

# Midwestern State University Gordon T. & Ellen West College of Education

ETEC 4003 Advanced Technology Integration Fall 2022

#### Contact Information

Instructor: Instructor Marci Moore

Office: No office on campus- Digital Appointments
Office Hours: Email and Zoom By Appointment

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## Course Description

This course prepares undergraduate students to use suites of digital media and communication tools that support technological pedagogical content knowledge development. Students will develop learning experiences that incorporate new technologies that are developed in collaboration with methods courses instructors or other instructors. You will be exposed to Google Certified Educator Level 1 & 2 materials and resources through this class.

#### ATTENDANCE AND CLASS PARTICIPATION:

This class is online. Everything you will need will be labeled and in weekly folders in D2L. You will also be given <a href="https://d2l.msutexas.edu/d2l/login">https://d2l.msutexas.edu/d2l/login</a> an activity assignment calendar in D2L with dates to stay on track with assignments. Video instructions and text instructions for every assignment are provided in D2L. You are responsible for getting your assignments turned in on time. This class is designed with you in mind and designed for you to work at your own pace. This course will require you to download several apps and use several instructional technology platforms.

#### Textbook & Instructional Materials

The Google Infused Classroom: A Guidebook to Making Thinking Visible

and Amplifying Student Voice By Holly Clark & Tanya Avrith ISBN: 978-1-7336468-0-2

As an Education Certification Student, you are required to take the Google Level 1 & 2 Required Text: (The bookstore will have these, and they can be purchased through the bookstore link on D2L) Also available on Amazon. This book is considered a guidebook and will read differently from other textbooks. (It is the Jammmmm, you will love it as a resource!)

#### Student Handbook

Refer to: Student Handbook-2020-22

## Academic Misconduct Policy & Procedures

Academic Dishonesty: Cheating, collusion, and plagiarism (the act of using source material of other persons, either published or unpublished, without following the accepted techniques of crediting or the submission for credit of work, not the individual's to whom credit is given). Additional guidelines on procedures in these matters may be found in the Office of Student Conduct.

#### Office of Student Conduct

## Grading

The following will be used to determine your final grade for the class. All grades will be scored on a scale of 100 possible points. The instructor reserves the right to make adjustments to this plan during the course of the class and agrees to notify all students if such should occur.

Assignments	Points
Quizzes (6 at 50 pts each)	300
Chapter Flipgrid Reviews(9 at 50 pts each)	450
Final Exam Portfolio/ Tech challenges (10 at 25 pts each)	250
Total Points	1000

Table 2: Total points for a final grade.

Grade	Points	
Α	900 to 1000	
В	800 to 899	
С	700 to 799	
D	600 to 699	
F	Less than	
	600	

## Late Work Policy

All week assignments are due at midnight on Friday. I grade on Monday. Complete all assignments on time. I understand life happens to try to stick to the assignment deadlines, and they are in place to help you with the workload. If you miss the deadline, you need to email me.

## Protecting Your Privacy

Social networking media such as wikis, Facebook, Twitter, and other such media were created with the idea that the people using them want to share information and ideas. It is also true that there are real problems when sharing information on social networking media, and these include crossing over between your social life, your academic life, and your professional life. Be proactive, and make sure you only share information that you feel is appropriate for an academic setting.

Do not share your username or password for Google, GAFE, just as you do not share your username and password for D2L, WebWorld, or your email.

All course grades are kept in D2L and can be seen by the student and instructor only. No course grades will be sent by email or posted anywhere other than D2L.

Do not respond to emails that ask for your user name, password, or other private information. The instructor, the College of Education, and the University will not ask for such information by email.

If you are participating in Facebook, Twitter, or other such media, you are welcome to include that information in your Digital Portfolio that you will complete as part of your coursework. However, you should check your privacy settings beforehand and make sure you use the grouping and privacy tools to share only the information you want to share with the class.

## Assignment Pacing Guide

All Assignments for this class are linked in this Hyperdoc Calendar. Please use it as a pacing guide for your assignments.

