6: Assessment

The candidate understands how to use multiple measures to monitor and assess individual student learning, engage learners in self-assessment, and use data to make decisions.

Student Teaching Portfolio Entry 7: Planning for Instruction

The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, technology, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Students had to write a reflective essay detailing for they met the required items for each entry and provide artifacts. Artifacts included student assignments, student feedback, lesson plans, teacher observations and evaluations, teacher reflections, unit plans, lesson plans, course plans, class syllabi, and assessments.

Final Student Teaching Evaluation- This evaluation is distributed to the cooperating teachers each spring. They report their assessment on the students. *In order to “pass” student teaching and qualify for a license, a score of 3 or 4 must be achieved on each measure. The instrument contains 30 different competencies. The competencies are included in the following categories:

1. The Learner and Learning
2. Content Knowledge
3. Instructional Practice
4. Professional Responsibility
5. Dispositions

Praxis scores- All students in the program are required to take the Principles of Learning and Teaching (PLT) and the Ag Content tests. They are Praxis exams and administered at certified

testing centers. The passing score for the PLT is 160 and 147 for the Ag Content Test. Our data is provided to us by K-State College of Education.

Results

For Entry 6, 9 students scored at the “distinguished” level with 8 in the “meets standard” level. One student scored at the “developing” level, but none scored at the “unacceptable” level. While we appreciate that nine scored at the highest level, we continue to work to increase that number. We were disappointed we had one student score in the developing level. (We had one score there the previous year as well. We continue to look for opportunities to help all learners achieve at their best ability.)

Results of Entry 7 yielded 9 students in the “distinguished” level and 9 students scoring at the “meets standard” level. There were no students who scored “developing” or “unacceptable.” We were very pleased with the number of students in the top two levels and no students in the lower levels. We made changes to assignments in the fall to set students up for success with this entry of the portfolio and believe it helped. We will continue to monitor changes made in the fall semester and how they positively (or negatively) impact performance on these assessment items.

Scores from the final Student Teaching Evaluation and Praxis PLT were provided by the College of Education.

For the Final Student Teaching Evaluation, the 18 students were evaluated by their cooperating teacher on 30 different competencies. (*Missing the one student who was working on the TLERN certificate.)

Overall, students scored at the “meets standards” or “exceeds standards” level in 23 of the 30 areas. There were 7 instances of ONE student scoring at the “developing” level. This is much improved from the previous year. We were pleased that this number had improved from the previous year, but are continuing to look for ways to help each student meet the higher expectations on all 30 items.

The Praxis PLT Grades 7 -12 was administered to 15 K-State agricultural education students. The Mean score (and median) was 175 with 100% passing the exam. This was a higher percent pass rate and median score than the previous year. We were curious about the missing four scores, but they were not in the data provided by COE. They may not have taken the exam if they decided they were not going to teach high school after graduation.

The Ag Content Test was administered to 15 K-State affiliated students. The Mean score was 166. The report stated that the 15 who took the test, all passed it (100%). Unfortunately, we did not receive a detailed table of the results for each category. We also do not know why there were four scores missing. We will continue to do our best to prepare students to take the exam and be successful.

6. *Teachers of agriculture engage in meaningful and intensive professional learning by participating in professional organizations, study, self-reflection and collaboration.*

Assessment Method(s)

This learning objective was assessed with Student Teaching Portfolio Entries 9 and 10. All 18 student teachers completed the entries.

Student Teaching Portfolio Entry 9: Professional Learning and Ethical Practices

The candidate engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

Student Teaching Portfolio Entry 10: Leadership, Participation, and Collaboration

The candidate seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, support staff, and community members to ensure learner growth, and to advance the profession.

For each entry, students were required to write a reflective essay demonstrating how they met the requirements for that particular item. They also had to provide artifacts to support their essay.

Results

For Entry 9, only two students scored in the “distinguished” category with 16 scoring in the “meets standard” category. Assessment of Entry 10 resulted in five students in the “distinguished” category and 13 in “meets standard.” There were no students in either entry in the “developing” or “unacceptable” categories.

This learning objective continues to be hard to effectively evaluate due to the more internal nature of the items being assessed, but the two student teaching portfolio entries are satisfactory to encourage students to reflect on how they grew as a professional during the student teaching semester.

