M.Ed. in Educational Technology Leadership

Division: Gallaspy College of Education and Human Development

Department: School of Education

Prepared by: Katrina Jordan & Susan Kahn   **Date: June 19, 2020**
Confirmed by GCEHD Assessment Coordinator Susan Kahn

Approved by: Kimberly McAlister   **Date: July 19, 2020**

Northwestern Mission. Northwestern State University is a responsive, student-oriented institution that is committed to the creation, dissemination, and acquisition of knowledge through teaching, research, and service. The University maintains as its highest priority excellence in teaching in graduate and undergraduate programs. Northwestern State University prepares its students to become productive members of society and promotes economic development and improvements in the quality of life of the citizens in its region.

Gallaspy College of Education and Human Development Mission.
The Gallaspy Family College of Education and Human Development is committed to working collaboratively to acquire, create, and disseminate knowledge to Northwestern students through transformational, high-impact experiential learning practices, research, and service. Through the School of Education and Departments of Health and Human Performance, Military Science, Psychology, and Social Work, the College produces knowledgeable, inspired, and innovative graduates ready for lifelong learning who contribute to the communities in which they reside and professions they serve. Additionally, the GCEHD is dedicated to the communities served by the Marie Shaw Dunn Child Development Center, NSU Elementary Laboratory School, NSU Middle Laboratory School, and the NSU Child and Family Network to assist children and their families related to learning and development.

School of Education Mission. The School of Education offers exemplary programs that prepare candidates for career success in a variety of professional roles and settings. As caring, competent, reflective practitioners, our graduates become positive models in their communities and organizations. This mission is fulfilled through academic programs based on theory, research, and best practice. Further, all graduates learn to value and work with diverse populations and to incorporate technologies that enrich learning and professional endeavors.

Program Mission Statement: The M.Ed. ETEC program seeks to enhance professionals' skills in digital tools for personal and professional productivity in education and other professional disciplines.

Methodology:
Data are collected from key assessments in courses identified for each SLO. The assessments are administered as capstone assessments in the courses, and all are evaluated with analytic rubrics. Results are reviewed annually using descriptive statistics, comparisons across administration cycles, and, anecdotally, student feedback.

Student Learning Outcomes:

SLO 1
Course Map: EDUC 5850

Departmental Student Learning Goal	Program Student Learning Outcome
Demonstrate discipline-specific content knowledge (SPA #1)	Candidates will demonstrate technology literacy skills, technology advocacy, and leadership in planning and delivering professional development appropriate for unique populations.

Measure 1.1. (Direct - Knowledge)
Evidence of assessment is the Project Study. The assessment is aligned to the Graduate School's paper-in-lieu-of-thesis guidelines as well as criteria specific to ISTE standards, data analysis, and project-based learning. The assessment criteria are aligned to the frameworks used to develop the assessment requirements. Performance indicators are qualitative and progressive across the rating scale. Research-based analyses of quality are planned for future assessment cycles.

The target is: 85% of candidates will earn minimum benchmark ratings of 5 (i.e. "Target") on each criterion based on performance expectations.

Finding: Target was Met

- **AC 2019-2020:** Target was Met. 100% of candidates met the benchmark.
- **AC 2018-2019:** Target was Not Met. 71% of candidates met the benchmark.
- **AC 2017-2018:** Target was Met. 85% of candidates met the benchmark.
- **AC 2016-2017:** Target was Not Met. 76.9% candidates met the benchmark.

Analysis:
In 2018-2019, the target not met. In response to AC 2017-2018 data analysis, faculty provided additional instructional support in APA style, writing tips, and grammar. However, in AC 2018-2019, patterns of consistent errors in candidate work were identified, which revealed that candidates did not take advantage of additional resources that had been provided in the course nor did they, overall, integrate corrections from draft assignments into their final assignments on which these data were based.

Based on the analysis of the AC 2018-2019 results, the faculty made the following changes in AC 2019-2020 to drive the cycle of improvement. In AC 2019-2020, additional instructional assignments were added to EDUC 5850 that focused on APA style, writing,

and grammar, which were the areas where candidates had, for two consecutive years, earned the lowest performance ratings. Since ratings on "content" items were consistently at benchmark, data did not indicate adjustments to those criteria to be necessary. In AC 2019-2020, assignments based on the additional resources were included into the course so that candidates were held accountable for reviewing those resources and so that performance on these assignments could be compared to final project rubric ratings to determine on which topics candidates struggled the most with APA style, writing, and grammar. These changes had a direct impact on the student's ability to demonstrate discipline-specific content knowledge.

As a result of these changes, in AC 2019-2020 the target was met.

