EDTC Program Assessment Framework

The University of Delaware's Master of Education in Educational Technology (EDTC) program aligns with both of the international standards bodies that inform the design of educational technology degree programs. These two standards bodies are the Association for Educational Communications and Technology (AECT) and the International Society for Technology in Education (ISTE). EDTC degree candidates may choose to follow either the AECT or the ISTE standards. This choice determines whether AECT or ISTE rubrics assess candidate progress toward fulfilling the degree performances that the EDTC program assessment framework comprises.

Degree Performances

The EDTC program assessment framework comprises the following eight performances:

1. Multimedia eLearning Environment. This is a multimedia web in which candidates create a blended learning environment using multiple methods of assessment including collaborative learning.
2. Grades in Courses. Grades indicate the extent to which candidates have acquired the pedagogical and content knowledge needed to provide effective leadership in technology integration.
3. Needs Assessment. This is a term paper with a literature review that candidates write during their first year in the program. It establishes the need for school or building-level improvements in the educational technology infrastructure, including teacher professional development, research-based best practices, and learner characteristics of all students.
4. Curriculum Project. This is field experience during which candidates keep a reflective journal documenting plans, experiences, and improvements made in a local school or workplace setting.
5. Action Research Project. This is a major research paper that the candidate writes toward the end of the master's program. In an action research project, the candidate conducts a local experiment in order to determine whether a nationally recognized best practice implemented in the local school or workplace can achieve results akin to those described in the research literature.
6. Instructional Design. The candidate designs and develops one or more lessons or modules on a topic of strategic importance to the curriculum of the local school or workplace. ISTE-C candidates must create teacher professional development informed by the principles of adult learning.
7. School or Workplace Technology Plan. This is a strategic plan that explains how the local school or workplace will go about achieving strategic goals by using technology to provide instruction, collect data, and evaluate results in order to determine the extent to which standards have been met. The plan includes a work schedule, hardware and software configuration, a proposed budget, and a budget explanation.

8. National Standards Capstone ePortfolio. In the capstone ePortfolio, the candidate submits artifacts documenting achievements in each ISTE or AECT standards domain. For each standard, the candidate explains the manner in which the artifact(s) address the criteria.

Standards Alignment Overview

The chart below identifies the specific AECT and ISTE standards that each performance assesses. In this chart, the column label ISTE-C refers to the ISTE standards for Coaches.

Assessments	AECT Standards	ISTE-C Standards
#1 Multimedia eLearning Environment	1.1, 3.3, 3.5, 3.6	3-c, 3-d, 5-c
#2 Grades	5.1	6-b
#3 Needs Assessment	1.2, 2.3, 2.5	1-a, 1-d, 4-a
#4 Curriculum Project	1.3, 2.1, 3.2, 4.4	2-c, 2-d, 2-e, 3-e, 5-b
#5 Action Research Project	5.2, 5.3, 5.4	2-b, 2-g, 4-c
#6 Instructional Design	2.2, 2.4, 3.1, 4.1	2-a, 2-f, 3-a, 4-b
#7 Technology plan	1.4, 3.4, 4.2, 4.5	1-b, 1-c, 3-f, 3-g, 5-a
#8 Capstone ePortfolio	1.5, 4.3, 5.1	2-h, 3-b, 6-a, 6-b, 6-c

Detailed Alignment with AECT Standards

The text of each AECT standard appears on the following grid, in which checkboxes indicate which rubric is used in assessing the candidate's performance.

AECT STANDARDS AND INDICATORS	APPLICABLE ASSESSMENTS
1. Content Knowledge. Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.	
1.1 **Creating.** Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
1.2 **Using**. Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
1.3 **Assessing/Evaluating**. Candidates demonstrate the ability to assess and evaluate the effective integration of appropriate technologies and instructional materials.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
1.4 **Managing**. Candidates demonstrate the ability to effectively manage people, processes, physical infrastructures, and financial resources to achieve predetermined goals.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
1.5 **Ethics**. Candidates demonstrate the contemporary professional ethics of the field as defined and developed by the Association for Educational Communications and Technology.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8
2. Content Pedagogy. Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy.	
2.1 **Creating**. Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
2.2 **Using**. Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
2.3 **Assessing/Evaluating**. Candidates demonstrate an inquiry process that assesses the adequacy of learning and evaluates the instruction and implementation of educational technologies and processes grounded in reflective practice.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
2.4 **Managing**. Candidates manage appropriate technological processes and resources to provide supportive learning communities, create flexible and diverse learning environments, and develop and demonstrate appropriate content pedagogy.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
2.5 **Ethics**. Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
3. Learning Environments. Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.	
3.1 **Creating**. Candidates create instructional design products based on learning principles and research-based best practices.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
3.2 **Using**. Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning based on principles, theories, and effective practices.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
3.3 **Assessing/Evaluating**. Candidates use multiple assessment strategies to collect data for informing decisions to improve instructional practice, learner outcomes, and the learning environment.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
3.4 **Managing**. Candidates establish mechanisms for maintaining the technology infrastructure to improve learning and performance.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8

AECT STANDARDS AND INDICATORS	APPLICABLE ASSESSMENTS
3.5 **Ethics**. Candidates foster a learning environment in which ethics guide practice that promotes health, safety, best practice, and respect for copyright, Fair Use, and appropriate open access to resources.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
3.6 **Diversity of Learners**. Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
4. Professional Knowledge and Skills. Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.	
4.1 **Collaborative Practice**. Candidates collaborate with their peers and subject matter experts toanalyze learners, develop and design instruction, and evaluate its impact on learners.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
4.2 **Leadership**. Candidates lead their peers in designing and implementing technology-supported learning.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
4.3 **Reflection on Practice**. Candidates analyze and interpret data and artifacts and reflect on the effectiveness of the design, development and implementation of technology-supported instruction and learning to enhance their professional growth.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8
4.4 **Assessing/Evaluating**. Candidates design and implement assessment and evaluation plans that align with learning goals and instructional activities.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
4.5 **Ethics**. Candidates demonstrate ethical behavior within the applicable cultural context during all aspects of their work and with respect for the diversity of learners in each setting.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
5. Research. Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.	
5.1 **Theoretical Foundations**. Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology.	□#1 ■#2 □#3 □#4 □#5 □#6 □#7 ■#8
5.2 **Method**. Candidates apply research methodologies to solve problems and enhance practice.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8
5.3 **Assessing/Evaluating**. Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8
5.4 **Ethics**. Candidates conduct research and practice using accepted professional and institutional guidelines and procedures.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8

Detailed Alignment with ISTE-C Standards

The text of each ISTE-C standard appears on the following grid, in which checkboxes indicate which rubric is used in assessing the candidate's performance.

