**M.S. in Education**

**Program Assessment Report**

**for**

**2014-2015**

**Submitted October 1, 2015**

**by**

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**Overview of the Master of Science in Education degree and concentrations**

The M.S. in Education degree at Radford University is designed to enhance the professional development of teacher candidates and practicing teachers. The degree has four different concentrations with additional concentrations in the planning/development stages. The current concentrations are as follows:

* Curriculum and Instruction (both with and without initial teacher licensure)
  + Elementary Education
  + Middle School Education
  + Secondary Education (Science, Social Sciences)
* Early Childhood/Early Childhood Special Education
* Educational Technology (this concentration is on hiatus)
* Mathematics Education

**Regardless of the concentration, all graduate students in the MS in Education program take a 12-hour sequence of courses referred to as “Masters Core” courses. The assignments that form the basis of program assessments are found in these four common courses:**

* **EDEF 606 - Educational Research**
* **EDEF 607 - Foundations of Education**
* **EDET 620 - Educational Technology: Applications, Applied Research and Integration**
* **EDUC 670 - Basic Principles and Practices of Multicultural Education**

**Each annual assessment report will examine data from two of these Masters Core courses.**

**For the 2014-2015 academic program assessment report, the data are analyzed from *EDEF 607: Foundations of Education* and *EDET 620: Educational Technology*.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ACADEMIC PROGRAM ASSESSMENT REPORT (2014-2015)*** | | | | | |
| ***ACADEMIC PROGRAM: Master of Science in Education*** | | | | | |
| ***PROGRAM MISSION:*** The mission of the Master of Science in Education program is to promote the professional development of education professionals who will teach, lead, and serve the students, schools, and communities in which they work. Program graduates will use research and evidence to continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community with the goal of ensuring the success of all students in a diverse and rapidly changing global environment. This mission will be implemented through a high quality program that maintains rigorous standards for instructors and students and by maintaining accreditation through state and other agencies as required by the University. | | | | | |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome 1 –*  Students will demonstrate a high level of competence in the use of English language arts (through oral and written communication)> | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Items 1, 2, and 3 on the rubric connect to this learning outcome. | The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure. | Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on Item 1 and Item 2. Twelve out of 12 students (100%) scored either “proficient” or “distinguished” on Item 3 during Fall 2014.  Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. Fourteen out of 15 students (93.3%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on items 1, 2, and 3 (see tables on page 13). | We conclude that we are very effectively meeting this learning outcome for our students and plan to continue what we are doing.  The program has set a new target achievement goal of at least 50% of students score at or above 90% on each of the five rubric items. |  |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome 2 –*  Students will show an in-depth understanding of possible options for school goals and their philosophical underpinnings. | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Items 1, 2, and 3 on the rubric connect to this learning outcome. | The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure. | Fall 2014: Eleven students (92%) taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on Item 4 of the rubric.  Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All students (15/15) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on item 4 of the rubric (see table on page 14). | We conclude that we are very effectively meeting this learning outcome for our students and plan to continue what we are doing. |  |
| *Student Learning Outcome 3 –*  Show an in-depth understanding of how schools are currently financed as well as other possible ways they could be financed (e.g. privatization). | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 4 on the rubric connects to this learning outcome. | The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure. | Fall 2014: Nine students (75%) taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 5.  Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All students (15/15) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 5 (see table on page 15). | We conclude that we are very effectively meeting this learning outcome for our students and plan to continue what we are doing. |  |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome 4 –*  Show an in-depth understanding of how schools are currently held accountable as well as possible other ways to hold schools accountable for meeting goals. | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 5 on the rubric connects to this learning outcome. | The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure. | Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 6.  Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All 15 students (100%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 6 (see table on page 16). | Future goals will focus on continued growth in the area of student understanding of how schools are financed with additional readings to support and extend this conversation. Future data analysis will note the percentage of students scoring at the more advanced levels of the “distinguished” category with a goal of at least 50% of students score at or above 90% on each of the five rubric items.  Our goal for Item 4 is to increase the percentage of students score at the level of 90% or above. |  |