Based on the analysis of the results in AC 2019-2020, all students reached target through iterative effort to meet standards for graduation. Candidate performance was strongest in identifying a research problem, justifying the need for research, and describing the research design. Primary areas of weakness were in presenting results and comparing to other research and explaining strengths and limitations of the research project. Other weaknesses included following proper style guidelines for APA 7th edition and grammar usage.

Action - Decision or Recommendation:

In AC 2019-2020, the target was met.

Based on information gathered from analysis of the AC 2019-2020 data, faculty will implement the following changes in AC 2020-2021 to drive the cycle of improvement. In AC 2020-2021, faculty will develop and deliver additional instructional materials and resources to be added to EDUC 5850 that focus presenting results and comparing to other research, explaining strengths and limitations of the research project, following proper style guidelines for APA 7th edition, and grammar usage.

These changes will improve the student's ability to demonstrate discipline-specific content knowledge, thereby continuing to push the cycle of improvement forward.

SLO 2
Course Map: ETEC 6010

Departmental Student Learning Goal	Program Student Learning Outcome
Apply discipline-specific content knowledge in professional practice (SPA #4)	Candidates will design and implement a virtual learning experience and assess participant learning in that experience.

Measure 2.1. (Direct - Knowledge)
Evidence of assessment is the Virtual Digital Citizenship Seminar. The assessment was developed to align with ISTE Technology Director Standard 5. Candidates demonstrate content knowledge of digital citizenship and gain practical experience in online course design and delivery by completing the Digital Citizenship Seminar. The seminar is an online course designed by candidates and hosted in Eliademy or another platform of the candidate's choosing. Candidates solicit individuals to serve as "students" in the

seminar; these "students" may be P-12 students or adults depending on the seminar's intended audience. Candidates' digital citizenship content knowledge is evaluated based on the content presented in the seminar, and their pedagogical knowledge is evaluated against the Quality Matters criteria for online course design and delivery.

Each candidate's seminar follows a standard framework of four units, and each unit must include a presentation of content, at least one interactive activity, and at least one assessment. The seminar content is created by the candidate and is unique to a school or district. While the content is unique to the setting, each unit's broad topic is standard. Those are: 1) overview of digital citizenship (Standard 5: Digital Citizenship); 2) digital equity (Element 5.1: Digital Equity); 3) safe, healthy, legal, and ethical technology use (Element 5.2: Policies for Safe, Healthy, Legal, and Ethical Use; Element 5.3: Programs for Safe, Healthy, Legal, and Ethical Use); and 4) diversity, cultural understanding, and global awareness (Element 5.4: Diversity, Cultural Understanding, and Global Awareness). Specific sub-topics are provided for each (see seminar outline below).

Content for each unit includes at least one candidate-created video lesson/lecture, one Web site, and one additional digital resource that extends that unit's content. Activities must reinforce the content, and assessments must provide meaningful feedback for seminar participants.

The assessment criteria and indicators have construct validity because items were aligned directly to ISTE Technology Director Standard 5 performance expectations.

Research-based analyses of quality are planned for future assessment cycles.

The target is: 80% of candidates will earn minimum benchmark ratings of 10 on each criterion based on performance expectations.

Finding: Target was Met

- **AC 2019-2020:** Target was Met. 93% of candidates met benchmark
- **AC 2018-2019:** Target was Met. 91% of candidates met benchmark
- **AC 2017-2018:** Target was Met. 80% of candidates met benchmark
- **AC 2016-2017:** Target was Met. 80% of candidates met benchmark

Analysis:
In AC 2018-2019, the target was met.

Based on analysis of the AC 2018-2019 results, faculty made the following changes in AC 2019-2020 to drive the cycle of improvement. Faculty refined assessment requirements to ensure clarity of criteria and indicators. These changes had a direct impact on the student's ability to apply discipline-specific content knowledge in professional practice.

As a result of these changes, in AC 2019-2020 the target was met.

In AC 2019-2020, candidate strengths were in areas of knowledge of subject matter or content they were teaching. Candidate weaknesses were in visual appeal--use of whitespace--a finetuning of a script that is concise when doing voice-overs.

Action - Decision or Recommendation:
In AC 2019-2020, the target was met.

Based on information gathered from analysis of the AC 2019-2020 data, faculty will implement the following changes in AC 2020-2021 to drive the cycle of improvement. In AC 2020-2021, faculty will provide additional instructional focus on visual appeal--use of whitespace--a finetuning of a script that is concise when doing voice-overs.

These changes will improve the student's ability to apply discipline-specific content knowledge in professional practice, thereby continuing to push the cycle of improvement forward.