ISTE TECHNOLOGY COACH STANDARDS AND INDICATORS	APPLICABLE ASSESSMENTS
1. Visionary leadership. Technology Coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.	
a. Contribute to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
b. Contribute to the planning, development, communication, implementation, and evaluation of technology-infused strategic plans at the district and school levels.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
c. Advocate for policies, procedures, programs, and funding strategies to support implementation of the shared vision represented in the school and district technology plans and guidelines.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
d. Implement strategies for initiating and sustaining technology innovations and manage the change process in schools and classrooms.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
2. Teaching, learning, and assessments. Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.	
a. Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
b. Coach teachers in and model design and implementation of technology-enhanced learning experiences using a variety of research-based, learner-centered instructional strategies and assessment tools to address the diverse needs and interests of all students.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8
c. Coach teachers in and model engagement of students in local and global interdisciplinary units in which technology helps students assume professional roles, research real-world problems, collaborate with others, and produce products that are meaningful and useful to a wide audience.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
d. Coach teachers in and model design and implementation of technology-enhanced learning experiences emphasizing creativity, higher-order thinking skills and processes, and mental habits of mind (e.g., critical thinking, metacognition, and self-regulation).	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
e. Coach teachers in and model design and implementation of technology-enhanced learning experiences using differentiation, including adjusting content, process, product, and learning environment based upon student readiness levels, learning styles, interests, and personal goals.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
f. Coach teachers in and model incorporation of research-based best practices in instructional design when planning technology-enhanced learning experiences.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
g. Coach teachers in and model effective use of technology tools and resources to continuously assess student learning and technology literacy by applying a rich variety of formative and summative assessments aligned with content and student technology standards.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8
h. Coach teachers in and model effective use of technology tools and resources to systematically collect and analyze student achievement data, interpret results, and communicate findings to improve instructional practice and maximize student learning.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8
3. Digital age learning environments. Technology coaches create and support effective digital age learning environments to maximize the learning of all students.	

ISTE TECHNOLOGY COACH STANDARDS AND INDICATORS	APPLICABLE ASSESSMENTS
a. Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
b. Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning environments.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8
c. Coach teachers in and model use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers and administrators.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
d. Select, evaluate, and facilitate the use of adaptive and assistive technologies to support student learning.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
e. Troubleshoot basic software, hardware, and connectivity problems common in digital learning environments.	□#1 □#2 □#3 ■#4 □#5 □#6 □#7 □#8
f. Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
g. Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
4. Professional development and program evaluation. Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning.	
a. Conduct needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning.	□#1 □#2 ■#3 □#4 □#5 □#6 □#7 □#8
b. Design, develop, and implement technology-rich professional learning programs that model principles of adult learning and promote digital age best practices in teaching, learning, and assessment.	□#1 □#2 □#3 □#4 □#5 ■#6 □#7 □#8
c. Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning.	□#1 □#2 □#3 □#4 ■#5 □#6 □#7 □#8
5. Digital citizenship. Technology coaches model and promote digital citizenship.	
a. Model and promote strategies for achieving equitable access to digital tools and resources and technology-related best practices for all students and teachers.	□#1 □#2 □#3 □#4 □#5 □#6 ■#7 □#8
b. Model and facilitate safe, healthy, legal, and ethical uses of digital information and technologies.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
c. Model and promote diversity, cultural understanding, and global awareness by using digital age communication and collaboration tools to interact locally and globally with students, peers, parents, and the larger community.	■#1 □#2 □#3 □#4 □#5 □#6 □#7 □#8
6. Content knowledge and professional growth. Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.	
a. Engage in continual learning to deepen content and pedagogical knowledge in technology integration and current and emerging technologies necessary to effectively implement the Standards•S and Standards•T.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8
b. Engage in continuous learning to deepen professional knowledge, skills, and dispositions in organizational change and leadership, project management, and adult learning to improve professional practice.	□#1 ■#2 □#3 □#4 □#5 □#6 □#7 ■#8
c. Regularly evaluate and reflect on their professional practice and dispositions to improve and strengthen their ability to effectively model and facilitate technology-enhanced learning experiences.	□#1 □#2 □#3 □#4 □#5 □#6 □#7 ■#8

Multimedia eLearning Environment

EDTC coursework includes multimedia and eLearning courses in which the candidate creates a multimedia eLearning environment. When evaluating this environment, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the multimedia eLearning environment rubrics.

AECT Rubric for Assessment #1: Multimedia eLearning Environment

Required Elements:

- ☐ Rationale for tool choices
- ☐ Multiple assessment strategies
- ☐ Ethical use of education technology
- ☐ Differentiated according to learner characteristics

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 1.1 Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches.	The learning environment may appear well designed but the rationale for tool choices does not indicate what systematic approaches were used.	The tool choices are well explained in the rationale and the materials reflect thoughtful application of these approaches.	Tool choices are well explained with citations indicating how tools were chosen to achieve improvements documented in the scholarly literature.
(check rating)	☐	☐	☐
AECT 3.3 Candidates use multiple assessment strategies to collect data for informing decisions to improve instructional practice, learner outcomes, and the learning environment.	Assessment may be rigorous but multiple strategies have not been employed.	The candidate employs multiple assessment strategies including discussion forums, formative checkpoints and summative exams or projects.	The candidate cites examples from the scholarly literature explaining how researched best practices informed the design of the multiple assessment strategies.
(check rating)	☐	☐	☐
AECT 3.5 Candidates foster a learning environment in which ethics guide practice that promotes health, safety, best practice, and respect for copyright, Fair Use, and appropriate open access to resources.	The site is missing basic accessibility requirements such as alternate text for graphics, and many artifacts do not have copyright notices or creative commons licenses.	An honest attempt has been made to meet accessibility and Fair Use guidelines, but there are some aspects of the user interface that are not accessible, or some copyright notices are unclear or missing.	The site complies with the Section 508 and WCAG guidelines for Web accessibility, and it follows applicable copyright and Fair Use Guidelines.
(check rating)	☐	☐	☐

