

Great Public Schools for Every Student

Technology Integration 101

Educator integrates digital tools effectively into their classroom lessons.

Key Method

The educator plans and delivers meaningful instruction using available digital tools.

Method Components

The Interstate Teacher Assessment and Support Consortium (InTASC) Standards specify that educators:

- use technological tools and a variety of communication strategies to build local and global learning communities that engage learners, families, and colleagues.
- advocate, model, and teach safe, legal, and ethical use of information and technology including appropriate documentation of sources and respect for others in the use of social
- understand the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy, including those that relate to the safe, responsible use of technology.

The International Society for Technology in Education (ISTE) Standards for Educators specify that educators:

- establish a learning culture that promotes curiosity and critical examination of online resources and fosters digital literacy and media fluency.
- mentor students in safe, legal and ethical practices with digital tools and the protection of intellectual rights and property.
- model and promote management of personal data and digital identity and protect student data privacy.

Examples of digital tools

- Laptops/Chromebooks
- Tablets/iPads
- Cell phones
- Student response systems
- Robots
- Smart Boards/Promethean Boards
- Web 2.0

Delivery methods for digital lessons

- Class website
- Learning management systems Schoology, Edmodo, My Big Campus, Moodle...)
- Google Classroom/Google Docs
- QR Codes
- Slide decks/flipcharts
- Projectors
- Web 2.0 tools

Lesson types that work well with technology

- WebQuests
- Project-based learning projects
- Data collection
- Writing/publishing/blogging
- Online discussion groups
- Peer feedback
- Practice websites
- Research projects
- Collaborative projects
- Interactive simulations (PhET,Gizmos...)
- Digital art and design projects
- Web 2.0 tools

Supporting Research

2012 Survey of K-12 Educators on Social Networking, Online Communities, and Web 2.0 Tools. Rep. MMS Education, 12 Dec. 2012. Web. 26 July 2017.

http://home.edweb.net/wp-content/uploads/2012_Educators-and-Social-Mediaweb.pdf

Digital Citizenship Defined: Teach the 9 Elements to Enhance Students' Safety, Creativity and Empathy. N.p.: International Society for Technology in Education, n.d. ISTE | Digital Citizenship Guide. Web. 25 June 2017.

<u>www.iste.org/resources/product?id=3980&format=eBook/iBook&name=Digital+Citizenship+Guide</u>

"ISTE Standards for Educators." ISTE | Standards For Educators. N.p., n.d. Web. 25 June 2017.

http://www.iste.org/standards/standards/for-educators

Resources

SAMR Model

https://sites.google.com/a/msad60.org/technology-is-learning/samr-model

Cutler, David. "Modeling Constructive Online Behavior." Edutopia. N.p., 22 Oct. 2015. Web. 25 June 2017.

https://www.edutopia.org/blog/modeling-constructive-online-behavior-david-cutler

Marcinek, Andrew. The Path to Digital Citizenship. November 26, 2013.

http://www.edutopia.org/blog/the-path-to-digital-citizenship-andrew-marcinek

Responsive Classroom. Time-Out & Teaching Self-Regulation. July 28, 2014.

https://www.responsiveclassroom.org/time-out-teaching-self-regulation/

Professional Learning Networks

https://twitter.com/hashtag/digcitchat

https://www.commonsense.org/education/professional-learning-communities

NEA edCommunities Digital tools and Learning Groups

Activities/Lessons for digital citizenship

Media Smarts- http://mediasmarts.ca/sites/mediasmarts/files/games/cyber-security-quiz/index_en.html

Integrating Cybersecurity in the Classroom- https://niccs.us-cert.gov/formal-education/integrating-cybersecurity-classroom

Nice Challenge - https://nice-challenge.com/

Common Sense Media- https://www.commonsensemedia.org/educators/1to1/aups

Activities/Lessons for technology integration

Webquest

http://webquest.org/

Seven Tech Integration Lesson Plans: Let the Voting Begin

https://www.edutopia.org/blog/seven-tech-integration-lesson-plans

The Best Web 2.0 Applications for Education in 2017

http://larryferlazzo.edublogs.org/2017/05/13/the-twenty-five-best-web-2-0-applications-for-education-in-2017-so-far/

Six Steps for Integrating Technology into your classroom

https://edtechmagazine.com/k12/article/2006/10/6-steps-integrating-technology-your-lesson-plan

Code.org

Ms Bixler's Classroom Website

http://msbixler.weebly.com/

Kathy Schrock's Guide to Everything

http://www.schrockguide.net/

Digital tools for informal assessment/reflection

Kahoot

https://kahoot.it/

Student response systems

Padlet

https://padlet.com/

Submission Guidelines & Evaluation Criteria

To earn the micro-credential, you must receive a passing evaluation for Parts 1 and 3, and a "Proficient" for each component in Part 2.