SLO 3
Course Map: ETEC 6010

Departmental Student Learning Goal	Program Student Learning Outcome
Model professional behaviors and characteristics.	Candidates will model skills and characteristics appropriate for individuals in formal or informal leadership roles.

Measure 3.1. (Direct - Skills, Dispositions)
Evidence of assessment is the Mentor Evaluation. The mentor evaluation is aligned to departmental goals, course outcomes, and ISTE and InTASC standards linked to course outcomes. It was developed by faculty using existing tools as models. The evaluation's alignment to departmental goals, ISTE standards, and InTASC standards provides evidence for meeting the said goals and standards. The evaluation criteria and indicators have construct validity because items were aligned directly to departmental goals, ISTE standards, and InTASC standards.

The target is: 100% of candidates will earn minimum ratings of 2 on all items.

Finding: Target was Not Met

- **AC 2019-2020:** Target was Not Met. 86.7% (n=36) of candidates met benchmark.
- **AC 2018-2019:** Target was Met. 100% (n=9) of candidates met benchmark
- **AC 2017-2081:** Target was Met. 100% (n=13) of candidates met benchmark
- **AC 2016-2017:** Target was Met. 100% (n=20) of candidates met benchmark

Analysis:
In AC 2018-2019, the target was met. In 2018-2019, the target was 100% of candidates meet benchmark. Based on an analysis of results in AC 2017-2018, procedures for mentor evaluations were changed to include formative and summative evaluations rather than only summative in AC 2018-2019.

Based on analysis of the AC 2018-2019 results, faculty made the following changes in AC 2019-2020 to drive the cycle of improvement. In AC 2019-2020, faculty developed

and implemented a new protocol for mentor evaluations require multiple evaluations instead of just mid-term and final evaluations to show greater dispersion of ratings and more actionable findings. These changes had a direct impact on the student's ability to model professional behaviors and characteristics.

As a result of these changes, in AC 2019-2020, the target was not met.

In AC 2019-2020, 86 % of candidates met the benchmark. Common candidate weakness was adapting appropriately to rapid changes. While overall achievement failed to reach target, the significant increase in program enrollment over prior years is noteworthy, including a 300% increase over the preceding assessment cycle. This may be due to the increasing demand for STEM fields and technology-based teaching and leadership credentials in the workforce and educational settings.

Action - Decision or Recommendation:

In AC 2019-2020, the target was not met.

Based on information gathered from the analysis of the AC 2019-2020 data, the faculty will implement the following changes in AC 2020-2021 to drive the cycle of improvement. In AC 2020-2021, faculty will provide additional instructional focus on adapting appropriately to rapid changes.

These changes will improve the student's ability to model professional behaviors and characteristics, thereby continuing to push the cycle of improvement forward.

SLO 4
Course Map: ETEC 5760

Departmental Student Learning Goal	Program Student Learning Outcome
Exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline (SPA #3)	Candidates will design virtual learning experiences that yield multimedia content presentations and interactive learning activities.

Measure 4.1. (Direct - Knowledge)
Evidence of assessment is the Interactive Multimedia Website. The Instructional Multimedia Website is the capstone assessment of ETEC 5760. In this assessment, candidates demonstrate their mastery of digital tools/resources, digital-age learning strategies, educational technology/technology integration knowledge, and reflection on practice. The assessment serves as technology-mediated instructional tool where a target audience and instructional problem or opportunity are identified. The candidate, considering the unique needs of the target audience, then creates and organizes content and learning activities using the Web platform he/she has selected. Students then use/work through the Website and provide feedback via survey on the Website once they complete the tasks embedded within it. Candidates then review that feedback and student performance on activities within the Website and prepare an analysis report

of the Website's implementation and student feedback. Within the analysis, candidates identify what decisions they made on revising the Website content or activities based on student feedback and performance.

Candidates use their knowledge of research-based pedagogy, digital tools, students, and the learning environment to select appropriate Web platforms for the Websites they create. They further demonstrate their mastery of instructional design principles for digital-age learning by designing the content and activities of the Website in alignment with those principles and reasonable expectations of students (Element 2.1: Digital Tools and Resources; Element 2.2: Research-Based Learning Strategies). Through the selection/creation of digital content and tools, candidates provide evidence of their knowledge of technology content and best practices in pedagogy for technology-mediated learning. The learning experiences they create through the Websites show their capacities for fostering innovation and creativity in digital-age learners (Element 6.1: Content and Pedagogical Knowledge)

Promoting self-reflection and use of data are emphasized in this assessment. Candidates are required to create mechanisms to collect student performance data on Website activities and feedback on the learning experience via the Website. Candidates then analyze the performance data and student feedback and report a synopsis of that analysis with plans for revising the Website content and/or activities aligned to student performance and feedback (Element 6.4: Continuous Learning; Element 6.5: Reflection). The assessment criteria and indicators have construct validity because items were aligned directly to ISTE Technology Director standards as noted in the analysis. Research-based analyses of quality are planned for future assessment cycles.

