

## Chapter 2 - Device Possibilities and Resources

### **Chapter Abstract**

*This chapter explores frameworks and resources for a more constructivist approach. Addressing the concerns of already overwhelmed classroom teachers, the chapter highlights valuable resources for effective technology integration. The chapter begins by emphasizing the importance of finding reputable sources for technology integration guidance. Teacher bloggers, such as Jennifer Gonzales of Cult of Pedagogy and George Couros, provide rich content and insights into technology integration and innovation in education. Jennifer Gonzales's annual recommendations for Ed Tech tools offer practical suggestions for educators looking to enhance their teaching practices. The American Association of School Librarians (AASL) is introduced as another valuable resource, presenting the Best Digital Tools for Teaching and Learning annually. These tools align with AASL's National School Library Standards and support qualities such as innovation, collaboration, and user-friendliness. The chapter encourages educators to question whether they are using technology for its own sake and emphasizes putting learning first. It references John Hattie's "Visible Learning" and introduces Howard Pitler's "Using Technology with Classroom Instruction that Works," which builds on effective instructional strategies and incorporates technology categories. Furthermore, the chapter introduces TechBestPractice.net, a resource supporting McREL research and the UTCITW framework. The UTCITW framework links technology tools to nine categories of instructional strategies identified in "Classroom Instruction that Works, 2nd ed." When technology tools are effectively integrated, they can extend learning by providing access to primary source material, methods for data collection, global collaboration opportunities, and authentic assessment. The chapter also delves into the importance of selecting the right apps, offering a Great App Checklist from "Mobile Learning: A Handbook for Developers, Educators, and Learners" by McQuillen. This checklist guides educators in determining the appropriateness of an app, addressing factors such as curricular alignment, pedagogical framework, privacy, and accessibility.*



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## Learning Objectives

After reading this chapter, learners will be able to:

1. Explain key vocabulary terms, theories, and resources relating to ubiquitous experiences.
2. Describe the connection between chapter topics and personal practice.
3. Summarize the course content of the chapter.

If we truly intend to meet the challenge laid out in the ACOT<sup>2</sup> research, that of ensuring the new digital generation of students receives the type of education they needed to learn and stay in school, what are some of the frameworks and resources available to move to a more constructivist approach? Equally important, where can classroom teachers who already have not a full plate, but an overflowing plate of responsibilities and requirements find the best of the best? Fortunately, there are some really great resources to make the job less formidable. In this chapter, I will focus on the resources available to you.

## Finding Resources

One way to simplify the process of finding the best of the best is to find a few good teacher bloggers who focus on technology integration. Let's start with Jennifer Gonzales. Jennifer is the author of [The Teacher's Guide to Tech](#) and the creator of [Cult of Pedagogy](#), a website for teachers. I could write a dozen or so pages trying to explain the depth of The Teacher's Guide, but one advantage of an ebook is I can just embed a video. Watch this short YouTube introduction to the guide.

If that didn't get you excited about the possibilities technology integration provides, let's try this. Subscribe to Ms. Gonzales's blog, [The Cult of Pedagogy](#). When you go to that link you will notice that she also has a series of videos, podcasts, and tips. I could seriously stop here and tell you to spend the next few weeks of our time together and explore Jennifer's vast resources and then create a video synopsis as a final project. I could, but of course, I won't. Ms. Gonzales annually highlights apps to try in the coming year. Take a look at [6 Ed Tech Tools to Try in 2023](#).

Another fantastic blog to follow is by George Couros. George is the author of *The Innovator's Mindset* (Dave Burgess Consulting, Incorporated, 2015). If you browse through the myriad of topics found on his [blog](#), I am sure you will find something that is a perfect fit for where you are in your teaching and learning journey. I mentioned *The Innovator's Mindset* (Couros, 2014) and I do recommend checking out that book, but you will also find a summary of each chapter on his blog page. This book focuses on innovation and not just technology innovation. For example, Chapter 4 of the book is entitled "Relationships, Relationships, Relationships." Learners I have worked with in previous classes will know that I believe that relationships are the foundation of what we do in education. Here is a peek at the discussion questions from that chapter.

