

George Mason University
College of Education and Human Development
Graduate School of Education: Elementary Education

ELED 257. DL3 – Integrating Technology in PreK-6
3 Credits, Fall 2021
Thursdays, 4:30 – 7:10 PM, Online

Faculty

Name: Dr. Debra R. Sprague
Office Hours: By Appointment
Office Location: Thompson Hall, Rm. 1403
Office Phone: 703-993-2069
Cell Number: 703-855-6641
Email Address: dspragu1@gmu.edu

Prerequisites/Corequisites

None

University Catalog Course Description

Introduces technology as a tool for working with children across a range of contexts, including early childhood and elementary classrooms. Explores multiple approaches and strategies for technology use in diverse settings. **This course meets the Mason Core Information Technology and Computing requirement.**

Course Overview

Students in this course will participate in individual and group activities that focus on the integration of technology into work with children in diverse settings through use of computers and mobile devices. Students will also participate in large group discussions led by the instructor and in small group discussions and activities with their classmates.

This course fulfills the Mason Core Information Technology and Computing requirement through the following learning outcomes:

1. Students will understand the principles of information storage, exchange, security, and privacy and be aware of related ethical issues.
2. Students will become critical consumers of digital information; they will be capable of selecting and evaluating appropriate, relevant, and trustworthy sources of information.

3. Students can use appropriate information and computing technologies to organize and analyze information and use it to guide decision-making.
4. Students will be able to choose and apply appropriate algorithmic methods to solve a problem.

Course Delivery Method

This course will be delivered online (76% or more) using both synchronous and asynchronous classes (designated in the **Class Schedule** section) format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @masonlive.gmu.edu or @gmue.edu) and email password. The course site will be available starting on August 20th.

Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:
https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers

To get a list of supported operation systems on different devices see:

https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
 - The following software plug-ins for PCs and Macs, respectively, are available for free download: Adobe Acrobat Reader: <https://get.adobe.com/reader/>
 - Windows Media Player:
<https://support.microsoft.com/en-us/help/14209/get-windows-media-player>
 - Apple Quick Time Player: www.apple.com/quicktime/download/

Expectations

- Course Week:
Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- Log-in Frequency:
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least three times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- Participation:
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:
Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. These meetings will take place via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:
Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

Field Experience:

This course requires 15 hours of field experience in a PK-6 classroom. Due to the recent pandemic and that schools will be trying to return to a normal routine this fall, students will have one of three options for field experience this semester.

1. If you are taking other course(s) that require you to have field experience and will be placed in a school you may add on an additional 15 hrs. for this course. Hours should be recorded on the Field Experience log and signed by your cooperating teacher. Please, complete the placement process through the link below by September 15th:

<https://education.gmu.edu/teacher-track-office/student-field-experience/>

2. If you are working in a school you may complete your field hours at that school by observing another teacher. Hours should be recorded on the Field Experience log and signed by your cooperating teacher.
3. For those students whose only course with field experience hours is this one, field experiences will consist of watching videos provided. Students will keep track of the videos they watch to insure they have 15 hours of viewing time. These videos are available in Blackboard.

Learner Outcomes or Objectives

This course is designed to enable students to do the following:

1. understand the principles of information storage, exchange, security, and privacy and be aware of related ethical issues;
2. become critical consumers of digital information; they will be capable of selecting and evaluating appropriate, relevant, and trustworthy sources of information;
3. use appropriate information and computing technologies to organize and analyze information and use it to guide decision-making;
4. choose and apply appropriate algorithmic methods to solve a problem;
5. exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society;
6. select appropriate materials, tools, and technologies to achieve instructional goals with all learners;
7. understand the principles of online learning and online instructional strategies and apply the skills to deliver online instruction.
8. understand the Virginia Standards of Learning for Computer Technology and the ability to use technology as a tool for teaching, learning, research, and communication
9. understand, possess, and integrate the knowledge, skills, dispositions, and processes needed to support learners' achievement in an interdisciplinary manner in Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds and the Virginia Standards of Learning in English, mathematics, history and social science, science, and computer technology.