The target is: 80% of candidates will earn minimum benchmark ratings of 3 on each criterion based on performance expectations.

Finding: Target was Met

- **AC 2019-2020:** Target was Met. 86.25% of candidates met benchmark.
- **AC 2018-2019:** Target was Met. 60% of candidates met benchmark
- **AC 2017-2081:** Target was Met. 100% of candidates met benchmark
- **AC 2016-2017:** Target was Met. 100% of candidates met benchmark

Analysis:
In 2018-2019, the target was not met. AC 2018-2019 results remained below benchmark, but three of the four candidates who did not meet benchmark did not complete the assessment. Thus, the finding is not a true representation of candidate performance, but of an omission of performance. Excluding those three non-completions, the target would have been met with 90% of candidates at or exceeding benchmark.

Based on analysis of the AC 2018-2019 results, faculty made the following changes in AC 2019-2020 to drive the cycle of improvement. The faculty placed instructional emphasis on completing the assessment. Faculty considered placing course-level weight on the assessment such as requiring completion of the assessment to earn a grade in the course. This additional accountability helped to support all candidates in completing the

assessment so that data could be collected. Additionally, faculty adjusted the course instructor assignment so that an instructor with greater multimedia expertise taught the course and faculty added clarity to the assessment instructions These changes had a direct impact on the student's ability to exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline.

As a result of these changes, in AC 2019-2020 the target was met.

Based on an analysis of AC 2019-2020 results. The 2019-2020 results indicate above candidate performance above benchmark. Academic areas of strength for candidates were knowledge of content area and color choices. Academic areas of weakness for candidates were organization, usability, and navigation.

Action - Decision or Recommendation:
In AC 2019-2020, the target was met.

Based on information gathered from analysis of the AC 2019-2020 data, faculty will implement the following changes in AC 2020-2021 to drive the cycle of improvement. In AC 2020-2021, faculty will increase instructional emphasis on organization, usability, and navigation.

These changes will improve the student's ability to exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline, thereby continuing to push the cycle of improvement forward.

SLO 5
Course Map: ETEC 5780

Departmental Student Learning Goal	Program Student Learning Outcome
Exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline (SPA #3)	Candidates will conduct investigations relevant to technology needs and uses in particular professional settings then present findings and recommendations for advancing technology in those settings.

Measure 5.1. (Direct - Knowledge)
Evidence of assessment is the Technology Plan. Candidates analyze the technology utilization and needs in an approved school setting. Using the material presented throughout the course, including the readings and class discussions, they orchestrate and lead a planning process with the school's Technology Committee. They format the plan per a template provided with some elements likely being proposed or conceptual. For example, elements related to budget or survey data may not be available within the timeframe of this activity. For those elements, they are addressed broadly with as much detail as possible or a proposed timeframe in which they will be addressed with notations that details are limited and with a proposed timeline for gathering all pertinent details.

The technology plan assessment requires candidates to investigate a school within the P-12 setting. The investigation includes an audit of current technologies and their uses. With that knowledge, the candidate then works with the school leadership to organize a

Technology Committee (or convene an existing committee) and lead an effort to draft a technology plan specific to the school in question (Element 1.2: Strategic Planning). In general, this substantive activity aligns with the three elements of Standard 1: Visionary Leadership in that the candidate is assuming a leadership role in drafting a technology plan to expand and enhance school operations (Element 1.1: Shared Vision; Element 1.2: Strategic Planning). With support of the school's Technology Committee, the candidate coordinates the effort to draft the school's vision and goals for school-wide technology integration. In some instances, this involves creating a vision and goals; in other instances, the activity serves to refresh an existing vision and related goals (Element 1.1: Shared Vision; Element 4.4: Partnerships). Once the vision has been identified, the candidate and the Technology Committee work to draft goals for the three planning focus areas of 1) technology integration, 2) professional development, and 3) community engagement. The focus area goals lead to process to identifying key individuals, both internal to the school and external stakeholders, who will be key personnel in supporting the goals and what each individual or group's role will be. Specific needs—hardware, software, networking, support, etc.—are then identified based on goals and data sources. Finally, candidates draft a budget for accomplishing the goals and seek out funding sources available (Element 4.5: Technology Infrastructure; Element 6.2: Technical Knowledge). Examples of how advocacy networks and resources influenced the work are integrated throughout all sections (Element 1.3: Advocacy). The assessment criteria and indicators have construct validity because items were aligned directly to ISTE Technology Director standards as noted in the analysis. Research-based analyses of quality are planned for future assessment cycles.