| *Student Learning Outcome 5 –*  Show an in-depth understanding of the intersections between education and politics, economics, and historical and cultural factors. | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 6 on the rubric connects to this learning outcome. | The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure. | Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 7.  Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. Fourteen out of 15 students (93.3%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 7. One student (6.66%) failed to achieve the achievement target on this objective. See table on page 17 for further breakdown of students’ scores. | While data on SLO5 (rubric item 7) suggested growth from previous semesters, this was the lowest performance area from Fall 2014 and the only area for which students did not meet or exceed program achievement targets. We will be carefully monitoring student performance data on this indicator in particular to make sure the trend toward improvement continues. | Some initial progress was noted in the Spring 2015 data for this rubric item. The course instructor reported emphasizing this topic more in multiple class sessions as opposed to one class session in Fall 2014. |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome 6 –*  Use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments | Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 7 on the rubric connects to this learning outcome. | The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes. | Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 26 students or 93% scored at the advanced proficient level and 2 students (7%)scored at the proficient level. | The portfolio artifacts provide for both student choice in meeting objectives outlined for this course and, based on the analysis of this year’s data, appear to offer the opportunity to distinguish between variations in student performance.  The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the EDET 620 course. |  |
| *Student Learning Outcome 7 -*  Students will design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop technology-related knowledge, skills, and attitudes. | Students in EDET 620 are required to compile a portfolio of artifacts to demonstrate their level of mastery across multiple standards.  This Student Learning Outcome was evaluated using a checklist to assess the overall quality of specific instruction-related projects that required the students to develop technology-supported tools and strategies to improve the effectiveness of educators. | The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes. | Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 26 students or 93% scored at the advanced proficient level and 2 students (7%)scored at the proficient level. | The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the course.  Future implementations of the course will try to incorporate additional artifacts into the overall EDET 620 student portfolios.  The use of these artifacts for all sections of EDET 620, regardless of the instructor, will also be encouraged. |  |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome 8 –*  Students will exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. | This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. | The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes. | Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 22 students or 78% scored at the advanced proficient level and 5 students (18%)scored at the proficient level. | The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the course.  Future implementations of the course will try to incorporate additional artifacts into the overall EDET 620 student portfolios.  The use of these artifacts for all sections of EDET 620, regardless of the instructor, will also be encouraged. |  |
| *Student Learning Outcome 9 –*  Students will understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. | This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. | The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes. | Twenty-seven of 28 students or **96.4%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 24 students or 85% scored at the advanced proficient level and 3 students (11%)scored at the proficient level. One student did not demonstrate either proficient or advanced proficient performance, scoring minimally proficient. | The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the course.  Future implementations of the course will try to incorporate additional artifacts into the overall EDET 620 student portfolios.  The use of these artifacts for all sections of EDET 620, regardless of the instructor, will also be encouraged. |  |
| ***Outcome*** | ***Assessment Methodology*** | ***Target/Criteria for Success*** | ***Results of Assessment*** | ***Plans for Improvement*** | ***Improvements Achieved Based on Action Plan*** *(to be completed in the year following the implementation of the action plan)* |
| *Student Learning Outcome –*  Students will continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. | This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. | The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes. | Twenty-seven of 28 students or **96.4%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 23 students or 82% scored at the advanced proficient level and 4 students (14%)scored at the proficient level. One student did not demonstrate either proficient or advanced proficient performance, scoring minimally proficient. | The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the course.  Future implementations of the course will try to incorporate additional artifacts into the overall EDET 620 student portfolios.  The use of these artifacts for all sections of EDET 620, regardless of the instructor, will also be encouraged. |  |
| *Program Outcome -* | Key assessments are analyzed in each of the four courses in the MS in Education Masters Core.  For the purposes of the Academic Program Assessment Report, data are collected annually from two of these four courses. The key assessment tasks for the 2014-2015 report can be found in the appendices of this document on pages 29-37. | The program outcome target is that 100% of students will meet or exceed the minimum achievement targets set for each of the 4 courses in the MS in Education Masters Core. | While it is affirming that our M.S. in Education students are meeting almost all learning outcomes discussed in this report, data collection methods need to provide for deeper analysis of data. Data for EDEF 607 in Spring 2015 were collected in an ideal way to allow for this deeper analysis. It is the goal of the MS in Education program to report all data for 2015-2016 in such a way as to allow for more thoughtful analysis of student performance levels. | Goal 1: Improve data collection from adjuncts teaching courses in the MS in Education Masters Core courses.  Goal 2: Monitor student performance on Item 7 of the EDEF 607 assessment to ensure continued growth.  Goal 3: Collect all data for 2015-2016 in the same format as data collected for EDEF 607 in Spring 2015. |  |