Students continue to struggle to know which artifacts to include as evidence of their learning in this SLO. We will continue to make examples of those artifacts clear to students early in the semester so they will be able to collect them throughout their time in the classroom. Students who do not score at the two highest levels tend to not take advantage of assistance leading up to the assignment deadline.

While we would have liked to see more of our students score at the “distinguished” level on these items, we also understand that they are balancing the roles of student and teacher during their final semester. They will step into the leadership roles after the graduate and enter the profession. These items are meant to encourage them to start the process early and some students are more prone to do so than others.

C. Program Self Review

Faculty Review of Annual Assessment Data and Process

Describe how program faculty reviewed the assessment results and process to decide on actions/revisions.

The faculty met both formally and informally throughout the year to discuss how the students were performing on the assessments. The Ag Content Portfolio, graded by Dr. Ulmer, continues to provide us quality insight into the technical knowledge of our students. The Experiential Learning Plan, developed and assessed by Dr. Brandie Disberger, allows students to demonstrate their FFA and SAE knowledge. The faculty approved both rubrics and deemed them appropriate to capture the data needed for the corresponding student learning objectives.

We offered a “workday” for students to come to campus or Zoom in to offer support as they worked on their portfolio entries during the spring semester. Faculty also reviewed the student teaching portfolio entries prior to their final submission for students who wanted us to provide them with feedback. It was

through this feedback opportunity that we continue to refine our teaching and support of students to perform at a higher level.

In addition to the items included in the official assessment report, we continually assess our program with qualitative feedback, advisory committee meetings, and feedback from recent graduates currently teaching at the high school level. Also, the program successfully went through the CAEP review with the College of Education this past academic year.

Program Improvements

In the last seven years (2016-2017; 2017-2018; 2018-2019, 2019-2020; 2020-2021, 2021-2022, 2022-2023) the faculty have worked hard to review and revise the existing degree program. Each year we reflect on the total degree program and make any necessary changes to benefit the students. Through all our work, we refer to student assessments and ways we can work to improve them.

In preparation for the CAEP review, we met with the College of Education several times during the 2021-2022 school year to make sure our assessments and rubrics align to existing criteria. We then worked to complete the required documentation for that review during the 2022-2023 school year. We successfully passed the KSDE report during the summer of 2022. Due to accreditation, most of our assessment tools are tied to the Student Teaching Portfolio.

This past academic year we engaged in several conversations regarding the new KBOR GE requirements. We adjusted our curriculum to meet those expectations, met with COE faculty regarding potential changes to teacher education courses, and pushed forward our proposal. We will see how it moves through the process and then work to implement the required changes.

Each year our advisory committee reviews the work we have done and makes key recommendations for further improvement.

Future Plans

Our outcomes are based on the KSDE program review standards. We will continue to seek out opportunities to meet the learning needs of our students while meeting the standards for accreditation.

We are still working to connect our learning outcomes to the assignments on Canvas to ease the assessment report process. We work with COE to access our students' assessment scores on the student teaching portfolio entries and state required exams. With the change to the PLT at the state level (dropping it as a requirement for licensure) we are not sure if that will impact our assessment data.

We continue to modify our program, assignments, and assessments to meet the ever-changing educational demands of the profession. The agricultural education faculty persistently seek out grant funding to provide an innovative and highly impactful educational experience for the undergraduate students. We will continue to identify program needs and funding agencies that we can solicit to support program growth.

We have started to explore offering more courses online to accommodate students who are not able to make it to campus for classes.

Finally, we are still working on a multi-year effort to obtain/create/build facilities that will meet the learning needs of our students, with a high priority in the agricultural mechanics area. This work has consumed large portions of the faculty time and energy, but we continue to push our need in hopes it will be met soon.

Summary of this Report

Our students are performing at an adequate level on each measure, but there are areas of improvement and enhancement. Special focus is given to the student teaching semester and required assessments occurring during that experience. The assessment process has allowed us to modify our lessons, assignments, and feedback to help students achieve at a higher level on the assessments used for this report. The Agricultural Education faculty meet on a regular basis to discuss students, coursework, and areas for refinement and change.