<u>Assignment Calendar Hyperdoc</u>

Link to D2L -Turn in a	ssignments here Week 1	How to use this assignment Calendar
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Aug. 22	<ul> <li>□ Read the Read me First folder in D2L</li> <li>□ Take the Pre-assessment-This will be sent through an email. IT may not come this week!</li> <li>□ Read the syllabus</li> <li>□ Student Survey</li> <li>□ Watch the How to D2L video &amp; How to upload an assignment Video.</li> <li>□ Print this calendar and use it as a checkoff list/ Or use it as a Hyperdoc in Google Docs to have links available. You can work right off of this calendar.</li> </ul>	Student Survey -Everyone takes this. Certification Students - I will email you when you take the TK2O Pre-Assessment in Week One. We have to wait for the 12th day of class to take the pre-assessment.
Tuesday, Aug. 23	☐ Let's Connect Flipgrid	Respond to Flip Let's Connect
Wednesday, Aug. 24		
Friday, Aug. 26		All Weeks Assignments submitted by

		Midnight Friday/ I grade on Monday
	Week 2	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Aug. 29	<ul><li>☐ Read Pedagogy Section in the book Pages 2-25</li><li>☐ Complete the Flipgrid Reading Reflection</li></ul>	Flip Reading 2-25 Reflection
Wednesday, Aug. 31	Google Cert 1 Boot Camp Sheet - go through this the rest of the week.	Flip Google Cert Boot Camp Reflection
Friday, Sept. 2		
	Week 3	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Sept. 5	Use this information for the quiz-Get Ready To use Technology in the classroom. ( Under Unit One: click Explore the benefits of the Digital classroom and encourage Twenty-First Century work go through the material	Explore the Benefits Unit 1 Quiz
Tuesday, Sept. 6	Google Sites Challenge- this will be a part of your final project Google Site Video Training Library- Help Videos	
Wednesday, Sept. 7		Attach your Published site link in D2L under the assignment.
	Week 4	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Sept. 12	<ul><li>Read Assessment Section in the book Pages 26-39</li></ul>	Flip Reading Reflection Pages 26-39
Wednesday, Sept. 14	Forms/ Sheets Challenge- you will click file/ make a copy to edit and write on this sheet and then Download it as a PDF to upload into D2L. Instructions are on the sheet.	<ul> <li>Turn In: Download the Google Forms Challenge page as a PDF and upload that into D2L. Under the Assignment.</li> </ul>
Friday, Sept. 16	Google Classroom G Suite Tutorial Sheet-You will need to open the G Suite Tutorial Sheet Look through the Google Classroom section to learn more about Google Classroom. Go through all of the	<ul> <li>go into our Google Classroom         (Code:4eeb4gy) and leave a         comment in order for me to give         you a grade for completion.         Nothing will need to be uploaded</li> </ul>

	videos under Google Classroom. Then you will need to go into our Google Classroom (Code:4eeb4gy) and leave a comment about something you learned new about Google Classroom in order for me to give you a grade for completion. Nothing will need to be uploaded into D2L.	into D2L.
	Week 5	
<u>Date</u>	Assignment/To-Do List	All Work due by Friday at Midnight
Monday, Sept. 19	<ul><li>Read Tips for Differentiation in the book Pages 40-46</li></ul>	<u>Differentiation Flip Reflection</u>
Wednesday, Sept. 21	Hyperdoc Challenge- Instructions: You will open the Hyperdoc and Click File/ Make a copy. You will need to work through the sections of the hyperdoc. When you get to the section of turning in your assignment, you will have created your own hyperdoc and you can turn that into the assignment dropbox.  Google Boot Camp Cert 2	☐ Boot Camp 2 Flip Reflection
Friday, Sept. 23		☐ Turn In: Paste your hyperdoc you created on a word or google doc and turn that into D2L.