Professional Standards

Upon completion of this course, students will have met the following professional standards:

The Virginia State Technology Standards for Instructional Personnel:

1. Instructional personnel shall be able to demonstrate effective use of a computer system and utilize computer software.
2. Instructional personnel shall be able to apply knowledge of terms associated with educational computing and technology.
3. Instructional personnel shall be able to apply computer productivity tools for professional use.
4. Instructional personnel shall be able to use electronic technologies to access and exchange information.
5. Instructional personnel shall be able to identify, locate, evaluate, and use appropriate instructional hardware and software to support Virginia's Standards of Learning and other instructional objectives.
6. Instructional personnel shall be able to use educational technologies for data collection, information management, problem solving, decision making, communication, and presentation within the curriculum.
7. Instructional personnel shall be able to plan and implement lessons and strategies that integrate technology to meet the diverse needs of learners in a variety of educational settings.
8. Instructional personnel shall demonstrate knowledge of ethical and legal issues relating to the use of technology.

International Society for Technology in Education (ISTE) Standards for Teachers:

1. Learner - Educators continually improve their practice by learning from and with others and exploring proven and promising practices that leverage technology to improve student learning.
2. Leader - Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning.
3. Citizen - Educators inspire students to positively contribute to and responsibly participate in the digital world.
4. Collaborator - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems.
5. Designer - Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability.
6. Facilitator - Educators facilitate learning with technology to support student achievement of the ISTE Standards for Students.
7. Analyst - Educators understand and use data to drive their instruction and support students in achieving their learning goals.

Required Texts

ISTE (2018). *Edtech for the K-12 classroom: ISTE readings on how, when, and why to use technology*. Eugene, Oregon: International Society for Technology in Education.

A list of required readings is available on MyMason. There are readings associated with each module. Some of the articles are available on GMU's e-reserves which can be accessed within Blackboard.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard or via other website as appropriate for the individual assignment, such as YouTube or FlipGrid or Google Classroom).

COURSE ASSIGNMENTS:

Assignment #1: Review of a Lesson Plan, 20 points [Outcomes 3, 5, 6]

Students will review one lesson plan of their choosing. They will rewrite the lesson to integrate technology into the curriculum. The lesson plan may focus on the humanities (literacy, social studies, or fine arts) or on STEM (science, mathematics, or engineering). The lesson may involve one student, small group of students, or whole class. Lesson plans will be provided in Blackboard.

Assignment #2: Creation of Technology Resource, 20 points [Outcomes 1, 2, 3, 4, 5, 6, 7]

Working in groups or individually, students will design and create a technology resource around a topic of their choosing. The technology resource should be appropriate for PK-6 students and appropriate Virginia SOLs and or Virginia's Foundation Blocks for Early Learning: Comprehensive Standards for Four-Year-Olds should be identified. The technology resource should be interactive and go beyond just presenting information. Ideas for this assignment could include: creating a virtual fieldtrip (primary sources should be used throughout the VFT), simulation, augmented reality activity, virtual escape room activity. Additional ideas could be discussed with the instructor.

Assignment #3: Online Activities, 36 points [Outcomes 1, 2, 3, 4, 5, 7]

Students complete three online modules. Each online module will be the equivalent of one week of face-to-face time. Online modules are to be completed within the stated time frame. Each module is worth 12 points. Instructions for the online modules are in Blackboard. The three online modules are: Creating E-Books, Fine Arts and Technology, and Digital Storytelling. Each module has students learning about the technology associated with each topic and then using the technology to complete the assignment. For example, students learn about e-books and then create their own e-book; they learn about fine arts and use a graphic program to create a postcard. In the Digital Story module, they will create a multimedia digital story. *As part of the module, students will write a reflection on what*

they learned about the technology, how they will use it in the classroom or informal learning environment and why they would use it.

Assignment #4: Reflection on Technology Use in Schools, 12 points [Outcomes 5]

During field experience videos, students will keep a log of how technology is used in the classroom and write a reflection on what they learned. Focus should be on how technology was used and what ISTE standards were addressed.

Assignment #5: Coding with Scratch, 12 points [Outcomes 3, 4]

Students will create an interactive game using Scratch. They will need to apply what they learned about various algorithmic methods to determine the best way to complete the task of designing the game. Scratch Games can be created individually or in a small group (2-3 students).