AECT 3.6 Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities. (check rating)	Linkages between learner characteristics and instructional design are absent or inappropriately described. ☐	Profiles the targeted student population and describes the impact learner characteristics will have on the instructional design. ☐	Profiles the targeted student population, describes the impact learner characteristics will have on the instructional design. and includes the provision of alternate representations to meet the needs of different kinds of users, especially those with special needs. ☐

ISTE Rubric for Assessment #1: Multimedia eLearning Environment

Required Elements:

- ☐ Blending
- ☐ Collaborative learning
- ☐ Accessibility

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 3.C Coach teachers in and model use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers and administrators. (check rating)	Materials may be plentiful but the rationale for choosing them is not provided or there is no clear logical pathway or navigation to guide the user through the site. ☐	The site is well organized with nicely designed screens and intuitive navigation enabling the user to understand the manner in which learning is blended and participate in online collaborative learning. ☐	The site documents the source of national standards and researched best practices that informed the design of the learning environment's blending and collaborative learning tools. ☐
ISTE 5-B Model and facilitate safe, healthy, legal, and ethical uses of digital information and technologies. (check rating)	The project is missing basic accessibility requirements such as alternate text for graphics, and many artifacts do not have copyright notices or creative commons licenses. ☐	An honest attempt has been made to meet accessibility and Fair Use guidelines, but there are some aspects of the user interface that are not accessible, or some copyright notices are unclear or missing. ☐	The project complies with the Section 508 and WCAG guidelines for Web accessibility, and it follows applicable copyright and Fair Use Guidelines. ☐

ISTE 5.C Model and promote diversity, cultural understanding, and global awareness by using digital age communication and collaboration tools to interact locally and globally with students, peers, parents, and the larger community.	The site lacks collaboration tools or uses them in such a way that they are neither obvious nor intuitive.	The site contains well designed collaboration and encourages users to participate by explaining where these tools reside and how the user will benefit from interacting locally and globally.	The collaborative learning environment cites articles from the scholarly literature that informed its design.
(check rating)	☐	☐	☐

Needs Assessment

In keeping with the School of Education's conceptual framework, EDTC degree candidates are reflective practitioners who learn from the experience of others in developing their own reflective practice. According to this framework, each EDTC student conducts a needs assessment in which local school or workplace needs are identified in light of best practices and research findings documented in the scholarly literature. Informed by this lit review, the candidate writes a term paper that defines the needs and determines the extent to which standards have been published to inform the design of curriculum materials in the chosen content area. Most EDTC candidates conduct this needs assessment in the content area of their intended curriculum project, which is thereby informed by the research reviewed in the term paper.

When evaluating the needs assessment, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Needs Assessment rubrics.

AECT Rubric for Assessment #3: Needs Assessment
(term paper with lit review)

Required Elements:

- ☐ Pedagogical justification of tool choices
- ☐ Key questions guide the inquiry into identifying needs
- ☐ Accommodate users with different learner characteristics

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 1.2 Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy.	The needs assessment may be thorough but it does not adequately explain the pedagogical reasons for using the tools it recommends.	Needs are accompanied by recommendations for using specific tools intended to address those needs from a pedagogical perspective explained in the needs assessment.	The reasons for recommending specified tools to meet identified needs are documented with citations from the scholarly literature explaining the best practices informing the tool selection.
(check rating)	☐	☐	☐
AECT 2.3 Candidates demonstrate an inquiry process that assesses the adequacy of learning and evaluates the instruction and implementation of educational technologies and processes grounded in reflective practice.	Although important needs may be identified, the needs assessment does not identify the key questions guiding this inquiry.	The key questions guiding this inquiry make logical sense in a framework pointing to the need for the technologies recommended.	The needs assessment cites researched best practices documented in the scholarly literature investigating similar key questions leading to the pedagogical analysis informing the recommended tool selection.
(check rating)	☐	☐	☐
AECT 2.5 Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community.	Linkages between learner characteristics and instructional design are absent or inappropriately described.	Profiles the targeted student population and describes the impact learner characteristics will have on the instructional design.	Profiles the targeted student population, describes the impact learner characteristics will have on the instructional design, and provides for alternate representations to meet the needs of users with different learning characteristics.
(check rating)	☐	☐	☐

ISTE Rubric for Assessment #3: Needs Assessment
(term paper with lit review)

Required Elements:

- ☐ Assesses needs for all students
- ☐ Proven implementation strategies
- ☐ Teacher Professional Development

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 1-A Contribute to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students.	Although the needs assessment may cover a lot of ground in terms of content and scope, it does not consider how to deliver the materials to all students, including those with special needs.	Profiles the targeted student population and describes the impact learner characteristics will have on the instructional design.	Profiles the targeted student population, describes the impact learner characteristics will have on the instructional design, and includes the provision of alternate representations to meet the needs of users with different learner characteristics, including students with special needs.
(check rating)	☐	☐	☐
ISTE 1-D Implement strategies for initiating and sustaining technology innovations and manage the change process in schools and classrooms.	Although the needs assessment may be rigorous and comprehensive, the document does not specify the strategies that will be needed to implement the proposed improvements.	Cites relevant research findings and proposes teacher professional development activities based on the recommendations other practitioners have made in the scholarly literature.	Cites relevant research findings and proposes teacher professional development activities based on recommendations documented in the scholarly literature. Reflects on the research findings and identifies areas in which there are unanswered questions or contradictions that merit further investigation.
(check rating)	☐	☐	☐

ISTE 3-D Select, evaluate, and facilitate the use of adaptive and assistive technologies to support student learning. (check rating)	Although the site may recommend assistive technology, the site is missing basic accessibility requirements such as alternate text for graphics, and many artifacts do not have copyright notices or creative commons licenses. ☐	An honest attempt has been made to meet accessibility and Fair Use guidelines, but there are some aspects of the user interface that are not accessible, or some copyright notices are unclear or missing. ☐	The site complies with the Section 508 and WCAG guidelines for Web accessibility, and it follows applicable copyright and Fair Use Guidelines. ☐
ISTE 4-A Conduct needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning. (check rating)	Although the needs assessment may specify what students need to learn, it does not recommend how teachers will receive the professional development needed to implement it. ☐	Identifies applicable professional or academic standards and proposes curriculum activities based on these standards. ☐	Identifies and reflects on applicable professional or academic standards and proposes curriculum activities based on these standards. Identifies areas in which the standards are vague or open to multiple interpretations. ☐

Curriculum Project

One of the most important abilities acquired by EDTC students is the capacity to use educational technology for curriculum enhancements and improvements. Each student must demonstrate this capacity by creating a curriculum project that is designed to improve instruction or solve an educational problem in an authentic school or workplace setting. In a reflective journal, the student documents problems analyzed, approaches tried, and results achieved. By studying this journal, the EDTC faculty (as well as potential employers) can evaluate the extent to which the student has become a reflective practitioner who is able to discover best practices and adapt them to local needs.