Week 6		
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Sept. 26	☐ Read Digital Portfolios in the book.	Digital portfolio Flip Reflection
	Pages 96-111	
Wednesday, Sept. 28	Use this information for the quiz-Get familiar with Google Tools for the digital classroom (This link should open up to the page you need make sure to work through the material. (if it opens another	Get familiar with Google tools Quiz

	way, Under unit one, Click Getting		
Filler Cont 20	<u>familiar with Google Tools)</u>		
Friday, Sept. 30			
	Week 7		
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight	
Monday, Oct. 3	☐ Twitter Tips- Read the Twitter article.	<ul> <li>Work through the Twitter Tips page and complete the tasks they introduce. Make a Twitter account if you do not have one. When you are done setting up your Twitter, follow me on Twitter</li> <li>@moore2thestory, and send me a shout-out on Twitter, and I will follow you back.</li> </ul>	
Wednesday, Oct. 5	Unit 6: Bring Meetings Online (under unit six, go through all of this unit)	Unit 6 Bring Meetings Online Quiz	
Friday, Oct. 7			
Week 8			
<u>Date</u>	Assignment/To-Do List	All Work due by Friday at Midnight	
Monday, Oct. 10	<ul><li>Read Demonstrations of learning in the book. Page 47-82</li></ul>		
	Level 2 Unit2: Leverage Learning  Models To personalize Learning ( Work through the unit	<u>Level 2- Unit 2 Quiz</u>	
Wednesday, Oct. 12	☐ Flipgrid PSA Challenge ☐ Flipgrid PSA Topic Card		
Friday, Oct. 14		Add your PSA to your FLipgrid Response in Flipgrid.	
Week 9			
<u>Date</u>	Assignment/To-Do List	All Work due by Friday at Midnight	
Monday, Oct. 17	Level 2, Unit 3: Use Advanced Features to Optimize Workflow (click on Unit 3 and work through the steps)	Level 2 Unit 3 Quiz	
Wed., Oct. 19	<ul><li>Read The Tools in the Book. Pages 117-127</li></ul>	Flip reading reflection Rethinking	
Friday, Oct. 21	Level 2 Unit 10: Give Students a Voice ( we through the unit)	ork Level 2, Unit 10 Quiz	
Week 10			
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight	

Monday, Oct. 24	<ul> <li>Level 2 Unit 10: Give Students a Voice ( w through unit 10)</li> </ul>	ork Level 2, Unit 10 Quiz
Wednesday, Oct. 26	Read this <u>Screencasting article</u>	Screencast Article Flipgrid Reflection
Friday, Oct. 28		
	Week 11	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Oct 31	<ul> <li>Read Reflection and Curation and the tools to use in the book pages 83-94</li> </ul>	
Wednesday, Nov. 2	Google Slides Challenge	☐ Turn In: Download the Google Slides Challenge page as a PDF and upload that into D2L. Under the Assignment. Click file/Download as
Friday, Nov. 4,	Level 2 Boot Camp - just go through the videos for practice. These are skills needed for the test.	
Week 12		
<u>Date</u>	Assignment/To-Do List	All Work due by Friday at Midnight
Monday, Nov. 7	Continue working on Level 2 Bootcamp	
Wednesday, Nov. 9	☐ Google Drawing Challenge	
Friday, Nov. 11		☐ Turn In: Download the Google Drawing Challenge page as a PDF and upload that into D2L. Under the Assignment. Click file/Download as
	Week 13	
Date	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Nov. 14	☐ Ar/VR Sites Challenge	Flip Ar/Vr Video Response
Wednesday, Nov. 16	☐ Take this week to Google Test	<ul> <li>4003 students, you need to sign up and take the test. Look in your D2L Email to find the code, link, and instructions</li> </ul>
	<ul> <li>□ Work on your Google Site final project</li> <li>□ Portfolio Rubric</li> <li>□ Iste Standards</li> <li>□ ISTE Educator Standards</li> <li>□ This is due Dec. 5th.</li> </ul>	You will turn your Google certificate into TK2O. Look for the link in Week 14 in D2L