Assignment Points

<i>Course Outcomes</i>	<i>Requirements & Assignments</i>	<i>Points</i>	<i>Due Date</i>
3, 5, 6	Review of a Lesson Plan	20	Nov. 18
1, 2, 3, 4, 5, 6, 7	Creation of technology resource	20	Dec. 2
1, 2, 3, 4, 5, 7	Online Asynchronous Activities	36	Sept. 9 Sept. 23 Sept. 30 Nov. 11
5	Reflection on Technology Use in Schools	12	Dec. 2
3, 4	Coding with Scratch	12	Oct. 28
		100	

Grading Policies

At George Mason University course work is measured in terms of quantity and quality. A credit normally represents one hour per week of lecture or recitation or not fewer than two hours per week of laboratory work throughout a semester. The number of credits is a measure of quantity. The grade is a measure of quality. The university-wide system for grading undergraduate courses is as follows:

Grade	Quality Points	Undergraduate Courses
A +	4.00	Passing
A	4.00	Passing
A -	3.67	Passing
B +	3.33	Passing
B	3.00	Passing
B -	2.67	Passing
C +	2.33	Passing
C	2.00	Passing
C -	1.67	Passing
D	1.00	Passing
F	0.00	Failing

Note: No credit toward graduation accrues from a failing grade or a grade that is replaced by a retaken course.

Expectations:

- **Writing:** All written papers are expected to be double-spaced, with 1” margins, and in 12-point font (Times New Roman, Calibri, or Arial). APA format is expected. If you do not have a 7th Edition APA manual, the OWL at Purdue is an excellent resource: <http://owl.english.purdue.edu/owl/resource/560/01/>. Please Note: The GMU Writing Center offers online support via email. They will provide feedback on your writing within one hour. Professional writing can be difficult; I encourage you to take advantage of this service. http://writingcenter.gmu.edu/?page_id=177
- **Assignments:** It is expected that all class assignments will be submitted on time to the correct location; therefore, **late assignments will not receive full credit**. If extraordinary circumstances prevent you from submitting your work in a timely manner, **it is your responsibility to contact the instructor as soon as possible after the circumstances occur and make arrangements to complete your work. It is up to the discretion of the instructor to approve the late/makeup work.** Assignments turned in late without prior communication will receive an automatic deduction of one letter grade making the highest possible score equivalent to 80% (B). All assignments must be submitted on the due date stated within the syllabus (see below) and should be submitted in the format outlined.
- **Revise & Resubmit:** If a student submits an assignment that may indicate limited understanding or confusion about the content as indicated by scoring on the assignment rubric, the instructor may request for a student to revise and resubmit the assignment based on feedback. This is an opportunity for a student to clarify understanding of the content and demonstrate growth. In most cases, the original assignment and revision will be averaged for a new final grade. The instructor will communicate with the student to determine a reasonable timeframe within which to complete the revision.

Note: I reserve the right to add, alter, or omit any assignment as necessary during the course of the semester. You will always receive advanced notice of any modifications.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times.

See <https://cehd.gmu.edu/students/polices-procedures/>

Class Schedule

Class	Date	Guiding Questions/Topics	Readings/Assignments Due Prior to Class
1	Aug. 26 (Synchronously)	-Introduction to the Course -Syllabus Review -Integrating technology – what and why? -Introduction to ISTE/VSTE -SAMR -Introduction to Google Tools	-Read the syllabus. -Read Chapter 1: ISTE Standards
2	Sept. 2 (Asynchronously)	Creating E-books Module.	-Complete the E-book Module -- Read Chapter 3: Personalized Learning
3	Sept. 9 (Synchronously)	-Discussion on security and privacy issues related to technology. -Exploring online tools (Flipgrid, Nearpod, etc.) -Discussion of ways to keep children safe online.	Creating E-books online assignment due. -Read Chapter 5: Digital and Media Literacy
4	Sept. 16 (Asynchronously)	Fine Arts and Technology Module	-Complete the Fine Arts and Technology Module
5	Sept. 23 (Asynchronously)	-Evaluating websites -Literacy and technology integration	-Fine Arts and Technology online assignment due. -Read Chapter 4: Digital Citizenship
6	Sept. 30 (Synchronously)	- Virtual Escape Rooms - Breakout.edu -Discussion of copyright issues.	-Submit website evaluations on Blackboard. - Read Chapter 7: Digital Learning Lessons and Resources
7	Oct. 7 (Synchronously)	- Coding - Video: Mitch Resnick: Let's Teach Kids to Code.	- Read Chapter 6: Digital Equity.
8	Oct. 14 (Asynchronously)	-Work on Scratch game.	