When evaluating the curriculum project, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Curriculum Project rubrics.

Note: If the curriculum project is not already covered by an approved Application for Educational Technology Internship or Practicum form, the student must complete this form in order to gain EDTC approval for carrying out this activity.

AECT Rubric for Assessment #4: Curriculum Project
(reflective journal)

Required Elements:

- ☐ Protocol explains why tools were chosen
- ☐ Content pedagogy and learning theory inform the curriculum design
- ☐ Assessment aligns with learning activities

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 1.3 Candidates demonstrate the ability to assess and evaluate the effective integration of appropriate technologies and instructional materials.	Although the curriculum plan may be rich in its use of tools, there is little or no explanation of why the materials were chosen.	The curriculum plan explains the reasons why the materials were chosen and provides the rationale for adopting the selected tools as compared to other possible approaches.	The curriculum plan cites researched best practices documented in the scholarly literature informing the decision to adopt the chosen strategy as compared to other technological possibilities.
(check rating)	☐	☐	☐
AECT 2.1 Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes.	Although the curriculum may be rich in technological resources, the plan contains little or no references or explanation of the content pedagogy that informed the design of the instructional sequencing, tool choices, and assessment of student learning.	The curriculum plan explains how content pedagogy impacted the design of the learning environment and the assessment of student learning outcomes.	Citations from the scholarly literature, such as research about TPACK, inform the design of the curriculum plan and its multiple assessment strategies.
(check rating)	☐	☐	☐
AECT 3.2 Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning based on principles, theories, and effective practices.	Although the curriculum may appear to make effective use of technology integration strategies, there is little or no explanation of the learning theory that informed these decisions.	The curriculum plan references and explains how learning principles and impactful practices informed the curriculum design.	The curriculum plan identifies gaps in the scholarly references to the learning theories that informed the project's design and suggests directions for further study.
(check rating)	☐	☐	☐

AECT 4.4 Candidates design and implement assessment and evaluation plans that align with learning goals and instructional activities. (check rating)	Criteria for determining learner mastery of assigned content are vague or unspecified. ☐	The materials implement clearly defined criteria to determine when the learner has mastered the assigned content. ☐	Instructional sequencing considers the learner's current achievement level, adjusts the course accordingly, and uses clearly defined criteria to determine when the learner has mastered the assigned content. ☐

ISTE Rubric for Assessment #4: Curriculum Project
(reflective journal)

Required Elements:

- ☐ Real world context
- ☐ Collaborative learning
- ☐ Project based assessment
- ☐ Differentiation
- ☐ Troubleshooting log

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 2-C Coach teachers in and model engagement of students in local and global interdisciplinary units in which technology helps students assume professional roles, research real-world problems, collaborate with others, and produce products that are meaningful and useful to a wide audience. (check rating)	The project may seem authentic but it does not use technology to help students assume professional roles and collaborate in solving real-world problems that are non-trivial. ☐	The curriculum design provides tools for students to collaborate on real-world problems in an authentic context and assume the role of a professional suggesting solutions to a needy audience. ☐	Includes participation in a real-world global learning community with citations to scholarly literature documenting its impact and scope. ☐
ISTE 2-D Coach teachers in and model design and implementation of technology-enhanced learning experiences emphasizing creativity, higher-order thinking skills and processes, and mental habits of mind (e.g., critical thinking, metacognition, and self-regulation). (check rating)	Although the curriculum may be rich in multimedia content, the assessment is primarily objective in nature, measuring student knowledge of facts as opposed to assessing what students are capable of doing. ☐	The curriculum contains project-based learning that involves students in creating or authoring, not just memorizing and consuming. ☐	The curriculum plan includes a rationale citing scholarly research that documents the effectiveness of the techniques chosen for engaging students in real-world project-based learning. ☐

ISTE 2-E Coach teachers in and model design and implementation of technology-enhanced learning experiences using differentiation, including adjusting content, process, product, and learning environment based upon student readiness levels, learning styles, interests, and personal goals. (check rating)	In spite of otherwise appearing to support a wide range of learning modalities, the curriculum does not specify how differentiation will take place. ☐	The curriculum protocol profiles the targeted student population and considers the impact learner characteristics will have on the instructional design. ☐	Profiles the targeted student population, describes the impact learner characteristics will have on the instructional design, and includes the provision of alternate representations to meet the needs of different kinds of users, especially those with special needs. ☐
ISTE 3-E Troubleshoot basic software, hardware, and connectivity problems common in digital learning environments. (check rating)	During the course of implementing the curriculum, the candidate had little or no involvement in helping users solve technical problems. ☐	The curriculum journal documents how the candidate played an active role in helping users overcome technical problems related to software, hardware, and connectivity. ☐	The curriculum journal identifies and categorizes the types of technical issues encountered and makes recommendations for solving these kinds of problems in the future. ☐

Action Research Project

A key feature of the EDTC program is the manner in which students carry out an actual project in a school or workplace setting appropriate to the student's career goals. This project normally consists of the implementation of one or more curriculum modules from the student's curriculum design project. Students report the results of the project in the form of a paper that is written in APA style using case study methodology such as the protocols defined in Yin, Robert K. Case Study Research: Design and Methods. Third edition. Thousand Oaks: Sage Publications, 2003. ISBN 0-7619-2553-8.

The action research project will be evaluated by a committee consisting of the candidate's advisor, a faculty member in the candidate's area of specialization, and one other member of the Master of Education core faculty. It is the candidate's responsibility to form this committee, in consultation with the advisor, during the semester preceding the academic term in which the paper will be written. Upon completion of the paper, the student will forward an electronic copy to each member of this committee, which has the responsibility to determine whether the paper satisfies the action research requirement. If the paper does not meet expectations, the advisor will provide the candidate with comments, and the candidate will have two weeks to revise the paper. This revision may be done only once. Candidates will be notified of the results approximately three weeks after completing the paper.