**M.S. in Education: Curriculum Map of Student Learning Outcomes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Student Learning Outcome. Students will…..** | **EDEF 607 Assessments** | **EDEF 606**  **Assessments** | **EDUC 670**  **Assessments** | **EDET 620**  **Assessments** |
| Demonstrate a high level of competence in the use of English language arts (through oral and written communication). | X, A |  |  |  |
| Show an in-depth understanding of possible options for school goals and their philosophical underpinnings. | X, A |  |  |  |
| Show an in-depth understanding of how schools are currently financed as well as other possible ways they could be financed (e.g. privatization). | X, A |  |  |  |
| Show an in-depth understanding of how schools are currently held accountable as well as possible other ways to hold schools accountable for meeting goals. | X, A |  |  |  |
| Show an in-depth understanding of the intersections between education and politics, economics, and historical and cultural factors. | X, A |  | X |  |
| Articulate the OEM (Ontology, Epistemology, and Methodology) of general methods of inquiry utilized in common approaches to Educational Research (i.e., statistical, non-statistical and naturalistic). |  | X, A |  |  |
| Demonstrate the indexing and critical use of relevant field literature to develop a research question. |  | X, A |  |  |
| Develop a research proposal that defines a research investigation to support their hypothesis or exploratory topic. |  | X, A |  |  |
| Examine themselves as cultural beings; Critically examine their own backgrounds related to race, ethnicity, gender, (dis)ability, language, class, religion, and sexual orientation. |  |  | X, A |  |
| Articulate the role of privilege in perpetuating inequity in schooling and society; Discuss, analyze and explain the social construction of difference. |  |  | X, A |  |
| Explain the significance of sociocultural theory as it relates to teaching and learning . |  |  | X, A |  |
| Describe theories and applications of culturally responsive pedagogy. | X, A |  | X, A |  |
| Use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. |  |  |  | X, A |
| Design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop technology-related knowledge, skills, and attitudes. |  |  |  | X, A |
| Exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. | X |  | X | X, A |
| Understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. |  |  |  | X, A |
| Continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. |  |  |  | X, A |

\* Concept Covered = X, Concept Assessed = A

**Program Assessment Data from 2014-2015**

**Assessment Name: The EDEF 607 Final Course Paper**

Official Course Title: *EDEF 607: Foundations of Education*

Methodology: Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Items 1, 2, and 3 on the rubric connect to this learning outcome. The rubric for this portfolio assignment can be found in Appendix A of this document.

Timeline and Number of Students Assessed: The EDEF 607 course is a requirement of all MS in Education students and the assessment is conducted every time the course is offered. During Fall 2014, 12 students were enrolled in this course. During Spring 2015, 15 students were enrolled across two sections of this course.

Achievement Target: The program target is that **80% of students will earn a score of “proficient” or “distinguished”** on each item included in this measure.

**Student Learning Outcome 1: Students will** demonstrate a high level of competence in the use of English language arts (through oral and written communication).

Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Items 1, 2, and 3 on the rubric connect to this learning outcome.

Results of the Assessment of SLO 1:

Three items on the assessment rubric (see Appendix A) align with this student learning outcome.

Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on Item 1 and Item 2. Twelve out of 12 students (100%) scored either “proficient” or “distinguished” on Item 3 during Fall 2014.

Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. Fourteen out of 15 students (93.3%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on items 1, 2, and 3 (see tables below).

**Item 1-** 100% (15/15) of EDEF 607 students during this academic year scored “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** |  |
| **90-94%** | **3** |
| **85-89%** | **11** |
| **P** | **80-84%** |  |
| **75-79%** | **1** |
| **70-74%** |  |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Item 2** –100% scored “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **4** |
| **90-94%** |  |
| **85-89%** | **9** |
| **P** | **80-84%** |  |
| **75-79%** |  |
| **70-74%** | **1** |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Item 3** -100% “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **11** |
| **90-94%** | **2** |
| **85-89%** | **1** |
| **P** | **80-84%** |  |
| **75-79%** | **1** |
| **70-74%** |  |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Student Learning Outcome 2:** Show an in-depth understanding of possible options for school goals and their philosophical underpinnings

Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 4 on the rubric connects to this learning outcome.

Results of the Assessment of SLO 2

Fall 2014: Eleven students (92%) taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on Item 4 of the rubric.

Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All students (15/15) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on item 4 of the rubric (see table below).

**Item 4 –** 100% “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **3** |
| **90-94%** | **2** |
| **85-89%** | **7** |
| **P** | **80-84%** |  |
| **75-79%** | **1** |
| **70-74%** | **2** |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Student Learning Outcome 3: Students will** show an in-depth understanding of how schools are currently financed as well as other possible ways they could be financed (e.g. privatization)

Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 5 on the rubric connects to this learning outcome.

Results of the Assessment SLO 3:

Fall 2014: Nine students (75%) taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 5.

Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All students (15/15) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 5 (see table below).

**Item 5** - 100% “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **2** |
| **90-94%** | **3** |
| **85-89%** | **6** |
| **P** | **80-84%** |  |
| **75-79%** |  |
| **70-74%** | **4** |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Student Learning Objective 4:** Show an in-depth understanding of how schools are currently held accountable as well as possible other ways to hold schools accountable for meeting goals.

Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 6 on the rubric connects to this learning outcome.

Results of the Assessment SLO 4

Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 6.

Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. All 15 students (100%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 6 (see table below).

**Item 6- 100%** “distinguished” or “proficient”

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **4** |
| **90-94%** | **3** |
| **85-89%** | **5** |
| **P** | **80-84%** | **1** |
| **75-79%** |  |
| **70-74%** | **2** |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Student Learning Objective 5:** Show an in-depth understanding of the intersections between education and politics, economics, and historical and cultural factors.

Students in EDEF 607 are required to write a summative reflection paper. Rubrics are used to evaluate the students’ performance. Item 7 on the rubric connects to this learning outcome.

Results of the Assessment SLO 5

Fall 2014: Ten students (83%) of students taking EDEF 607 in Fall 2014 scored either “proficient” or “distinguished” on rubric item 7.

Spring 2015: Data were available in more detail for the spring 2015 implementation of EDEF 607. Fourteen out of 15 students (93.3%) taking EDEF 607 during Spring 2015 scored “distinguished” or “proficient” on rubric item 7. One student (6.66%) failed to achieve the achievement target on this objective. See table below for further breakdown of students’ scores.

**Item 7-**93% (14/15) scored “distinguished” or “proficient**”**

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **3** |
| **90-94%** | **2** |
| **85-89%** | **5** |
| **P** | **80-84%** |  |
| **75-79%** |  |
| **70-74%** | **4** |
| **B** | **65-69%** | **1** |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

**Discussion of Student Learning Outcomes based on this assessment:**

Analysis of this assessment that student performance exceeded targeted achievement level which stated that **80% of students earning a score of “proficient” or “distinguished”** on each item included in this measure. For four of the five student learning outcomes the actual performance totaled 100% of students earning a score of “proficient” or “distinguished.” The lowest area of performance occurred during Fall 2014 on item 4 – show an in-depth understanding of possible options for school goals and their philosophical underpinnings. During Spring 2015 the lowest performance area was on item 7 – show an in-depth understanding of the intersections between education and politics, economics, and historical and cultural factors. Student performance still exceeded the program target of 80% given that 93% of students earned at least a “proficient” on item 7.

**Course Revisions undertaken in 2014-2015 based on data from 2012-2013 and 2013-2014:**

Previous analyses of course data suggested that additional support and more in-class time was needed to help students grasp the complexity of issues related to school funding. This goal emerged from data on *rubric item 5 – show an in-depth understanding of how schools are currently financed as well as other possible ways they could be financed*. While data on item 7 suggested growth from previous semesters, this was the lowest performance area from Fall 2014 and the only area for which students did not meet or exceed program achievement targets. Some initial progress was noted in the Spring 2015 data for this rubric item. The course instructor reported emphasizing this topic more in multiple class sessions as opposed to one class session in Fall 2014. We will be carefully monitoring student performance data on this indicator in particular to make sure the trend toward improvement continues.

**Future course revisions based on assessment results from 2014-2015:**

During Spring 2015 we examined student performance within the categories of “proficient” and “distinguished.” Breaking down student performance into percentile ranges enables us to fine-tune our achievement targets.

For example, in the table listed below for item 4, you can note that 12 out of the 15 students scored at the “distinguished” level. However, most of these students were performing in the 85-89% range. Our goal for Item 4 is to increase the percentage of students score at the level of 90% or above. As a result our program target for next year will be revised from the current **80% of students earning a score of “proficient” or “distinguished”** to the level of **80% of students earning a score of “proficient” or “distinguished” with at least 50% of students scoring at 90% or above** on each of the five Student Learning Objectives included in this assessment.

**Item 4** - 33% of students scoring at or above 90%

|  |  |  |
| --- | --- | --- |
|  | **% score** | **# of students** |
| **D** | **95-100%** | **3** |
| **90-94%** | **2** |
| **85-89%** | **7** |
| **P** | **80-84%** |  |
| **75-79%** | **1** |
| **70-74%** | **2** |
| **B** | **65-69%** |  |
| **60-64%** |  |
| **55-59%** |  |
| **50-54%** |  |

The data seem to indicate that students are skilled in identifying the philosophical underpinnings of different approaches to school. An improvement is noted between Fall 2014 and Spring 2015 in the degree of students’ understanding of various financial structures for schooling, including public and private financing options. The data also indicate that the students demonstrate a high level of competence in written communication. Future goals will focus on continued growth in the area of student understanding of how schools are financed with additional readings to support and extend this conversation. Future data analysis will note the percentage of students scoring at the more advanced levels of the “distinguished” category with a goal of at least 50% of students score at or above 90% on each of the five rubric items.

