PDXPERT
COLLECTION

My Students Have Devices, Now What Do I Do? Technology Integration in Instructional Practice

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Workshop Overview

Following is a general overview of this workshop, including desired participant outcomes, an explanation of the workshop's alignment with the Learning Forward Standards for Professional Learning, and resources that are included in print and electronic form.

Duration: Full workshop – 3 hours

Desired Outcomes:
Participants will…
- Recognize the value of using digital tools to support 21st century, student-centered learning.
- Use online resources and tools to complete class activities.
- Create tech-rich activities aligned with state and national standards.
- Understand the importance of responsible and ethical technology use, including keeping student data private.

Learning Forward Standards for Professional Learning:
- **Learning Communities:** Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.
- **Resources:** Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
- **Outcomes:** Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

Resources in this Module:
- Attendee Handouts:
  - Workshop Agenda
  - Attendee Notes
  - Resources
  - 3-2-1 Evaluation Form
  - Certificate of Completion
- "Think About It" Exercise
- Ready, Set, Go Planning Activity

Video Clips:
- "Project Based Learning Explained" by the Buck Institute for Education (2010): www.youtube.com/watch?v=LMCZvGesRz8
- "Alan Kay on 'Why does computer-based teaching fail?'" excerpted from *Doing with Images Makes Symbols* (1987): www.youtube.com/watch?v=bC7x_qntM0g

Topic Outline

Understanding the general flow of topics to be covered is an important part of giving a strong presentation. This allows the presenter(s) to lead effective group discussions and speak extemporaneously. Following are the main topics covered in this PowerPoint presentation. As you prepare to give the workshop, you may want to refer to this page often.

Main Topics:
1. Benefits of Technology Integration
2. Facing Technology Challenges
3. Instructional Technology Best Practices
4. Classroom Management

Subtopics:

1. Benefits of Technology Integration
    a. 21st Century Skills
    b. Technology = Value-Added Instruction
    c. Standards-Based Teaching
    d. Personalized Learning
    e. Communication with Experts
    f. Project-Based Work
    g. Collaboration

2. Facing Technology Challenges
    a. Bandwidth
    b. Access
    c. Media Literacy
    d. Student Data Privacy: FERPA, CIPA, NCIPA, PPRA, and COPPA
    e. Technology Professional Development for Teachers

3. Instructional Technology Best Practices
    a. Access
    b. Responsible Use Policy: Internet Safety, Digital Citizenship, Netiquette, Anti-Cyberbullying
    c. Models of Technology Integration: SAMR and TPACK
    d. Assessment

4. Classroom Management
    a. "Care and Feeding" of Digital Devices
    b. Student Engagement
        • Student-Centered Learning
        • Guiding Questions
    c. Project-Based Learning

Presentation Outline

This outline is designed for you to see the PowerPoint presentation at a glance. Note that slide numbers and the approximate amount of time needed per slide are shown in the right two columns. **The times in bold print show the approximate total time needed for that topic, while non-bold print times show the approximate amount of time an activity or discussion will take within that topic.** You might consider keeping this page within reach during the presentation.

Section of Presentation	Slide #	Timing (mins)
Getting Started • Introduce self, co-teacher, participants • Cover learning objectives and outline the workshop agenda. • Review the driving question, addressing the pre-assigned readings.	1-4	10
Activity – Life Without Technology?	5-6	15
Part 1: Benefits of Technology Integration	7-17	**40**
Activity – Benefits of Technology	8	(10)
Video Clip – Project-Based Learning Explained		(10)
Discussion – Project-Based Work	16	
Break		
Part 2: Facing Technology Challenges	18-25	**30**
Discussion – Media Literacy	22	(10)
Part 3: Instructional Technology Best Practices	26-33	**45**
Discussion – Best Practices	26	(10)
Part 4: Classroom Management	34-40	**30**
Discussion – Using and Adapting Digital Checklists	37	(5)
Video Clip – Alan Kay on "Why Does Computer-based Teaching Fail?"		(10)
Discussion – The Music Is Not in the Piano	39	
Closing Remarks	40	10

Total of 3 hours (not including break)

Helpful Tip! This workshop can be broken up into shorter sessions so that you can adapt the presentation according to your time constraints. For example:

Day 1: Introduction plus Part 1
Day 2: Part 2
Day 3: Parts 3 and 4

If you would like to extend the workshop session, one or more of the following slides—located after the references in the PowerPoint presentation—may be used to deepen understanding.

Slide 48: Activity – What Do We Want to Learn? (20 minutes)
Slide 49: Video Clips – Technology's Value-Added Potential (25 minutes)
Slide 50: Discussion – Personalized Learning (15 minutes)
Slide 51: Discussion – Collaboration (10 minutes)
Slide 52: Video Clip and Discussion – Digital Lives of 8th Graders (15 minutes)

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Slide 8

Activity: Benefits of Technology
Allow 10 minutes for this activity.

Preparation: Give each participant a note card.

Instructions: *Using one side of the note card for each question, write down what you consider to be the benefits of technology integration:*

1. For yourself or your work.
2. For your students.

Be prepared to explain your choices.

Allow 3-4 minutes for each participant to fill out his or her card.

When participants have drawn up their lists, go around the room, having each participant list one important benefit and one drawback. Continue in sequence until there are no more responses. Allow 3-4 minutes.