Friday, Nov. 18th	☐ Take the post-assessment	<ul> <li>4003 Students take the         Post-Assessment in TK20 ( look             in Week 13 folder for the link.)     </li> <li>This is required</li> </ul>
	Week 14	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Thanksgiving Holiday	November 21-25	Take this week to take your Google Cert 1 and Google Cert 2 test. If you have not already.
	1.45	
	Week 15	
<u>Date</u>	Assignment/ To-Do List	All Work due by Friday at Midnight
Monday, Nov. 28	<ul> <li>□ Work on your Google Site <u>final project</u></li> <li>□ <u>Portfolio Rubric</u></li> <li>□ <u>Iste Standards</u></li> <li>□ <u>ISTE Educator Standards</u></li> </ul>	
Wednesday, Nov. 30		Course 4003-Turn your Google Site Portfolio published link into TK20. Look on D21 in the Week 15 folder.

for the link.

Course 4003- Turn in your Google educator Certificates in the TK20 link provided in the D2L week 15folder.

4003 certification students have 4 Core Assessments that must be completed by the end of this course. They are all lined out below. You will use the TK20 links in this course that are provided to upload the following. These will be completed throughout this course.

Turn Everything into D2L

Last Deadline for all grades

- 1. Pre-Assessment to assess your G-suite knowledge and skills I will let you know when to complete this through email.
- 2. Post-Assessment to assess your G-suite knowledge and skills-This will not be completed until the end of the class.
- 3. Google Site Portfolio aligned with ISTE standards- The Google site portfolio is based on the <u>Tech Portfolio Rubric</u>. Certification students are expected to score proficient or above with a minimum score of no lower than 70. The Google Site Portfolio assesses digital skills learned through the class, displays digital badges attained from completed tasks (including Googe cert

Friday, Dec. 2

Monday, Dec. 5

- badges), and shows the educator's in-depth knowledge of the ISTE standards. This will be achieved as a final at the end of this class.
- 4. Google 1 & 2 Certificates- You do not have to pass these tests to pass this class, but you will have to take both tests before this class is over and upload your results in the TK20 link through D2L. I will provide a code for you to take the test when the time comes. I will email each of you with your code to test. The assignments and quizzes assigned in this class will help you pass both tests.

#### **COMMUNICATIONS:**

All communication will be conducted via the D2L found at <a href="https://d2l.msutexas.edu/d2l/login">https://d2l.msutexas.edu/d2l/login</a>. It is imperative that you check your email or the News communication in D2L regularly. Select a class partner to have as an alternate contact for class questions, etc.

## Apps you will use in this class:

Flip App (Flipgrid) - All video discussions will take place through this app. You will also be able to use this in the web-based form from your computer and not only the app. The Grid link will be in D2L for you or here: <a href="https://flipgrid.com/etce4003">https://flipgrid.com/etce4003</a> Please watch this instruction video to learn how to video yourself through the app.

#### STORAGE DEVICE AND FILE MANAGEMENT:

We will store everything in D2L. You will also be using Google Suite heavily, and you can use your MSU Google or your own personal Google Account.

#### ATTITUDE:

Demonstrate the following dispositions essential for learning:

- curiosity (ask meaningful questions, look for additional information, probe, reflect);
- flexibility (take alternate points of view, venture new ideas; be open-minded and playful);
- organization (plan ahead)
- patience (take time to reason, be persistent in efforts);
- risk-taking (try things beyond current repertoire);
- caring/passion (invest in ideas/process/product).

Be aware of how your attitude is conveyed to others (body language, conversation, neatness and completeness of work, willingness to assist and contribute, etc.). A sense of humor and the ability to be flexible is crucial!

#### PREPARATION:

Complete all assignments on time. I understand life happens to try to stick to the assignment deadlines, and they are in place to help you with the workload.

#### **RESPECT:**

Be considerate of others. We will use a video-based discussion platform called Flipgrid. Ensure that when communicating through a video, you do not use foul language. Behave ethically.

#### **CELL PHONES:**

You will download several Apps, and your phone will be used in this class.