**Program Assessment Data from 2014-2015**

**Assessment Name: The EDET 620 Portfolio Assessment**

**Official Course Title**: *EDET 620: Educational Technology*

**Methodology:** Students in EDET 620 are required to compile a portfolio of artifacts to demonstrate their level of mastery across multiple standards. The rubric for this portfolio assignment, which can be found in Appendix B of this document, shows that students are given a menu of options regarding which EDET 620 projects to include in their final portfolio. A complete listing of assignment overviews required in this portfolio can be found at <http://edet620-2015.weebly.com/>.

**Timeline and Number of Students Assessed:** This assessment is conducted each time this course is offered. Data were not available for Fall 2015 (Dr. Greg Sherman was on Sabbatical and the course was taught by an adjunct instructor). Data for Spring 2015 and Summer 2015 are included in this report. A total of 28 students were enrolled in EDET 620 in Spring 2015 (10 students) and Summer 2015 (18 student).

**Achievement Target:** The program target is that **90% of students will be rated as either “minimally proficient” or “proficient”** on each of the five student learning outcomes described below:

Students will…

* Use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments
* Design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop technology-related knowledge, skills, and attitudes.
* Exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.
* Understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.
* Continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

**Student Learning Outcome 6:** Use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

This Student Learning Outcome was evaluated using a checklist to assess the overall quality of specific instruction-related projects that required the students to develop technology-supported tools and strategies to improve the effectiveness of educators.

Results of the Assessment of SLO 6:

Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 26 students or 93% scored at the advanced proficient level and 2 students (7%)scored at the proficient level.

**Student Learning Outcome 7:** Design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop technology-related knowledge, skills, and attitudes.

This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. Regardless of the products selected, students were required to demonstrate their competency in the following skills:

* design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity as evidenced by one or more of the following portfolio artifacts:
  + 2e. General Educational Material Evaluations
  + 2f. Technology-Supported Instructional Program Design
* develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress as evidenced by one or more of the following portfolio artifacts:
  + 2d. Instructional Game Evaluation
  + 2e. General Educational Material Evaluations
  + 2f. Technology-Supported Instructional Program Design
  + 2k. Student Reflection
* customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources as evidenced by one or more of the following portfolio artifacts:
  + 2f. Technology-Supported Instructional Program Design
  + 2h. Multicultural Classroom Environment
* enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress as evidenced by one or more of the following portfolio artifacts:
  + 4b. Manage Strategies for Cultivating a Learner-Centered Classroom

Results of the Assessment of SLO 7:

Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 26 students or 93% scored at the advanced proficient level and 2 students (7%)scored at the proficient level.

**Student Learning Outcome 8:** Exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. Regardless of the products selected, students were required to demonstrate their competency in the following skills:

* Students will demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations as evidenced by one or more of the following portfolio artifacts:
  + 2a. Media as Context
  + 2b. Media in the Content Area
  + 2c. Content Area Conceptual “Big Pictures”
  + 2d. Instructional Game Evaluation
  + 2e. General Educational Material Evaluations
  + 2f. Technology-Supported Instructional Program Design
  + 2j. Technology-Supported Assessment
  + 2k. Student Reflection
* Students will collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation as evidenced by one or more of the following portfolio artifacts:
  + 3a. Community in a One-Computer Classroom
  + 3b. Communication Tools
  + 3c. Community-building Strategies
  + 2k. Student Reflection
* Students will communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats as evidenced by one or more of the following portfolio artifacts:
  + 3a. Community in a One-Computer Classroom
  + 3b. Communication Tools
  + 2k. Student Reflection
* Students will model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning as evidenced by one or more of the following portfolio artifacts:
  + 4a. Resource Access and Use
  + 4b. Manage Strategies for Cultivating a Learner-Centered Classroom
  + 5a. Educational Research and Evaluation

Results of the Assessment SLO 8:

Twenty-eight of 28 students or **100%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 22 students or 78% scored at the advanced proficient level and 5 students (18%)scored at the proficient level.