The target is: 80% of candidates will earn minimum benchmark ratings of 10 on each criterion based on performance expectations.

Finding: Target was Met

- **AC 2019-2020:** Target was Met. 81% of candidates met benchmark.
- **AC 2018-2019:** Target was Met. 80% of candidates met benchmark
- **AC 2017-2081:** Target was Met. 100% of candidates met benchmark
- **AC 2016-2017:** Target was Met. 100% of candidates met benchmark

Analysis:

In AC 2018-2019, the target was met. While the benchmark was met in 2018-2019, the finding was not 100% because three candidates did not complete the assessment. The course instructor ensured that assessment criteria and instructions remained clear and that candidates had opportunities to pose clarifying questions as needed through an online Q&A forum to which all candidates had access.

Based on analysis of the AC 2018-2019 results, faculty made the following changes in AC 2019-2020 to drive the cycle of improvement. In AC 2019-2010, faculty placed greater instructional emphasis on completing the assessment. by placing course-level weight on the assessment requiring completion of the assessment to earn a grade in the course. This additional accountability helped ensure that more candidates completed the assessment so that data could be collected. These changes had a direct impact on the student's ability to exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline.

As a result of these changes, in AC 2019-2020 the target was met.

Based on an analysis of AC 2019-2020 results, the course instructor ensured that assessment criteria and instructions remained clear and that candidates had opportunities to pose clarifying questions as needed through an online Q&A forum to which all candidates had access. An area of particular strength was the ability to effectively choose given technologies to meet needs under certain conditions. An area of particular academic weakness was the ability to fully show the justification for major purchases of technology equipment by better illustrating the impacts it will have on the student body.

Action - Decision or Recommendation:

In AC 2019-2020, the target was met.

Based on information gathered from analysis of the AC 2019-2020 data, faculty will implement the following changes in AC 2020-2021 to drive the cycle of improvement. In AC 2020-2021, faculty will provide additional instructional emphasis on the ability to fully show the justification for major purchases of technology equipment by better illustrating the impacts it will have on the student body.

These changes will improve the student's ability to exhibit creative thinking that yields engaging ideas, processes, materials, and experiences appropriate for the discipline, thereby continuing to push the cycle of improvement forward.

Comprehensive Summary of Key Evidence of Improvements Based on Analysis of Results:
Program faculty made several decisions after examining results of data analysis from AC 2018-2019 which resulted in improved student learning and program improvement in AC 2019-2020.

- SLO 1
  - Additional APA style, writing tips, and grammar support were provided to candidates; however, patterns of consistent errors in candidate work were identified, which revealed that candidates did not take advantage of the additional resources nor did they, overall, integrate corrections from draft assignments into their final assignments on which these data are based.
- SLO 2
  - Assessment requirements were refined to ensure clarity of criteria and indicators.
- SLO 3
  - Procedures for mentor evaluations were changed to include formative and summative evaluations rather than only summative.
- SLO 4
  - The course instructor assignment was changed so that an instructor with greater multimedia expertise taught the course and clarity was added to the assessment instruction.
- SLO 5
  - The course instructor ensured that assessment criteria and instructions

remained clear and that candidates had opportunities to pose clarifying questions as needed through an online Q&A forum to which all candidates had access.

- Overall
  - o Candidates are exhibiting knowledge and application of the breadth of each ISTE standard/element.
  - o Data show that candidates struggle with 1) scholarly writing and 2) APA formatting.
  - o Data show that some candidates are simply not submitting key assessments for evaluation.

Plan of Action Moving Forward:

Program faculty have examined the evidence and results of data analysis from AC 2019-2020 and will take steps to continue to improve student learning in AC 2020-2021:

- SLO 1: Faculty will develop and deliver additional instructional materials and resources to be added to EDUC 5850 that focus presenting results and comparing to other research, explaining strengths and limitations of the research project, following proper style guidelines for APA 7th edition, and grammar usage.

- SLO 2: Faculty will provide additional instructional focus on visual appeal--use of whitespace--a finetuning of a script that is concise when doing voice-overs.

- SLO 3: Faculty will provide additional instructional focus on adapting appropriately to rapid changes.

- SLO 4: Faculty will increase instructional emphasis on organization, usability, and navigation.

- SLO 5: Faculty will provide additional instructional emphasis on the ability to fully show the justification for major purchases of technology equipment by better illustrating the impacts it will have on the student body.