When evaluating the action research project, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Action Research Project rubrics.

Note: If the action research project is not already covered by an approved Application for Educational Technology Internship or Practicum form, the student must complete this form in order to gain EDTC approval for carrying out this activity.

AECT Rubric for Assessment #5: Action Research Project (case study)

Required Elements:

- ☐ Data supports the findings
- ☐ Hypotheses and key questions foster logical inquiry
- ☐ Evidence of ethical conduct of research

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 5.2 Candidates apply research methodologies to solve problems and enhance practice.	Claims made based on the local findings reported are not supported by the data that has been collected.	Collects qualitative and quantitative data and correctly uses statistical methods (such as mean, standard deviation, t-test, and chi-square) to determine the extent to which improvements have occurred.	Collects qualitative and quantitative data and develops a theoretical framework to explain the differences observed between local findings and results reported in the scholarly literature.
(check rating)	☐	☐	☐
AECT 5.3 Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance. (p. 203)	The hypotheses are misstated or missing, or the local experiment is not informed by results and experiences reported in the scholarly literature.	Hypotheses and key questions guiding the inquiry are well formed and make logical sense in framing this action research project.	Analyzes the results of a model project reported in the scholarly literature and frames locally recommended actions in the form of hypotheses to test and measure the effectiveness of the locally proposed actions.
(check rating)	☐	☐	☐
AECT 5.4 Candidates conduct research and practice using accepted professional (p. 296) and institutional (p. 297) guidelines and procedures.	The research may appear ethical but the study does not explain how the candidate followed local school district or workplace requirements for the ethical conduct of research.	The study explains how the candidate followed local school district or workplace requirements for the ethical conduct of research, such as applicable IRB stipulations.	The study follows and suggests improvements in local school district or workplace requirements for the ethical conduct of research.
(check rating)	☐	☐	☐

ISTE Rubric for Assessment #5: Action Research Project (case study)

Required Elements:

- ☐ Teacher learning aimed at improving results
- ☐ Formative and summative techniques
- ☐ Compare findings to those reported in scholarly literature

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 2-B Coach teachers in and model design and implementation of technology-enhanced learning experiences using a variety of research-based, learner-centered instructional strategies and assessment tools to address the diverse needs and interests of all students. (check rating)	The Action Research Project may have good overall design but it does not provide any mechanism for differentiating instruction so that all students can learn. ☐	The project profiles the targeted student population and considers the impact of learner characteristics. ☐	The project profiles the targeted student population, considers the impact of learner characteristics, and provides alternate representations to meet the needs of different kinds of users, especially those with special needs. ☐
ISTE 2-G Coach teachers in and model effective use of technology tools and resources to continuously assess student learning and technology literacy by applying a rich variety of formative and summative assessments aligned with content and student technology standards. (check rating)	The Action Research Project may specify standards alignment but the data collected is based on summative measures with little or no facility for coaching students on a formative basis. ☐	The Action Research Project specifies the standards that guide the inquiry and uses both formative and summative techniques for collecting data and analyzing results. ☐	The Action Research Project specifies the standards that guide the inquiry in both formative and summative assessment domains and compares its findings to results reported in the scholarly literature. ☐
ISTE 4-C Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning. (check rating)	The Action Research Project may be based around a sound curriculum but nothing is done to assess whether the teacher learned or improved anything. ☐	The case study documents what the teachers learned or analyzes data indicating how teachers can help improve learning outcomes. ☐	The case study documents what the teachers learned and compares its findings to those reported in the scholarly literature. ☐

Instructional Design

The EDTC program requires that each degree candidate must design a learning object intended for use by students whose school or workplace context requires improved results on the performance being taught. Most EDTC candidates choose to design a learning object that is part of their curriculum project. This design must be presented in the form of an annotated concept map and/or storyboard providing sufficient detail that a developer could create the learning object from the specifications provided.

When evaluating the instructional design, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Instructional Design rubrics.

AECT Rubric for Assessment #6: Instructional Design (concept map/storyboard)

Required Elements:

- ☐ Explain how content pedagogy and learning principles informed the design
- ☐ Accommodate learners from diverse backgrounds
- ☐ Collaborate with SMEs in making design decisions

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 2.2 Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy.	Although technological design decisions may appear sound, there is little or no explanation of how they were informed by content pedagogy.	The concept map or storyboard contains annotations explaining how content pedagogy informed the design decisions.	Citations from the scholarly literature support claims made in explaining how the design decisions were informed by content pedagogy.
(check rating)	☐	☐	☐
AECT 2.4 Candidates manage appropriate technological processes and resources to provide supportive learning communities, create flexible and diverse learning environments, and develop and demonstrate appropriate content pedagogy.	Although the storyboard or concept map may explain how content pedagogy informed its design, there is little or no explanation of how the material can function in differentiating instruction.	The concept map or storyboard contains annotations explaining where and how the design can differentiate instruction in support of diverse learning communities.	Citations from the scholarly literature support design decisions made in creating a flexible and diverse learning environment.
(check rating)	☐	☐	☐

AECT 3.1 Candidates create instructional design products based on learning principles and research-based best practices. (check rating)	The design may be based on learning principles but there are no citations to best practices documented in the scholarly literature, or the practices cited are misused. ☐	The candidate makes Instructional Design recommendations based on learning principles and cites relevant research-based best practices. ☐	The candidate makes Instructional Design recommendations based on reflective study of best practices cited in the scholarly literature and poses additional research questions in the form of testable hypotheses for further investigation. ☐
AECT 4.1 Candidates collaborate with their peers and subject matter experts to analyze learners, develop and design instruction, and evaluate its impact on learners. (check rating)	There is little or no evidence of collaboration between the designer and peers or subject matter experts. ☐	Annotations in the concept map identify design decisions made as a result of collaboration with peers or subject matter experts. ☐	Annotations in the concept map indicate that the designer participated in a professional learning community in which nationally known scholars collaborated on the project. ☐

ISTE Rubric for Assessment #6: Instructional Design
(concept map/storyboard)

Required Elements:

- ☐ Content pedagogy and technological standards
- ☐ Uses research-based best practices
- ☐ Integrates technology into classroom activities
- ☐ Fosters collaborative learning
- ☐ Applies adult learning principles to teacher professional development