**Student Learning Outcome 9:** Understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. Regardless of the products selected, students were required to demonstrate their competency in the following skills:

* Students will advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources as evidenced by one or more of the following portfolio artifacts:
  + 5a. Educational Research and Evaluation
* Students will address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources as evidenced by one or more of the following portfolio artifacts:
  + 2h. Multicultural Classroom Environment
* Students will promote and model digital etiquette and responsible social interactions related to the use of technology and information as evidenced by one or more of the following portfolio artifacts:
  + 4a. Resource Access and Use
* Students will develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools as evidenced by one or more of the following portfolio artifacts:
  + 2h. Multicultural Classroom Environment

Results of the Assessment SLO 9:

Twenty-seven of 28 students or **96.4%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 24 students or 85% scored at the advanced proficient level and 3 students (11%)scored at the proficient level. One student did not demonstrate either proficient or advanced proficient performance, scoring minimally proficient.

**Student Learning Outcome 10:** Continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

This Student Learning Outcome was evaluated across a choice of student products using the evaluation instruments that correspond with each product. Regardless of the products selected, students were required to demonstrate their competency in the following skills:

* Students will participate in local and global learning communities to explore creative applications of technology to improve student learning as evidenced by one or more of the following portfolio artifacts:
  + 5c. Professional Organizations
  + 5d. Learning Communities
* Students will exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others as evidenced by one or more of the following portfolio artifacts:
  + 1c. Reflections
  + 5e. Educational Technology Leadership
* Students will evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning as evidenced by one or more of the following portfolio artifacts:
  + 5f. Personal Professional Goals

Results of the Assessment SLO 10:

Twenty-seven of 28 students or **96.4%** earned either “proficient” or “advanced proficient” on this student learning outcome. Closer examination of the data reveal that 23 students or 82% scored at the advanced proficient level and 4 students (14%)scored at the proficient level. One student did not demonstrate either proficient or advanced proficient performance, scoring minimally proficient.

**Discussion of Student Learning Outcomes based on the EDET 620 Portfolio Assessment:**

The portfolio artifacts provide for both student choice in meeting objectives outlined for this course and, based on the analysis of this year’s data, appear to offer the opportunity to distinguish between variations in student performance. The portfolio artifacts will continue to be assessed regarding their level of appropriateness for assessing the targeted skills within the parameters of the EDET 620 course. Future implementations of the course will incorporate additional artifacts into the overall EDET 620 student portfolio. The use of these artifacts for all sections of EDET 620, regardless of whether the course is taught by full-time T&R professor or adjunct instructor, will also be encouraged.

**Overall Analysis of Program Assessment Data from 2014-2015**

While it is affirming that our M.S. in Education students are meeting almost all learning outcomes discussed in this report, data collection methods need to provide for deeper analysis of data. Data for EDEF 607 in Spring 2015 were collected in an ideal way to allow for this deeper analysis. It is the goal of the MS in Education program to report all data for 2015-2016 in such a way as to allow for more thoughtful analysis of student performance levels.

**Goal Setting**

Goal 1: Improve data collection from adjuncts teaching courses in the MS in Education Masters Core courses.

Goal 2: Monitor student performance on Item 7 of the EDEF 607 assessment to ensure continued growth.

Goal 3: Collect all data for 2015-2016 in the same format as data collected for EDEF 607 in Spring 2015.

**Appendix A**

“Final” Exam / Summative Paper- In a minimum of about 4 to 5 pages, 12 pt font, double spaced, standard margins, please respond to this question: We have critically deconstructed much of American education in this course, and the authors we have read have sort of obliquely (and sometimes more directly) suggested how things should change. I now want to hear from you: How would YOU set up American education if you had the “magic wand”? Specifically:

* What do you think schools should be seeking to do (obviously, “educate” – but what does that mean exactly?) What would be the specific end goals that you seek/ What is the point of sending kids to school? --how would you answer?
* How would you hold schools accountable for meeting these end goals? What exactly would you expect schools to do to prove that they are meeting the end goals you see as most important?
* How would your ideal school and accountability system be funded?
* What difficulties would we face in trying to shift from where we are to where you want us to be in education? (e.g. what wider policies in society might need to change or might be impacted by the education you seek? )

Responding to these questions requires more than unsupported opinion and mere assertions; you should attempt to incorporate the course’s reading, outside readings, class discussions, etc., in attempting to clarify what you believe. However, this is NOT asking you to give a summary of our entire course’s content – only bring in course content as it relates to your personal answer to the question. You must include an APA formatted bibliography of any readings you mention, including readings I assigned.