#### Discussion Questions:

1. How do you build relationships with individuals in your district, school, or classroom?
2. How do you empower others to take risks? Examples?
3. How do you create opportunities for your school community to have learning driven by their personal interests?

Another great resource repository comes from the American Association of School Librarians (AASL). Every year the



year's [Best Digital Tools for Teaching and Learning](#). These tools should foster the qualities of:

- Innovation/Creativity
- Active Participation
- Collaboration
- User Friendly
- Encourages Exploration
- Information/Reference.

They should also address at least one of the AASL's National School Library Standards six Shared Foundations:

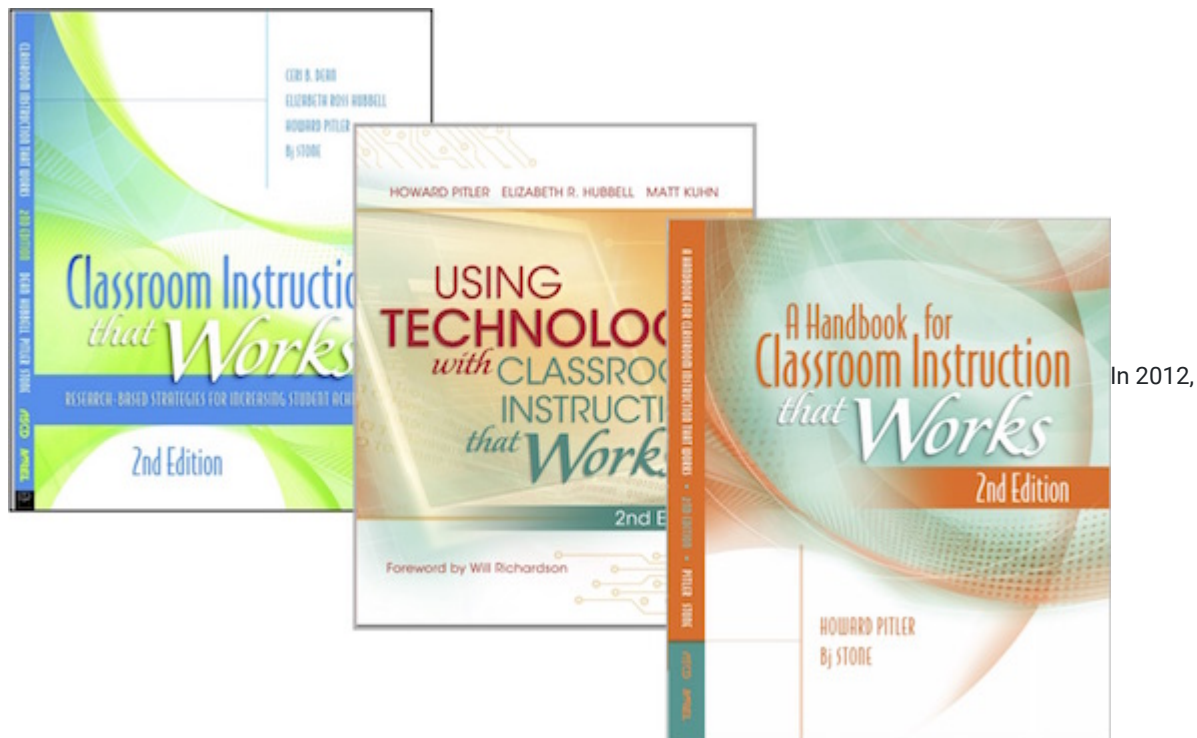
- Inquire
- Include
- Collaborate
- Curate
- Explore
- Engage

If you are beginning to see a connection between these sets of resources and the findings from the ACOT<sup>2</sup> research you are absolutely right.

## Integrating Technology

Are you using technology for “technology's sake?” How do you know?

In John Hattie’s “[Visible Learning](#)” (2018), he updates his extensive meta-analysis on what best practice strategies have the most impact on learning. As we think about the integration of technology, it is important that we put learning first.