9	Oct. 21 (Asynchronously)	-Work on Scratch game.	
10	Oct. 28 (Synchronously)	-Students will share their Scratch games. - Introduction to Digital Storytelling.	-Scratch Games due.
11	Nov. 4 (Asynchronously)	Digital Storytelling	-Complete Digital Storytelling Module
12	Nov. 11 (Synchronously)	-The role of technology in STEM -MakerSpace -AR/VR -Discuss technology resource options	-Digital Storytelling online assignment due.
13	Nov. 18 (Asynchronously)	-Work on the technology resource.	- Review of a Lesson Plan due. - Read: Chapter 2: Support and Community
14	Nov. 25	No Class – Thanksgiving Break	
15	Dec. 2 (Synchronously)	- Sharing technology resource.	-Reflection on Technology Use in Schools due. -Technology Resource due.

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

For additional information on the College of Education and Human Development, School of Education, please visit our website [See <https://education.gmu.edu/>]

EMERGENCY PROCEDURES

You are encouraged to sign up for emergency alerts by visiting the website <https://alert.gmu.edu>. There are emergency posters in each classroom explaining what to do in the event of crises. Further information about emergency procedures exists on <http://gmue.edu/service/cert>

ASSIGNMENT #1
Review of Lesson Plan
20 Points

The purpose of this assignment is to design a lesson that integrates technology into the PreK-6 classroom.

Procedure:

- Read the articles in the “Research Focused on Integrating Technology” folder.
- Choose a lesson plan from the folder in Blackboard. Review the lesson and redesign it to integrate technology in the classroom.
- Think about ways students could use the technology to enhance their learning of the concept(s)
- Submit the revised lesson plan via MyMason. Be sure to indicate which lesson plan you revised.

Evaluation Criteria:

	Meets Requirements (5 Points)	Partial Requirements (3 Points)	Needs Improvement (1 Point)
Appropriate Choice of Technology	The technology chosen is appropriate for the lesson and is the best fit. Technology use optimally supports the lesson.	The technology chosen is appropriate for the lesson, but another use of technology would be better. Technology use somewhat supports the lesson.	The technology chosen is not appropriate for the lesson. Technology use does not support the lesson.
Appropriate Use of Technology	Students use the technology to create and produce knowledge.	Students use the technology to consume information, but not to create.	Teacher uses technology to present information. Students do not use the technology.
Alignment with Standards	The use of technology aligns with the ISTE standards and these are stated in the revised lesson plan.	The use of technology aligns with the ISTE standards. However, these are not stated in the revised lesson plan.	The use of technology does not align with the ISTE standards.
Lesson Effect	The use of technology enhances the lesson.	The use of technology complements the lesson, but does not enhance it.	The use of technology detracts from the lesson.

ASSIGNMENT #2
Designing a Technology Resource
20 Points

Purpose: This assignment enables students to design a technology resource that allows for the connection of multiple concepts. This can be done as an individual or group assignment.

Procedure:

- Students will explore various modules to choose a technology resource to create.
- Students may work in small groups if they desire (no more than four to a group).
- Students will choose a grade level and appropriate SOL(s) for their resource.
- Students will create a technology resource for PreK-6 children. Students should discuss their idea with the instructor to determine the appropriate resources needed.
- The technology resource should allow PreK-6 students to interact with the material in a way that promotes a deeper understanding of the concept. The resource should go beyond presenting information.
- Technology resources will be shared in class.

Evaluation Criteria:

	Meets Requirements (5 Points)	Partial Requirements (3 Points)	Needs Improvement (1 Point)
Content	There is a clear concept taught in using the resource.	There is a concept being taught, but some parts are confusing.	There is no clear concept being taught.
Appropriate	All aspects of the resource are appropriate for PreK-6 students. If applicable, all websites linked are appropriate in terms of content and reading levels.	The majority of the resource is appropriate for PreK-6 students. Websites are appropriate in terms of content, but reading levels maybe challenging.	The majority of the resource is not appropriate for PreK-6 students. Websites are not appropriate in terms of content and reading levels.
Engaging	The resource is engaging for PreK-6 children. The majority of students will enjoy interacting with the resource.	The resource is somewhat engaging for PreK-6 children. Some students will enjoy interacting with the resource.	The resource is not engaging for PreK-6 children. The majority of students will not enjoy interacting with the resource.
Creative	Considerable thought and effort went into development of the resource. It is usable in a classroom.	Thought and effort is evident. It could be used in a classroom.	Little thought or effort is evident. Could not be used in a classroom.

ASSIGNMENT #3

Online Activities

36 points

Purpose: These assignments provide opportunities for hands-on experience with technology, as well as models for integrating technology.

Procedure (Throughout the semester):

- Students will complete four online modules by each due date.
- Late assignments will be deducted points.