**607 Final Paper Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Level of Performance🡪** | | **Distinguished** | Proficient | Basic | Unsatisfactory |
| **Written paper-mechanics, formatting, feel**  (15%) | | Spelling, punctuation, grammar, and phrasing are flawless or there are only 1-3 errors.  Length and formatting are correct (e.g. margins, font size, page minimum)  The writing is compelling. It hooks the reader and sustains interest throughout.  13.5-15 pts | There are 4-9 spelling, punctuation, grammar, and/or phrasing errors.  The writing is generally engaging, but has some dry spots. In general,  it is focused and keeps the reader's attention.  12.75 pts | There are 10-15 spelling, punctuation, grammar, and/or phrasing errors.  The writing is dull and unengaging. Though the paper has some interesting parts, the  reader finds it difficult to maintain interest  10.5 pts | There are 15+ spelling, punctuation, grammar, and/or phrasing errors.  Length and/or formatting are incorect  The writing has little  personality. The reader  quickly loses interest and stops reading.  7.5 pts or below |
| **Bibliography and in-text references– format of references**  (7%)  *For this, please use resources available on WebCT, meet with me or with someone at library or LARC if you have any questions about how to do proper APA.* | | APA format is used accurately and consistently in the paper and on the “References" page.  7 pts | APA format is used with minor errors.  5.95 pts | There are frequent errors in APA format.  4.9 pts | Format of the document is not recognizable as APA.  3.5 pts or below |
| **Organization**  (8%) | | The ideas are arranged logically. They flow smoothly from one to another and are clearly linked to each other. The reader can follow the line  of reasoning.  7.2 -8 pts | The ideas are arranged logically. They are usually clearly linked to each other. For the most part, the reader can follow the line of reasoning.  6.8 pts | In general, the writing is arranged logically, although occasionally ideas fail to make  sense together. The reader is fairly clear about what writer  intends.  5.6 pts | The writing is not logically organized. Frequently, ideas fail to make sense together. The reader cannot identify a  line of reasoning and loses interest.  4 pts or below |
| **Level of Performance🡪** | | **Distinguished** | Proficient | Basic | Unsatisfactory |
| **Quality of response**  **70%** | **What do you think schools should be seeking to do? What would be the specific end goals that you seek?**  **(17.5%)** | Does everything listed in proficient level, but also has “something” extra – perhaps a very original take on the question, useful examples, insightful connections, an extra thoroughness, in-depth exploration of possible repercussions of  argument, considerable evidence of extension of the course readings, etc.  17.5 points | *Student responds to this question, showing an understanding of possible options for school goals and their philosophical underpinnings.*  *Student shows evidence of having considered multiple perspectives of the issue as well as the impacts his/her arguments will have on various stakeholders*  *Compelling evidence from professionally legitimate sources is given to support claims. Attribution is clear and fairly represented.*  14.875 points | Something is lacking, (e.g. although attributions are occasionally given, many statements seem unsupported; details are insufficient to show in-depth understandings, multiple perspectives not considered, etc.)  12.25 points | Multiple things are lacking, listed below:  8.75 or below |
| **How would your ideal school and accountability system be funded?**  **(17.5%)** | Does everything listed in proficient level, but also has “something” extra – perhaps a very original take on the question, useful examples, insightful connections, an extra thoroughness, in-depth exploration of possible repercussions of  argument, considerable evidence of extension of the course readings, etc.  17.5 points | *Student responds to this question, showing an understanding of how schools are currently financed as well as other possible ways that they could be funded.*    *Student shows evidence of having considered multiple perspectives of the issue as well as the impacts his/her arguments will have on various stakeholders*  *Compelling evidence from professionally legitimate sources is given to support claims. Attribution is clear and fairly represented.*  14.875 points | Something is lacking, (e.g. although attributions are occasionally given, many statements seem unsupported; details are insufficient to show in-depth understandings, multiple perspectives not considered, etc.)  12.25 points | Multiple things are lacking, listed below:  8.75 or below |
| **How would you hold schools accountable for meeting these end goals?**  **(17.5%)** | Does everything listed in proficient level, but also has “something” extra – perhaps a very original take on the question, useful examples, insightful connections, an extra thoroughness, in-depth exploration of possible repercussions of  argument, considerable evidence of extension of the course readings, etc.  17.5 points | *Student responds to this question, showing an understanding of how schools are currently held accountable as well as other possible means ways to hold schools accountable for meeting goals.*  *Student shows evidence of having considered multiple perspectives of the issue as well as the impacts his/her arguments will have on various stakeholders*  *Compelling evidence from professionally legitimate sources is given to support claims. Attribution is clear and fairly represented.*  14.875 points | Something is lacking, (e.g. although attributions are occasionally given, many statements seem unsupported; details are insufficient to show in-depth understandings, multiple perspectives not considered, etc.)  12.25 points | Multiple things are lacking, listed below:  8.75 or below |
| **What difficulties would we face in trying to shift from where we are to where you want us to be in education?**  **(17.5%)** | Does everything listed in proficient level, but also has “something” extra – perhaps a very original take on the question, useful examples, insightful connections, an extra thoroughness, in-depth exploration of possible repercussions of  argument, considerable evidence of extension of the course readings, etc.  17.5 points | *Student responds to this question, showing an understanding of the intersections between education and politics, economics, historical and cultural forces.*  *Student shows evidence of having considered multiple perspectives of the issue as well as the impacts his/her arguments will have on various stakeholders*  *Compelling evidence from professionally legitimate sources is given to support claims. Attribution is clear and fairly represented.*  14.875 points | Something is lacking, (e.g. although attributions are occasionally given, many statements seem unsupported; details are insufficient to show in-depth understandings, multiple perspectives not considered, etc.)  12.25 points | Multiple things are lacking, listed below:  8.75 or below |