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 2-A Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards. (check rating)	The design may address content standards but student technology standards are lacking. ☐	The concept map/storyboard explains how the design aligns both with content standards as well as student technology standards. ☐	The concept map/storyboard uses a nationally researched teacher preparation framework such as TPACK to explain how the design supports both content and technology standards. ☐
ISTE 2-F Coach teachers in and model incorporation of research-based best practices in instructional design when planning technology-enhanced learning experiences. (check rating)	The instructional design makes little or no references to the scholarly literature about research-based best practices in instructional design. ☐	The instructional design uses and references research-based best practices documented in the scholarly literature about instructional design. ☐	The instructional design cites research-based best practices that informed its design and identifies gaps or suggests ideas for further research to advance the field. ☐
ISTE 3-A Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments. (check rating)	The design spec says little or nothing about how teachers should go about implementing this in the classroom and learning through collaborating. ☐	The design spec does a good job of explaining how the teacher facilitates learning by managing the classroom aspects of the design including learning through collaborating. ☐	The design spec explains how models documented in the scholarly literature informed the design of the classroom technology integration and collaborative learning strategy. ☐

ISTE 4-B Design, develop, and implement technology-rich professional learning programs that model principles of adult learning and promote digital age best practices in teaching, learning, and assessment.	References to adult learning principles are vague or missing, the alignment is unclear, or the citations are used out of context.	Identifies applicable principles of adult learning and proposes teacher professional development activities based on these principles.	Identifies and reflects on applicable principles of adult learning and proposes teacher professional development activities based on these principles. Identifies areas in which the standards are vague or open to multiple interpretations.
(check rating)	☐	☐	☐

Technology Plan

As part of their internship, EDTC candidates create a detailed plan for carrying out an actual technology facilitation project in a school or workplace setting appropriate to the candidate's career goals. In the technology plan, the candidate must analyze the logistical, pedagogical, and political issues related to putting the project into practice. The plan can be to implement the candidate's curriculum project or instructional design, or the plan can cover a different topic involving technology integration. Scheduling, budgetary, and staffing implications must be clearly articulated, and the candidate must present a realistic schedule for implementing the project in the local setting. The candidate submits the implementation plan in the form of a narrative that can include charts and diagrams created with project management tools.

When evaluating the technology plan, EDTC faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Technology Planning rubrics.

Note: If the proposed field experience is not already covered by an approved Application for Educational Technology Internship or Practicum form, the student must complete this form in order to gain EDTC approval for carrying out this activity.

AECT Rubric for Assessment #7: School or Workplace Technology Plan

Required Elements:

- ☐ Plan of work specifies project management tools
- ☐ Identifies obstacles and strategizes how to overcome them
- ☐ Consults with stakeholders
- ☐ Treats all students ethically including learners with special needs

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
AECT 1.4 Candidates demonstrate the ability to effectively manage people, processes, physical infrastructures, and financial resources to achieve predetermined goals.	Although the goals of the plan may seem important, the quality of the timeline, budget explanation, and plan of work do not inspire confidence that the innovation can be successfully implemented by following this plan.	The plan identifies implementation obstacles, predicts when they will occur, and prepares coping strategies based on findings documented in the scholarly literature.	The plan hypotheses new ways of overcoming obstacles identified in the scholarly literature and prepares to test these hypotheses if the obstacles are encountered.
(check rating)	☐	☐	☐
AECT 3.4 Candidates establish mechanisms (p. 190) for maintaining the technology infrastructure (p. 234) to improve learning and performance.	Project management methodologies are vague or it is unclear how proposed project management tools will work together in order to help keep the project on time and within budget.	The plan identifies a suite of project management tools and explains how the implementation team will use these tools to keep the project on schedule, control costs, monitor the results, and communicate with each other in accomplishing the project's goals.	The plan calls for managers to use follow-through tools to obtain feedback from developers and implementers in order to identify emerging problems and solve them before they cause negative impacts on the project's budget, schedule, or effectiveness.
(check rating)	☐	☐	☐
AECT 4.2 Candidates lead their peers in designing and implementing technology-supported learning.	The stakeholders have not been identified or there is no evidence they are committed to carrying out this project in an authentic school or workplace setting.	The plan identifies the stakeholders who are committed to carrying out this project in an authentic school or workplace setting.	There is evidence that the stakeholders have committed to play a key role in promoting or even requiring the use of the innovation in an authentic school or workplace setting.
(check rating)	☐	☐	☐

AECT 4.5 Candidates demonstrate ethical behavior within the applicable cultural context during all aspects of their work and with respect for the diversity of learners in each setting. (check rating)	The plan is missing basic accessibility requirements, accommodations for users with special needs, or provisions for copyright notices or creative commons licenses. ☐	An honest attempt has been made to meet accessibility, copyright, and Fair Use guidelines, but some aspects of the plan fail to take into account accommodations for users with special needs. ☐	The plan contains evidence that the candidate proceeded ethically within the applicable cultural context during all aspects of their work on this plan and with respect for the diversity of learners in each setting. ☐

ISTE Rubric for Assessment #7: School or Workplace Technology Plan

Required Elements:

- ☐ Considers the school or district technology plan
- ☐ Uses technology to consult with stakeholders
- ☐ Considers researched best practices

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
ISTE 1-B Contribute to the planning, development, communication, implementation, and evaluation of technology-infused strategic plans at the district and school levels. (check rating)	The plan may consider aspects of the local classroom or workplace but fails take into account its impact or implications for the school district or enterprise as a whole. ☐	The classroom or workplace plan considers and describes its potential impact and implications for the school district or enterprise as appropriate. ☐	Using citations to planning documents studied in the scholarly literature, the classroom or workplace plan provides a national context for how it supports and contributes to school and enterprise level planning. ☐
ISTE 1-C Advocate for policies, procedures, programs, and funding strategies to support implementation of the shared vision represented in the school and district technology plans and guidelines. (check rating)	Although the plan may specify appropriate strategies, it lacks references to the local school and district technology plans and guidelines. ☐	The plan specifies how it aligns and supports and advocates for the shared vision in the school and district technology plans and guidelines. ☐	The plan aligns with, supports, and makes suggestions for improvements based on citations to the scholarly literature such as the national education technology plan. ☐