#### ACADEMIC MISCONDUCT

Any act of dishonesty will constitute academic misconduct. MSU students demand the highest level of academic honesty as delineated in their honor creed. Academic honesty involves submitting work that is wholly the student's own work, except in the case of assigned group work. Additionally, academic honesty involves the proper citation of other authors' works. By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include

but shall not be limited to the right to reproduce the student's work product in order to verify originality and authenticity and to use for educational purposes.

## **EQUAL TREATMENT:**

The instructor and students in this course will act with integrity and strive to engage in equitable verbal and non-verbal behavior with respect to differences arising from age, gender, race, physical ability, and religious preferences.

#### REASONABLE ACCOMMODATIONS

In accordance with the law, MSU provides academic accommodations to students with documented disabilities. If you have a documented disability, please contact me immediately.

## Course competencies

Upon completion of this course, the student will be able to:

Competency 1: Understand the appropriate use of online resources

Competency 2: Understand the role of technology in promoting literacy and higher-order skills.

Competency 3: Integrate Technology in classroom planning and instruction.

Competency 4: Model the use of a variety of instructional technologies.

Competency5: Utilize technology to monitor student learning.

#### Course Standards

<u>Standard I:</u> All teachers use and promote creative thinking and innovative processes to construct knowledge, generate new ideas, and create products.

1.1k,1.2k,1.3k, 1.1s,1.2s1.3s,1.4s,1.5s

Standard II: All teachers collaborate and communicate both locally and globally using digital tools and resources to reinforce and promote learning.

2.1k,2.2k,2.3k,2.4k,2.1s,2.2s,2.3s,2.4s,2.5s,2.6s,2.7s,

<u>Standard II:</u> All teachers collaborate and communicate both locally and globally using digital tools and resources to reinforce and promote learning. 2.8s,2.9s,2.10s,

<u>Standard III:</u> All teachers acquire, analyze, and manage content from digital resources. 3.1k,3.2k,3.3k,3.1s,3.2s,3.3s,3.4d,3.5s,3.6s,3.7s

Standard IV: All teachers make informed decisions by applying critical

thinking and problem-solving skills. 4.1k,4.2k,4.3k,

4.1s,4.2s,4.3s,4.4s,4.5s,4.6s,4.7s,4.8s,

<u>Standard IV</u>: All teachers make informed decisions by applying critical thinking and problem-solving skills. 4.9s,4.10s,4.11s,4.12s

<u>Standard V:</u> All teachers practice and promote safe, responsible, legal, and ethical behavior while using technology tools and resources.

5.1k,5.2k,5.3k,5.1s,5.2s,5.3s,5.4s5.5s,5.6s

<u>Standard VI</u>: All teachers demonstrate a thorough understanding of technology concepts, systems, and operations.

6.1k,6.2k,6.3k,6.4k,6.1s,6.2s,6.3s,6.4s,6.5s,6.6s,6.7s,6.8s,6.9s,6.10s,6.11s, 6.12s,6.13s,6.14s,6.15s,6.16s6.17s,6.18s,6.19s,6.20s,6.21s,6.22s,6.23s,6.2 4s,6.25s,6.26s,6.27s,6.28s,6.29s,6.30s,6.31s

<u>Standard VII:</u> All teachers know how to plan, organize, deliver, and evaluate instruction for all students that incorporates the effective use of current technology for teaching and integrating the Technology Applications Texas Essential Knowledge and Skills (TEKS) into the

curriculum.7.1k,7.2k,7.3k7.4k,7.5k,7.8k,7.5k,7.6k,7.7k,7.8k,7.1s,7.2s,7.3s,7.4s,7.5s,7.6s,7.7s,7.8s,7.9s,7.10s,7.11s,7.12s,7.13s,7.14s,7.15s,7.16s,7.17s,7.18s,

## Conceptual Framework Overview

The outcomes for graduates of professional programs are based upon knowledge, skills, and dispositions in the following elements:

**Learner Development** - understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

**Learning Differences** - understand individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

**Learning Environment -** work with others to create environments that support individual and collaborative learning and that encourage positive social interaction, active engagement in learning, and self-motivation.

**Content Knowledge -** understand the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and create learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content.