Evaluation Criteria:

	Meets Requirements (9 Points)	Partial Requirements (6 Points)	Needs Improvement (3 Points)
Completes Assignments on Time	All assignments were completed on time.	One assignment was late, but notified the instructor ahead of time or had a viable excuse.	More than one assignment was late, no viable excuse provided.
Participation	Participated in all class and online discussions and activities.	Participated in some of the class or online discussions and activities.	Rarely or never participated in class or online discussions or activities.
Online Postings	Online postings in the discussion board demonstrated a clear understanding of the concepts. It is clear that readings were completed.	Online postings in the discussion board demonstrated a partial understanding of the concepts. It is clear that some of readings were completed.	Online postings in the discussion board demonstrated a poor understanding of the concepts. Seldom or never completed readings.
Online Modules	All of the online modules were completed in their entirety. All activities were completed.	The majority of the online modules were completed in their entirety. For those not completed, a minor activity was skipped.	The majority of the online modules were not completed in their entirety. Major parts of the modules were skipped.

ASSIGNMENT #4
Reflection on Technology Use
12 Points

Purpose: This assignment enables students to understand how technology is used in the classroom.

Procedure:

- Observe the use of technology in the classroom by either visiting a PreK-6 classroom or watching assigned videos and keep a journal of what you see.
- Who is using the technology, what technology is used, how is the technology used?
- Write a reflection of what you learned about the use of technology in the schools.
- Include examples of how technology was used.
- Include how you would integrate technology in your teaching practice.

Evaluation Criteria

	Meets Requirements (3 Points)	Partial Requirements (2 Points)	Needs Improvement (1 Point)
Depth of Reflection	Response demonstrates an in-depth reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are insightful and well supported.	Response demonstrates a minimal reflection on, and personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are supported with flawed arguments.	Response demonstrates a lack of reflection on, or personalization of, the theories, concepts, and/or strategies presented in the course materials to date. Viewpoints and interpretations are inappropriate, and/or unsupported.
Examples of Technology Used	Clear, detailed examples are provided. Include a mixture of teacher use and student use of technology.	Examples of technology use lack details. The focus is mostly on student use of technology.	Examples of technology use are irrelevant to the assignment. Examples focus mostly on teacher use of technology.
Future Plans for Use of Technology	Included several future plans for use of technology in the classroom. Ideas were connected to the SOLs and ISTE standards. Included both teacher and student use.	Included at least two future plans for use of technology. Ideas were connected to the SOLs, but not ISTE standards. The ideas focused on student use.	Included one or no ideas for future plans for use of technology. Ideas presented were not connected to the SOLs or ISTE standards. Ideas focused on teacher use only.

Structure	Writing is clear, concise, and well organized with excellent sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. There are no more than three spelling, grammar, or syntax errors per page of writing.	Writing is mostly clear, concise, and well organized with good sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. There are no more than five spelling, grammar, or syntax errors per page of writing.	Writing is unclear and/or disorganized. Thoughts are not expressed in a logical manner. There are more than five spelling, grammar, or syntax errors per page of writing.
-----------	--	---	---

Assignment #5
Coding with Scratch
12 points

Purpose: This assignment enables students to develop an understanding of coding and computational thinking and how to integrate coding in the classroom.

Procedure:

- Explore various algorithmic methods.
- Design and create a game using Scratch
- Be prepared to share with other students
- This assignment can be completed either individually or with 2-3 other students.

Evaluation Criteria:

	Meets Requirements (3 Points)	Partial Requirements (2 Points)	Needs Improvement (1 Point)
Creativity	Considerable thought and effort went into the game. Usable in a classroom. Engaging and fun!	Thought and effort evident. Could be used in a classroom. It is engaging.	Little thought or effort. Could not be used in a classroom. Not fun or engaging.
User Friendly	The game is user friendly. It is easy to figure out how to play.	The game is somewhat user friendly. Although easy to figure out, there are some parts that are confusing.	The game is not user-friendly. It is confusing and difficult to play.
Programming	Project showed understanding of game design platform. Game is organized, logical, and debugged.	Project showed some understanding of game design platform. The game has some organization and logic. There are a couple of minor bugs.	Project showed little understanding of game design platform. The game lacks organization and logic. There are several bugs.
Originality	The game presents a new concept. It is well designed.	The game takes a familiar concept and presents it in a new way. It is well designed.	The game recreates a familiar concept without presenting anything new. It is poorly designed.