ISTE 3-F Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure. (check rating)	There is little evidence that the candidate collaborated with teachers and administrators in developing this plan. ☐	The plan does a good job of explaining how consultation with teachers and administrators informed its design and recommendations. ☐	Based on citations from the scholarly literature such as the national education technology plan, the plan suggests actions the local school or district could take to further enhance teaching and learning with technology. ☐
ISTE 3-G Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community. (check rating)	The plan fails to address how teachers can use digital communication and collaboration tools to communicate locally and globally with stakeholders. ☐	The plan provides specific recommendations explaining how teachers can use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community. ☐	The plan cites best practices documented in the scholarly literature that informed its recommendations for teachers to use digital communication and collaboration tools to communicate locally and globally with stakeholders. ☐
ISTE 5-A Model and promote strategies for achieving equitable access to digital tools and resources and technology-related best practices for all students and teachers. (check rating)	Although the plan may do a good job of specifying digital tools and resources, there is little or no specification about making them equitably available. ☐	The plan provides actionable examples of how the organization can achieve equitable access to the digital tools and resources recommended in the plan. ☐	The plan cites examples from the scholarly literature that informed the recommended strategies for achieving equitable access to digital tools and resources. ☐

National Standards Capstone ePortfolio

As the capstone project at the end of the master's program, all EDTC students will create a multimedia Web site ePortfolio full of artifacts demonstrating the manner and the extent to which the degree candidate has met the ISTE-C or AECT standards. When evaluating the capstone ePortfolio, program faculty use one of the following two rubrics. Faculty use the ISTE rubric for candidates who are teachers working toward the ISTE-C endorsement. For all other candidates, faculty use the AECT rubric. The tables below present the Capstone ePortfolio rubrics.

AECT Rubric for Assessment #8: National Standards Capstone ePortfolio

Required Elements:

- ☐ Summative Introduction
- ☐ Statement for each of the five AECT standards
- ☐ Artifacts, with abstracts, supporting each of the five AECT standards

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
Summative Introduction	The introduction may accurately summarize the five statements and connections, but it does not discuss insights gained or connect the statements as a whole.	Introduces and summarizes theories and connections to artifacts presented in the statements. This provides the reader with an overview of your accomplishments as well as a context for the statements that follow.	In addition to summarizing the connections between the artifacts and the statements, the introduction includes a reflection on how your perspective as an instructional developer has been impacted by the process of meeting the AECT standards.
(check rating)	☐	☐	☐
AECT 1.5 Candidates demonstrate the contemporary professional ethics of the field as defined and developed by the Association for Educational Communications and Technology.	The portfolio is missing basic accessibility requirements such as alternate text for graphics, and many artifacts do not have copyright notices or creative commons licenses.	An honest attempt has been made to meet accessibility and Fair Use guidelines, but there are some aspects of the user interface that are not accessible, or some copyright notices are unclear or missing.	The site complies with the Section 508 and WCAG guidelines for Web accessibility, and it follows applicable copyright and Fair Use Guidelines.
(check rating)	☐	☐	☐

AECT 4.3 Candidates analyze and interpret data and artifacts and reflect on the effectiveness of the design, development and implementation of technology-supported instruction and learning to enhance their professional growth. (check rating)	Although the portfolio may recommend tools that have the potential for improving instructional practice, they are not presented in a systematic framework for collecting and analyzing student data toward the goal of continually improving the learning environment. ☐	The portfolio explains how the candidate collects and analyzes student achievement data to inform continuous improvements in the learning environment. ☐	Citations from the scholarly literature explain how the candidate's data collection and analysis are informed by nationally recognized best practices for systematic improvement of instructional practice and student learning. ☐
AECT 5.1 Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology. (check rating)	The portfolio lacks statements in which the candidate acknowledges the contribution of research to the development of the past and current theory of educational communications and technology. ☐	The portfolio contains reflections in which the candidate acknowledges the contribution of research to the development of the past and current theory of educational communications and technology. ☐	Through citations from the scholarly literature, the portfolio puts into a national best-practice context the candidate's reflections and plans for continued professional growth in modeling and facilitating technology-enhanced learning experiences. ☐
Statements documenting achievement of the five AECT Standards (check one rating per standard)	Artifacts may demonstrate proficiency, but their value to the candidate's practice and theory-base is not clear. Artifacts may be of high quality showing good use of integrated technology, but their connection with the AECT standards is not explicit or the artifacts are of limited value. Artifacts are not given a context or are evaluated only to a limited extent by the candidate. More artifacts are needed to support proficiency in one or more AECT standards.	Two to three significant artifacts are cited for each AECT standard, and artifacts are used for multiple standards. For each artifact cited there is an abstract which provides (1) a description of the artifact and how it relates to the candidate (context/date), and (2) an analysis of how the artifact demonstrates evidence for one or more particular standards.	In addition to citing two or three significant artifacts for each AECT standard, selections or portions are chosen from artifacts to illustrate salient points. In addition to explaining how each artifact demonstrates evidence for one or more standards, the abstract includes a reflection on how the artifact has contributed to the candidate's growth as a more informed, reflective, and/or responsive educator consistent with the SOE conceptual framework.

1. Content Knowledge. Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.			
	☐	☐	☐
2. Content Pedagogy. Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy.			
	☐	☐	☐
3. Learning Environments. Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.			
	☐	☐	☐
4. Professional Knowledge and Skills. Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.			
	☐	☐	☐
5. Research. Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.			
	☐	☐	☐
Technical Quality of ePortfolio Design	Graphic elements are missing or fail to contribute to the site's usability. There may be some garish color choices or backgrounds that interfere with readability of the foreground text. Text is not carefully edited for spelling and grammar. Writing style and/or organization create comprehension difficulties for the reader. Reader may be confused or lost due to poor site design. It is hard to find the artifacts that are supposed to be in the portfolio.	Although graphical elements contribute to the understanding of concepts, ideas and relationships, there may be some inconsistencies in layout, font, and color choices. Writing is concise, clear, and well organized. The navigation functions well, but it is not always clear how to move to a different section or bring a given artifact onscreen.	Graphic elements make visual connections contributing to the understanding of concepts, ideas and relationships. Font faces, type sizes, and foreground/background color choices are judicious and consistent. Writing works well with site structure to synthesize and make connections. Navigation is intuitive. The various parts of the portfolio are clearly organized and easy to retrieve onscreen.
(check rating)	☐	☐	☐

ISTE Rubric for Assessment #8: National Standards Capstone ePortfolio

Required Elements:

