

Undergraduate Assessment of Student Learning Report
Report for Academic Year: 2020-2021

A. Program Information

Department: Communications and Agricultural Education
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

Eighteen students completed this assessment in Fall 2020. Of those students, 4 scored a perfect 40 (scored “distinguished” on each of the 10 items). The remaining fourteen students scored between 32 -39 points overall. This was a positive improvement from the Fall 2019 group when we had several students score below 31 points.

The average score was 36.33 for the entire student group (N=18).

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. Changes made in how the content is taught led to all students passing this assessment with an acceptable score.

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 18 students enrolled in the course in which the Ag Content Portfolio is assessed in the Fall 2020 semester. The average score for the eighteen students was 25.61(91.5%) (Max score is a 28).

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 (72%) who achieved scores between 25 and 28 to achieve the “distinguished” category, the other 5 (28%) 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 higher for this group of students than the Fall 2019. This is a good indicator that we are making positive improvements in the program.

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 2021 Student Teaching Portfolio document from the College of Education). Students complete this assessment during their student teaching experience. We had eighteen students in Spring 2020. 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 18 students completed each entry during their student teaching experience in Spring 2021 (due April 28, 2021).

For Entry 4, six students scored at the “distinguished” level with the remaining 12 students scoring at the “meets standard” level. No students scored at the developing or unacceptable level. For Entry 5, two students scored at the “distinguished” level and 16 students at the “meets standard” level.

There were more students in the “meets standards” level for both the portfolio entries than in “distinguished.” This could be a result of the challenges of teaching during the COVID-19 pandemic. Each school district handled the precautions and protocols to mitigate the virus in their own way. Therefore, some students had more teaching challenges than others.

We would like to see more students in the “distinguished” level, but were pleased that no students scored in the “developing” area. This is the third year in a row we have all students score at “meets standard” or “distinguished”. The faculty continue to meet on a regular (weekly) 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 require them to do a ‘practice’ portfolio and will work to provide key feedback to help prepare them for the actual student teaching portfolio.

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 2021 Student Teaching Portfolio document from the College of Education). Students complete this assessment during their student teaching experience. We had 18 students in Spring 2021. We expect students to score “Meets Standard” or “Distinguished” on each measure.

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There were more students in the “meets standards” level for both the portfolio entries than in past years. This could be a result of the challenges of teaching during the COVID-19 pandemic. Each school district handled the precautions and protocols to mitigate the virus in their own way. Therefore, some students had more teaching challenges than others.

**Same comments as SLO #3: We would like to see more students in the “distinguished” level, but were pleased that no students scored in the “developing” area. This is the third year in a row we have all students score at “meets standard” or “distinguished”. The faculty continue to meet on a regular (weekly) 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 require them to do a ‘practice’ portfolio and will work to provide key feedback to help prepare them for the actual student teaching portfolio.*

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 18 Spring 2021 student teachers. 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, only one student scored at the “distinguished” level with the remaining 17 in the “meets standard” level. No students scored at the “developing” or “unacceptable” level. We were very disappointed we didn’t have more in the distinguished level. We will continue to work with students to increase the percent that score in the “distinguished” level.

Results of Entry 7 yielded 10 students in the “distinguished” level with the remaining 8 students scoring at the “meets standard” level. No students scored at the developing or unacceptable level. Again, we would have liked to have more score in the distinguished level and will continue to look at modifications we can make to help them achieve a higher score on that entry.

Overall, we were pleased no one scored in the “developing” or “unacceptable” level for these two entries. We will work this next academic year to have more score in the “distinguished” category for these entries.

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.

Overall, students scored at the “meets standards” or “exceeds standards” level (16/30). There were 14 instances of ONE student scoring at the “developing” level. All 18 of the students scored at “exceeds standards” on item 27 Commits to Professional, Ethical, and Legal Conduct. We know there are still areas of growth for the students, and they will continue to develop as they enter their own classrooms after graduation.

The Praxis PLT Grades 7 -12 was administered to 17 K-State agricultural education students. The Median score was 168 with 15 (88%) passing the exam.

The Ag Content Test was administered to 18 K-State affiliated students. The median score was 167.5. The report stated that all 18 (100%) passed the test. Below is a table detailing the results for each of the categories of the Ag Content Praxis Test.

Variables	Average % Correct		
	National	State	Institution
Category I. Agribusiness Systems	49.62	46.15	44.44
Category II. Animal Systems	74.16	75.25	74.38
Category III. Food Science and Biotechnology Systems	71.05	71.50	70.26
Category IV. Environmental and Natural Resource Systems	73.73	72.33	69.65
Category V. Plant Systems	74.88	75.40	74.84
Category VI. Power; Structural; Technical Systems	67.56	70.30	69.95
Category VII. Leadership and Career Development	75.53	78.98	79.86

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, four students scored in the “distinguished” category with the remaining 14 in “meets standard”. Assessment of Entry 10 resulted in only two students in the “distinguished” category, with the remaining 16 in “meets standard”.

This learning objective is hard to 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 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. We will work harder to help students recognize ways they can improve in the key areas of this learning objective.

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.

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.

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, during the summer 2021, Dr. Hock led the work on the KSDE program review.

Program Improvements

In the last five years (2016-2017; 2017-2018; 2018-2019, 2019-2020; 2020-2021) the faculty have worked hard to review and revise the existing degree program. Due to our efforts, we successfully reduced the degree program from 130 to 120 credit hours, added more flexibility to the required agriculture courses, and added content-specific courses to needed areas (i.e. agricultural mechanics). Each year we reflect on the total degree program and make any necessary changes to benefit the students. Through all our work, we refer back 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 2020-2021 school year to make sure our assessments and rubrics align to existing criteria.

New KSDE State Standards for Agricultural Education were written in 2014 and went into effect in 2016. The program review document was submitted in 2021 to provide evidence of our work to meet the standards. We worked hard to review our curriculum and assessments to guarantee we are meeting and assessing those standards. We continue to look for opportunities to meet these standards through degree program modifications, course revisions, and experiential learning opportunities. Each year our advisory committee reviews the work we have done and makes key recommendations for further improvement.

Due to accreditation, most of our assessment tools are tied to the Student Teaching Portfolio. Brandie Disberger serves on the Portfolio Committee in the College of Education. Her work on the committee helps to bridge the expectations put on us from the state department with those that we believe are needed for our particular group of students to be successful.

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 continue to work with COE to more easily access our students' assessment scores on the student teaching portfolio entries.

We continue to modify our program, assignments, and assessments to meet the ever-changing educational demands of the profession.

The agricultural education faculty continually 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.

Finally, we are 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 are hopeful a new facility is in the near future.

Summary of this Report

Our students are performing at an adequate level on each measure, but there are areas of improvement and enhancement. The assessment process has allowed us to modify our lessons, assignments, and feedback to help them 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.