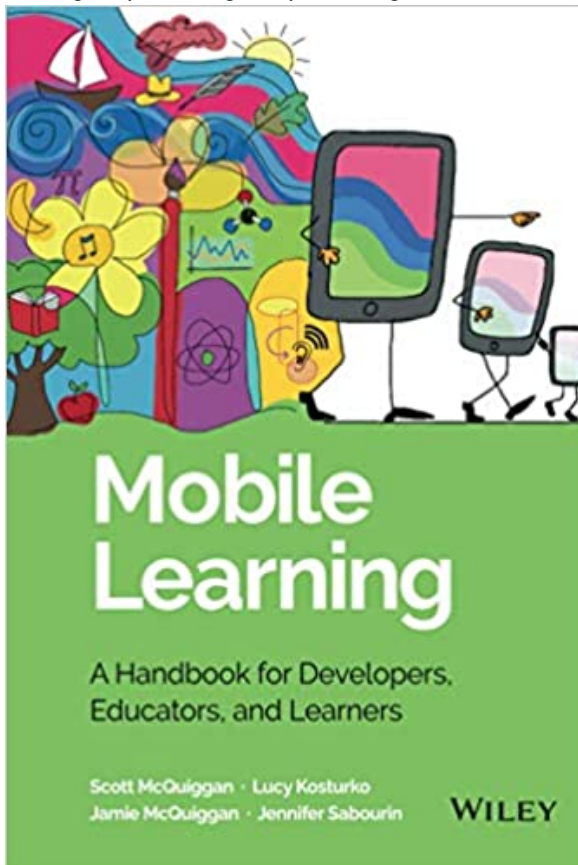


Howard Pitler, Matt Kuhn and Elizabeth Ross with McREL International (Pitler, Kuhn, & Ross, 2012) released, “*Using Technology with Classroom Instruction that Works*” 2nd ed (UTCITW). Building on the research on effective classroom instructional strategies outlined in *Classroom Instruction that Works, 2nd ed*, (Dean, Hubble, Pitler & Stone, 2012) The authors took the research further and introduced technology categories. Janice Harding and Jennifer Parker created **Note: as of 10.26.23 the link to this resource is not available. The authors have changed domains. As soon as they give me the new link I will post it.** “TechBestPractice.net” to support the McREL research and the UTCITW

framework. When you get to the TechBestPractice page, click on the links on the left navigation panel to see resources specifically linked to the nine categories of instructional strategies identified in *Classroom Instruction that Works, 2nd ed.* (Dean, Hubble, Pitler & Stone, 2012).

When technology tools are effectively integrated into the curriculum, they can extend learning in powerful ways. These tools can provide students and teachers with:

- access to up-to-date primary source material
- methods of collecting/recording data
- ways to collaborate with students, teachers and experts around the world
- opportunities for expressing understanding via multimedia
- learning that is relevant and assessment that is authentic
- training for publishing and presenting their new knowledge (Parker & Harding, 2022).



## Selecting the Right Apps

[The Great App Checklist found in Appendix B](#) of *Mobile Learning: A Handbook for Developers, Educators, and Learners* by McQuiggan (2015) presents a series of questions to help determine the appropriateness of an app. The checklist is designed to be used in sequential order, going through the purpose, curricular alignment, pedagogical framework (more on that in the next chapter), personalization, sharing and access of work, ease of use, privacy, app citizenship, and accessibility. This checklist will prove invaluable to technology and curriculum directors across all grade levels.

The Great App Checklist helps educators and districts try to determine the right apps for their learners. Alyson Klein, the Assistant Editor of EdWeek addresses this in her article, [The Number of Ed-Tech Tools Districts Use Has Almost Tripled. That's a Problem](#). She writes, "These numbers [of educational apps] should prompt district leaders to ask not just what ed tech is being used in their schools or how often it's getting used, but also whether it is safe, equitable, and positively impacting learning,"



In the next Chapter, you will explore three current models of technology integration that shape digital age teaching and learning:

1. SAMR
2. TPACK
3. PICRAT

We do love our acronyms in education.

## Application:

Pick **2 of the prompts** below and respond to them in 7-10 sentences total.

- How many resources or links (and which ones) have you &/or your students/staff worked with before?
- Are there some in particular that you would like to explore? Why do those interest you?
- What could you and your students/staff do with these resources in your classroom/building?
- Seek out someone you respect for their views on--or use of--technology: what do they use and in what way(s)?



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