At the end of the activity, summarize the examples provided. Always end on a positive note, pointing out that with technology integration comes flexibility, opportunities for differentiated instruction, timely and relevant information, and student engagement.
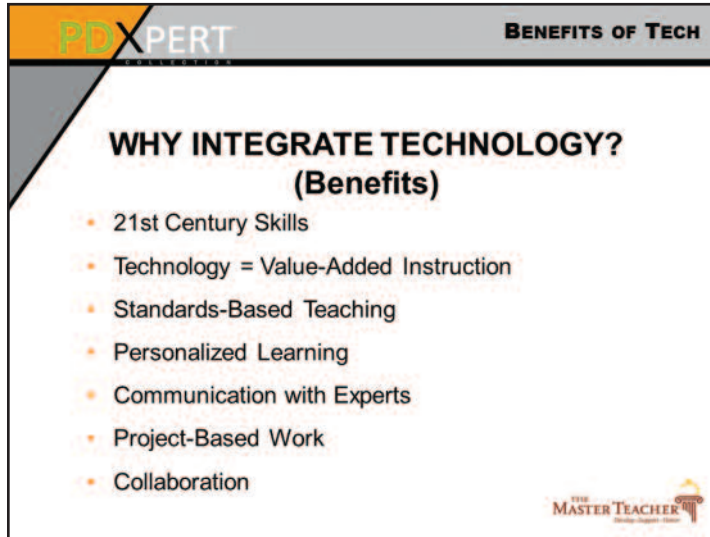
Slide 9

Remind participants that technology by itself doesn't add value.

How teachers and students use technology is what has value-added potential. The question we must always ask is, "Why use a particular tool?" Does it help students do things more easily, more enjoyably, more quickly? Does it give students a way to revisit the content, self-instruct at their own pace, take the lesson further? Does it increase productivity or efficiency?

Just because technology is out there and it sparkles, that doesn't mean we need to integrate it. Junk food has a certain appeal, but how often (if ever) do we eat at McDonald's? When thinking about the value technology adds, let's remember that we can often accomplish the same learning objective without technology. Suggesting that one important reason for integrating technology is the opportunity it provides for students to become teachers and teachers to become learners misses the point that students have opportunities to become teachers without the use of technology. Whenever students present in front of a class, they become teachers; whenever they share something interesting they've brought from home, they become teachers; whenever they go off in groups to work on a project with other students, they become teachers. If there is anything you take away from this workshop, let it be that technology is just a tool to support instruction. It can be the focus of instruction for part of a lesson, but the goal should be to become familiar enough with the tool to use it for knowledge application.

For example, you can create a paper table consisting of rows and columns. Inside column 1, you can list M&M colors; inside column 2, you can identify the numbers of M&M's for each color found in a 1-oz. package. You can manually total the number of M&M's in the package. But this table is static. You cannot ask it "What if?" questions. With a digital spreadsheet, however, you can do just that. You can calculate the number of colors for one bag, 10 bags, 50 bags. You can easily calculate averages. The digital tool lets you experiment and apply knowledge to different situations.

On the following slides, we will dive more deeply into the benefits of technology integration.

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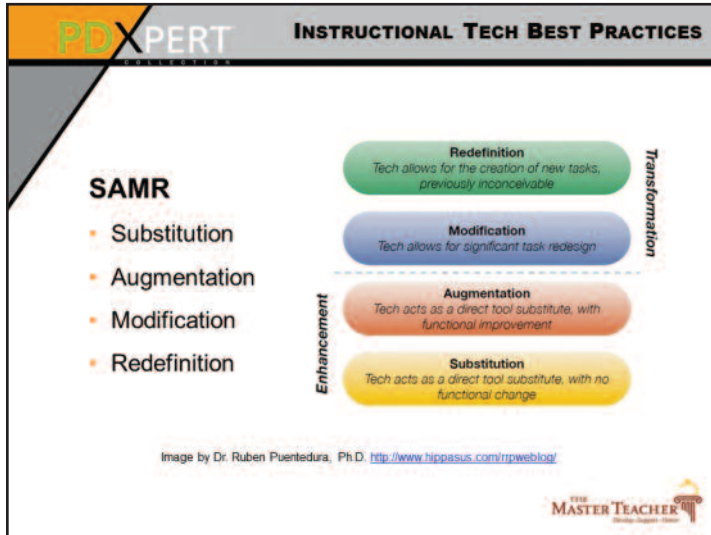
The SAMR model was developed by Dr. Ruben Puentedura. SAMR is an acronym that refers to: Substitution, Augmentation, Modification, and Redefinition. There is an implied sequence of implementation from lower levels to higher. Substitution means that a piece of technology replaces a non-digital tool, but there is no observed learning improvement (e.g., going from paper worksheets to digital worksheets or from overhead projectors to using an interactive whiteboard minus the interaction at the board).

Augmentation implies some functional change. For example, the teacher makes class-room handouts available in digital form so that students can access materials anytime, any place, wherever there is computer access.

At the Modification level, there is substantial change and improvement. For example, the teacher converts the document to digital format and students are required to use Google Docs or Sheets to collaborate on the assignment. The teacher provides feedback by adding comments to the shared file. Students use text-to-speech for revising written work or accessing content too difficult for them to read. They use online dictionaries to obtain definitions as needed.

At the level of Redefinition, students post their assignments online for commenting by peers and people outside the class. They integrate multimedia resources into their final project. The entire project would not be possible without the use of technology.

While SAMR provides helpful definitions for levels of technology integration, there is a danger in thinking that it moves just one way from low to high. Redefinition may not be the ultimate goal and there's no reason why teachers can't be integrating technology at different levels for different projects. Teach with the end goal in mind. If technology can help you get there, be sure to use it, whatever the level of impact.

"Think About It" Exercise

Have staff complete this exercise to begin implementing what they learned during the workshop. Distribute this document to staff by attaching the file to the Next Day Follow-Up Email, or make copies for the staff.

1. What aspect of the workshop did you find most worthwhile professionally?

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2. List two technology integration strategies that you frequently use in your classroom. What student learning successes have you had with these strategies?

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3. How do you see yourself using the information from the workshop to support student learning?

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