Technology Integration: Analyst

Educator understands and uses data to drive their instruction and support students in achieving their learning goals.

Key Method

The educator applies digital tools to design and implement a variety of formative and summative assessments that accommodate learner needs. Educator analyzes ongoing assessment data to guide progress and communicate with stakeholders to develop student self-direction.

Method Components

Components of Summative Assessments

Create and administer a summative assessment with digital tools using alternative ways for students to demonstrate competency.

- Learning objectives
- Daily success criteria
- Google Forms

Components of Formative Assessments

Keep ongoing monitoring notes and records with digital tools for ongoing assessment and planning.

- Spreadsheets
- Word processors
- Purchased note-taking software
- Scan handwritten documents
- Monitoring notes

Components of Student Reflection

Students reflect on learning using digital tools.

- Address connections between technology and overall goals
- Students show reflection in reviewable document
- Ongoing Socratic discourse

**Components of Assessment Analysis**

Analyze assessments to drive further instruction.

- Organize data categorically
- Record data
- Use digital tools

**Components of Goal Sheets**

Students develop goal sheets based on reflection and data.

- Concrete goals
- Success criteria

**Components of Stakeholder Communication**

Communicates analysis with stakeholders via digital tools.

- Students
- Parents
- Education stakeholders

**Examples of Digital Tools for Assessments**

- Google Forms tests
- Recorded data from success criteria according to lesson plans
- Formal test data
- Growth data from website educational platforms
- Monitoring notes (digitally recorded)
- Online or scanned student reflections

**Supporting Research**


National Association of Elementary School Principals (NAESP). PDF, "Using Student Achievement Data to Support Instructional Decision Making.”

http://www.naesp.org/sites/default/files/Student%20Achievement_blue.pdf


Resources

Standards

ISTE Standards for Educators
https://www.iste.org/standards/for-educators

ISTE Standards for Students
https://www.iste.org/standards/for-students

Articles

ISTE standards in teacher education: A collection of practical examples

NOTE: The new ISTE Educator standards are only 2 years old, so current research is minimal.

Integrating Educational Technology into Teaching (6th Edition)
https://wtqbrkxbw05.storage.googleapis.com/MDEzMJYxMjI0Q==05.pdf

Framework: ISTE Standards, a Roadmap

Aspiring School Administrators’ Perceived Ability to Meet Technology Standards and Technological Needs for Professional Development
https://www.tandfonline.com/doi/abs/10.1080/15391523.2016.1215168

What is Successful Technology Integration?
https://www.edutopia.org/technology-integration-guide-description

Technology Integration and Blended Learning
https://www.digitallearning.org/technology-integration-and-blended-learning


Videos
Reimagining Classrooms: Teachers as Learners and Students as Leaders | Kayla Delzer
https://www.youtube.com/watchtime_continue=18&v=w6vVXmwYvgs

Gwynn’s Technology Integration Playlist
https://www.youtube.com/watch?v=AgLNRKR3Al&list=PLJHRhsWVgYsPWkJ6-514Fdf3_K1DFJ7

Teaching Resources

Common Sense Media - Digital Citizenship
https://www.commonsense.org/education/digital-citizenship

Five Tech Tools for Monitoring Student Learning
http://corwin-connect.com/2016/10/five-tech-tools-monitoring-student-understanding/

Kathy Schrock’s Guide to Everything
http://www.schrockguide.net/

Google for Education Teaching Center
https://teachercenter.withgoogle.com/

FreeTech4Teachers
https://www.freetech4teachers.com/

Peter G Schmidt Elementary
https://www.tumwater.k12.wa.us/Page/3044

Teacher Toolkit – Exit Ticket

The Ultimate List – 65 Digital Tools and Apps to Support Formative Assessment Practices

Submission Guidelines & Evaluation Criteria

To earn the micro-credential, you must receive a passing score in Parts 1 and 3 and receive a proficient for all components in Part 2.

Part 1. Overview Questions

200-250 words

Please answer the following contextual questions to help our assessor understand your current situation. Please do not include any information that will make you identifiable to your reviewers.

1. Why did you choose this micro-credential?

2. Describe your students’ access to digital tools in your classroom, school, and at home; i.e. are you 1:1 with devices, does your school have reliable Wi-Fi, etc.
3. What is your experience using data analysis to drive instruction without technology?

4. What types of data analysis experience do you have with technology?

5. What student data-driven instructional needs do you have in your classroom?
   - **Passing:** Response provides specific examples to justify choosing this micro-credential to address specific needs of both the teacher and the students.

### Part 2. Work Examples / Artifacts

To earn this micro-credential, please submit the following **three artifacts in one document** as evidence of your learning. Please do not include any information that will make you or your students identifiable to your reviewers.

#### Artifact 1: Assessment

Create and submit a grade level appropriate, standards-based classroom assessment using digital tools. See Method Components for ideas.

#### Artifact 2: Assessment Results

Administer the above assessment to your students and submit a summary of the results. Please include:

- At least one chart or graph using a digital tool
- Identified strengths of your class
- Identified next steps for your class based on results

#### Artifact 3: Lesson Plan

Based on the next steps you outlined above, create a lesson plan that uses digital tools that enhance the lesson delivery presentation and/or student work. Be sure to include:

- Standards being addressed
- Success criteria
- Timeframe for lesson

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<td><strong>Artifact 1: Assessment</strong></td>
<td>Assessment meets all of the following:</td>
<td>Assessment meets 2 of the following:</td>
<td>Assessment meets one or none of the following:</td>
<td>Uses appropriate digital tool to create assessment</td>
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Artifact 2: Assessment Results

Summary includes all of the following:
- At least one chart or graph
- Identified strengths of the class
- Identified next steps

Summary includes 2 of the following:
- At least one chart or graph
- Identified strengths of the class
- Identified next steps

Summary includes 1 or none of the following:
- At least one chart or graph
- Identified strengths of the class
- Identified next steps

Artifact 3: Lesson Plan

Lesson plan is connected to the next steps outlined in your summary of results.
- Lesson plan uses some form of digital tool for lesson delivery and/or student work and the chosen tools enhance the lesson.
- Lesson plan includes:
  - Standard(s)
  - Success criteria
  - Timeframe

Lesson plan may be loosely connected to the next steps outlined in your summary of results.
- The use of digital tools doesn’t enhance the lesson.
- Lesson plan may not include one or more of the following:
  - Standard(s)
  - Success criteria
  - Timeframe

Lesson plan is not connected to the next steps outlined in your summary of results.
- Digital tools are not used.
- Lesson plan includes none of the following:
  - Standard(s)
  - Success criteria
  - Timeframe

Reflection

500-word limit

Please answer the following reflective questions. Please do not include any information that will make you identifiable to your reviewers.

1. How has this micro-credential influenced your instructional practices?

2. In what ways has this helped student growth in your classroom?

3. How do you see this affecting your digital tools instructional practices in the future?

4. What methods did you use to record student data? What process did you use to analyze it? In what ways will you apply the analysis to your next lessons?

- **Passing:** Reflection provides evidence that this activity has had a positive impact on both educator practice and student success. Specific examples are cited directly from personal or work-related experiences to support claims. Also included are specific actionable steps that demonstrate how new learning will be integrated into future practices.

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