Total \_\_\_\_\_\_\_\_\_/100

**Appendix B**

**EDET 620 Web-Based Portfolio Requirements**

*Updated Spring 2014*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Skill Area*** | ***Specific Outcomes*** | ***NETS-T Correlation*** | ***EDET 620 Projects\**** | ***Reflection*** |
| Instruction | Use technology to improve the quality of instructional contexts, introductions, information presentation, practice/feedback, and reviews.  Use technology to promote creative thinking and the learning of worthwhile outcomes.  Use technology to help support the meeting of individual learner needs. | 1a, 1b, 1c, 2a, 2b, 2c, 2d, 4b, | * Instruction: What's worth learning? * Instruction: "Big Picture" Prezi Content Map * Instruction: Google Earth [Context for Learning] * Instruction: Context Examples [Creation, Problem-Solving and Real] * Instruction: Video-Enhanced Introduction * Instruction: Good & Bad Examples of Examples * Instruction: Technology-Related Scaffold Samples * Instruction: Concept Map Review | Present research-supported justifications for the instructional design decisions made in any course projects.  Reflect on how you plan to use instructional design principles to support your work in the future. |
| Community Building & Personal Learning Communities | Use technology to promote community among and between stakeholders within an instructional experience. These could be students, teacher, parents, community members, experts.  Use technology to promote, build, sustain and grow your learners’ personal learning networks.  Use technology to promote local and global learning partnerships. | 1c, 1d, 3b, 3c, 4d, 5a, 5b | * Community-Building and PLN Support: In-Class/School, Local and Global Community-Building Examples * Community-Building: Pinterest Interest | Describe personal accounts of how technology has improved your own personal learning networks, and possibly improved the nature of community in your classroom. |
| Management | Use technology to help manage all the aspects of your job as a professional educator. This could include organizing resources well as grading and assessment support, among other things. | 3d | * Management: Cooperative Learning and ClassDojo * Management: Management & Support Education Resources | Describe specific, personal ways in which your job has/will become both more and less manageable because of technology. |
| Professional Development | Use technology to promote, build, sustain and grow your own professional personal learning networks.  Use technology ethically and responsibly. | 3a, 3d, 4a, 4c, 5a, 5b, 5c, 5d | * Instruction: "Big Picture" Prezi Content Map * Professional Development: Evaluation and Organization of Resources * Professional Development: Final Course Reflections | Include a reflection on your current professional development goals, and how you hope to grow in your use of technology to improve your practice. |

\*Details about each project (including evaluation criteria) can be viewed at

http://edet620-2015.weebly.com*ISTE National Educational Technology Standards for Teachers (NETS-T)*

|  |  |
| --- | --- |
| ***NETS-T Category*** | ***NETS-T*** |
| **1. Facilitate and Inspire Student Learning and Creativity**  Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments. Teachers: | a. promote, support, and model creative and innovative thinking and inventiveness. |
| b. engage students in exploring real-world issues and solving authentic problems using digital tools and resources. |
| c. promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes. |
| d. model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments. |
| **2. Design and Develop Digital-Age Learning Experiences and Assessments**  Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the NETS•S. Teachers: | a. design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity. |
| b. develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress. |
| c. customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources. |
| d. enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress. |
| **3. Model Digital-Age Work and Learning**  Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society. Teachers: | a. demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations. |
| b. collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation. |
| c. communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital-age media and formats. |
| d. model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning. |
| **4. Promote and Model Digital Citizenship and Responsibility**  Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices. Teachers: | a advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources. |
| b. address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources. |
| c. promote and model digital etiquette and responsible social interactions related to the use of technology and information. |
| d. develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital-age communication and collaboration tools. |
| **5. Engage in Professional Growth and Leadership**  Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Teachers: | a. participate in local and global learning communities to explore creative applications of technology to improve student learning. |
| b. exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others. |
| c. evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning. |
| d. contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community. |