**Application of Content -** understand how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.

**Assessment -** understand and use multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.

**Planning for Instruction -** plan instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

**Instructional Strategies -** understand and use a variety of instructional strategies to encourage learners to develop a deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.

**Professional Learning and Ethical Practice -** engage in ongoing professional learning and use evidence to continually evaluate his or her practice, particularly the effects of his or her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

**Leadership and Collaboration -** seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth, and to advance the profession.

Course Learning Objectives or What's in it for you

Students demonstrate a basic level of technological pedagogical content

knowledge through creating student-centered, technology-rich lessons, assessments, and parent communication (CAEP Standard 1)

<u>Students</u> design, implement, create and participate in digital learning and teaching experiences in the classroom and for professional development (CAEP Standard 2)

<u>Students</u> demonstrate knowledge and can model through their teaching content decisions the legal and ethical implications of digital citizenship.

#### **ISTE Standards for Educators**

## **Empowered Professional**

#### 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. Educators:

- a. Set professional learning goals to explore and apply pedagogical approaches made possible by technology and reflect on their effectiveness.
- b. Pursue professional interests by creating and actively participating in local and global learning networks.
- c. Stay current with research that supports improved student learning outcomes, including findings from the learning sciences.

#### 2. Leader

Educators seek out opportunities for leadership to support student empowerment and success and to improve teaching and learning. Educators:

- a. Shape, advance, and accelerate a shared vision for empowered learning with technology by engaging with education stakeholders.
- b. Advocate for equitable access to educational technology, digital content and learning opportunities to meet the diverse needs of all students.
- c. Model for colleagues the identification, exploration, evaluation, curation and adoption of new digital resources and tools for learning.

## 3. Citizen

Educators inspire students to positively contribute to and responsibly participate in the digital world. Educators:

- a. Create experiences for learners to make positive, socially responsible contributions and exhibit empathetic behavior online that builds relationships and community.
- b. Establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.
- c. Mentor students in the safe, legal, and ethical practices with digital tools and the protection of intellectual rights and property.
- d. Model and promote the management of personal data and digital identity and protect student data privacy.

# **Learning Catalyst**

#### 4. Collaborator

Educators dedicate time to collaborate with both colleagues and students to improve practice, discover and share resources and ideas, and solve problems. Educators:

- a. Dedicate planning time to collaborate with colleagues to create authentic learning experiences that leverage technology.
- b. Collaborate and co-learn with students to discover and use new digital resources and diagnose and troubleshoot technology issues.
- c. Use collaborative tools to expand students' authentic, real-world learning experiences by engaging virtually with experts,

teams, and students, locally and globally.

d. Demonstrate cultural competency when communicating with students, parents, and colleagues and interact with them as co-collaborators in student learning.

## 5. Designer

Educators design authentic, learner-driven activities and environments that recognize and accommodate learner variability. Educators:

- a. Use technology to create, adapt and personalize learning experiences that foster independent learning and accommodate learner differences and needs.
- b. Design authentic learning activities that align with content area standards and use digital tools and resources to maximize active, deep learning.
- c. Explore and apply instructional design principles to create innovative digital learning environments that engage and support learning.

#### 6. Facilitator

Educators facilitate learning with technology to support student achievement of the 2016 ISTE Standards for Students. Educators:

- a. Foster a culture where students take ownership of their learning goals and outcomes in both independent and group settings.
- b. Manage the use of technology and student learning strategies in digital platforms, virtual environments, hands-on maker spaces or in the field.
- c. Create learning opportunities that challenge students to use a design process and computational thinking to innovate and solve problems.
- d. Model and nurture creativity and creative expression to communicate ideas, knowledge, or connections.

# 7. Analyst

Educators understand and use data to drive their instruction and support students in achieving their learning goals. Educators:

- a. Provide alternative ways for students to demonstrate competency and reflect on their learning using technology.
- b. Use technology to design and implement a variety of formative and summative assessments that accommodate learner needs, provide timely feedback to students and inform instruction.
- c. Use assessment data to guide progress and communicate with students, parents, and education stakeholders to build student self-direction.