Part 1. Overview Questions

500 word limit total

Please answer each of the following questions:

What is your skill level with digital tools used for educational technology?

What do you think your challenges will be?

How will you overcome your challenges?

What is the skill level with digital tools used for educational technology of your students?

What do you think their challenges will be?

How will you prepare your students to be successful with using technology in your classroom?

What technology do have available to use in your classroom?

What limitations do you have on technology in your classroom?

■ **Passing:** Responses address each of the questions using specific examples and descriptions. A passing response must include the types of devices the educator regularly uses, and how/when they use them to access the Internet or other software.

Part 2. Work Examples / Artifacts

Please submit the following artifacts

Artifact 1: A lesson plan that you currently have that does not integrate digital tools. This can be one that you write yourself or one taken from an existing resource that you use for your lesson planning. This should include a clear beginning (teacher intro/demo), middle (student practice/work time) and an end (closing, reflection, assessment)

Artifact 2: The same lesson plan adapted for use with digital tools that you have in your classroom. Please be explicit about how you are going to use available digital tools in all three parts of your lesson: beginning (teacher intro/demo), middle (student practice/work time) and an end (closing, reflection, assessment)

Artifact 3:Three student work samples from the lesson that uses digital tools.

All artifacts should be in one single document.

They can be submitted as links, screenshots, or other types of files.

Artifacts 2 and 3 should show how students will or did use technology to create, collaborate, communicate, think critically or conduct research.

null	Proficient	Basic	Developing
Artifact 1: Lesson Plan without technology	Artifact 1: Lesson plan has a beginning (intro/demo), middle (student practice, work time) and an end (closing, reflection, informal assessment)	Artifact 1: Lesson plan is missing one part: missing a clear beginning (intro/demo), OR middle (student practice, work time) OR an end (closing,	Artifact 1: Lesson does not have a clear beginning (intro/demo), middle (student practice, work time) and an end (closing, reflection, informal

Artifact 2: Lesson Plan (adapted to integrate digital tools)

Artifact 2: Lesson plan utilizes digital tools in ALL THREE sections: beginning (teacher intro/demo), middle (student practice/work time) and an end (closing, reflection, assessment) Students use the technology in a way that enhances and supports their learning. This may include but is not limited to:

increased engagement, opportunities to create, opportunities to share with an audience outside of the classroom, more effective way to collect formative assessment data, improve audio visual experience for students, streamline a process (for example providing feedback to students), increase peer interactions

reflection, informal assessment)

Artifact 2: Lesson plan utilizes digital tools in only TWO sections of the three: beginning (teacher intro/demo), middle (student practice/work time) and an end (closing, reflection, assessment)

Students use the technology in a limited way
The use of technology supports the students' learning in a superficial way

assessment)

Artifact 2: Lesson plan utilizes digital tools in only ONE section of the three: beginning (teacher intro/demo), middle (student practice/work time) and an end (closing, reflection, assessment)

Only the teacher uses the technology

The use of technology does not support the students' learning

Artifact 3: Student work samples Artifact 3: Student work samples showcase students engaging in at least one of the following: communication, collaboration, critical thinking, creating, conducting research connected to learning or understanding of the concepts being taught.

Artifact 3: Student work samples use digital tools to produce something but the project does not contribute to the learning or understanding of the concepts being taught

Student may use technology but the technology is limited to digital worksheet type activities (typing practice, games, digital flash cards) Artifact 3: Student work samples do not use digital tools or do not demonstrate a meaningful connection to the learning or concepts being taught

Reflection

500 word limit

Please answer the following questions

How did your students respond to the use of technology? Was there evidence of increased engagement or deeper learning? Explain.

How did working on this micro-credential impact your classroom instruction? What will you continue to use that you learned while working on this micro-credential in your classroom practice? Why or Why not?

■ **Passing:** Answers include specific examples from the lesson used. All questions are addressed completely and there is evidence of educator learning and reflection. Writing is organized and easy to understand.



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