- ☐ Summative Introduction
- ☐ Statement for each of the six ISTE-C standards
- ☐ Artifacts, with abstracts, supporting each of the six ISTE-C standards

Candidate's Name:	**Date:**

INDICATORS	Developing	Meets	Exceeds
Summative Introduction	The introduction may accurately summarize the six statements and connections, but it does not discuss insights gained or connect the statements as a whole.	Introduces and summarizes theories and connections to artifacts presented in the statements. Provides an overview of candidate accomplishments as well as a context for the statements that follow.	In addition to summarizing the connections between the artifacts and the statements, the introduction includes a reflection explaining how the candidate's perspective as an instructional developer has been impacted by the process of meeting the ISTE-C standards.
(check rating)	☐	☐	☐
ISTE 2-H Coach teachers in and model effective use of technology tools and resources to systematically collect and analyze student achievement data, interpret results, and communicate findings to improve instructional practice and maximize student learning.	Although the portfolio may recommend tools that have the potential for improving instructional practice, they are not presented in a systematic framework for collecting and analyzing student data toward the goal of continually improving the learning environment.	The portfolio explains how the candidate collects and analyzes student achievement data to inform continuous improvements in the learning environment.	Citations from the scholarly literature explain how the candidate's data collection and analysis are informed by nationally recognized best practices for systematic improvement of instructional practice and student learning.
(check rating)	☐	☐	☐
ISTE 3-B Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning environments.	Although the portfolio may appear to have a strong collection of tools, there is no clear rationale explaining why the tools were chosen or what learner characteristics they are addressing.	The portfolio explains the context for the candidate's tool selection and recommends different tools for use by students depending upon their learner characteristics.	Citations from the scholarly literature support the candidate's tool selection aimed at providing alternative strategies depending upon the users' learner characteristics.
(check rating)	☐	☐	☐

ISTE 6-A Engage in continual learning to deepen content and pedagogical knowledge in technology integration and current and emerging technologies necessary to effectively implement the Standards•S and Standards•T. (check rating)	Although the portfolio may references ISTE Standards•S and Standards•T, there is no clear plan for how the candidate will engage in the professional learning community for advancing teacher knowledge for achieving these standards. ☐	The portfolio contains an actionable plan for the manner in which the candidate will advance teachers' content and pedagogical knowledge for integrating current and emerging technologies in the implementation of the ISTE Standards•S and Standards•T. ☐	The portfolio explains the nationally recognized mechanisms through which the candidate will continually advance and enhance teacher knowledge of content and pedagogical strategies for implementing the ISTE standards for students and for teachers. ☐
ISTE 6-B Engage in continuous learning to deepen professional knowledge, skills, and dispositions in organizational change and leadership, project management, and adult learning to improve professional practice. (check rating)	The portfolio contains little or no evidence that the candidate is engaging in continuous learning related to leadership, project management, and professional practice. ☐	The portfolio contains evidence that the candidate is engaging in strategies for deepening professional knowledge and skills in leadership, project management, and adult learning to improve constituents' professional practice. ☐	Citations from the scholarly literature document the national best-practice context informing the candidate's strategies for deepening professional knowledge and skills in leadership, project management, and adult learning. ☐
ISTE 6-C Regularly evaluate and reflect on their professional practice and dispositions to improve and strengthen their ability to effectively model and facilitate technology-enhanced learning experiences. (check rating)	The portfolio lacks reflections aimed at evaluating and planning for continued improvement of the candidate's dispositions and professional practice in modeling and facilitating technology-enhanced learning experiences. ☐	The portfolio contains reflections in which the candidate evaluates and provides plans for continued professional growth in modeling and facilitating technology-enhanced learning experiences. ☐	Through citations from the scholarly literature, the portfolio puts into a national best-practice context the candidate's reflections and plans for continued professional growth in modeling and facilitating technology-enhanced learning experiences. ☐
Statements documenting achievement of the six ISTE•C Standards (check one rating per standard)	Artifacts may demonstrate proficiency, but their value to the candidate's practice and theory-base is not clear. Artifacts may be of high quality showing good use of integrated technology, but their connection with the ISTE•C standards is not explicit or the artifacts are of limited value.	Two to three significant artifacts are cited for each ISTE•C standard, and artifacts are used for multiple standards. For each artifact cited there is an abstract which provides (1) a description of the artifact and how it relates to the candidate (context/date), and (2) an analysis of how the artifact demonstrates evidence for one or more particular standards.	In addition to citing two or three significant artifacts for each ISTE•C standard, selections or portions are chosen from artifacts to illustrate salient points. In addition to explaining how each artifact demonstrates evidence for one or more standards, the abstract includes a reflection on how the artifact has contributed to the candidate's growth as a more informed, reflective,

	Artifacts are not given a context or are evaluated only to a limited extent by the candidate. More artifacts are needed to support proficiency in one or more ISTE•C standards.		and/or responsive educator consistent with the SOE conceptual framework.
1. Visionary leadership. Technology Coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.			
	☐	☐	☐
2. Teaching, learning, and assessments. Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.			
	☐	☐	☐
3. Digital age learning environments. Technology coaches create and support effective digital age learning environments to maximize the learning of all students.			
	☐	☐	☐
4. Professional development and program evaluation. Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning.			
	☐	☐	☐
5. Digital citizenship. Technology coaches model and promote digital citizenship.			
	☐	☐	☐
6. Content knowledge and professional growth. Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.			
	☐	☐	☐
Technical Quality of ePortfolio Design	Graphic elements are missing or fail to contribute to the site's usability. There may be some garish color choices or backgrounds that interfere with readability of the foreground text. Text is not carefully edited for spelling and grammar. Writing style and/or organization create comprehension difficulties for the reader. Reader may be confused or lost due to poor site design. It is hard to find the required artifacts in the portfolio.	Although graphical elements contribute to the understanding of concepts, ideas and relationships, there may be some inconsistencies in layout, font, and color choices. Writing is concise, clear, and well organized. The navigation functions well, but it is not always clear how to move to a different section or bring a given artifact onscreen.	Graphic elements make visual connections contributing to the understanding of concepts, ideas and relationships. Font faces, type sizes, and foreground/background color choices are judicious and consistent. Writing works well with site structure to synthesize and make connections. Navigation is intuitive. The various parts of the portfolio are clearly organized and easy to retrieve onscreen.