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# Technology Integration: What's Your Next Step

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# Technology Integration: What's Your Next Step

**Abstract**

Technology integration continues to be an important educational topic. This importance is evidenced by the inclusion of digital technology in the Common Core State Standards, the continuing research on achievement gaps that exist for online reading ability based on income inequality (Leu, Forzani, Rhoads, Maykel, Kennedy, & Timbrell, 2014), the way that digital technology is increasingly a part of the way that children learn to read and write, and the way that digital technology is part of the literacy practices the children see modeled in their homes (Beschorner & Hutchison, 2013). The integration of digital technology is especially relevant and important for literacy instruction because literacy teachers are responsible for teaching the dominant modes and genres for reading and writing, which now includes reading and writing in digital environments (Hutchison & Reinking, 2011). Yet, integrating digital technology into literacy instruction continues to be difficult for many teachers due to a variety of constraints such as lack of understanding about how to teach both traditional and digital literacy skills (Hutchison & Reinking, 2010).

**Disciplines**

Curriculum and Instruction | Higher Education | Online and Distance Education | Technology and Innovation

frustrated and dismayed, but saw the problem and worked to resolve it successfully with the child.

The difficulty we saw was that many times computer or *online* applications are much like watching television or a movie to a child and tends to make those activities seem *unreal* to some, for so much of what they view is "make-believe" or fantasy.

Though we can certainly use technologies to benefit children in learning, we must not forget the *nature* of a child and the need to build on the basics.



## Technology Integration: What's Your Next Step?

by Amy Hutchison
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Technology integration continues to be an important educational topic. This importance is evidenced by the inclusion of digital technology in the Common Core State Standards, the continuing research on achievement gaps that exist for online reading ability based on income inequality (Leu, Forzani, Rhoads, Maykel, Kennedy, & Timbrell, 2014), the way that digital technology is increasingly a part of the way that children learn to read and write, and the way that digital technology is part of the literacy practices the children see modeled in their homes (Beschorner & Hutchison, 2013). The integration of digital technology is especially relevant and important for literacy instruction because literacy teachers are responsible for teaching the dominant modes and genres for reading and writing, which now includes reading and writing in digital environments (Hutchison & Reinking, 2011). Yet, integrating digital technology into literacy instruction continues to be difficult for many teachers due to a variety of constraints such as lack of understanding about how to teach both traditional and digital literacy skills (Hutchison & Reinking, 2010).

Numerous models have been developed to describe the ways that technology should be used in the classroom. A popular model for considering types of technology integration is the Substitution Augmentation Modification Redefinition (SAMR) model (Puentedura, 2006). This model advocates using technology in a way that moves along a continuum that begins with simply substituting technology for an existing classroom practice, but at the highest level, involves using technology to redefine instruction by creating new tasks that would not be possible without technology. Based on this model, it is a desirable goal for teachers to integrate technology at the redefinition level. However, there is evidence that this is not how technology is being integrated into literacy instruction (Hutchison & Reinking, 2011).

One reason that teachers may not frequently integrate digital technology into literacy instruction, or integrate technology in a way that moves beyond the substitution level, is that they simply are unsure how to start. Alternately, teachers may attempt to integrate technology, but face barriers along the way that they are not able to overcome or that cause them to abandon their goal. These potential barriers are why Hutchison and Woodward created the Technology Integration Planning Cycle (2014). The cycle is presented in Figure 1. The purpose of the Technology Integration Planning Cycle is to guide teachers in planning instruction by first considering their instructional goal rather than starting with the technology application they will use and then trying to make the instructional content fit with the technology. The cycle further guides teachers in considering how the use of technology contributes to the instruction, the possible constraints they may face when integrating the technology, and the ways that they may need to reconsider aspects of the classroom routine when technology is integrated.
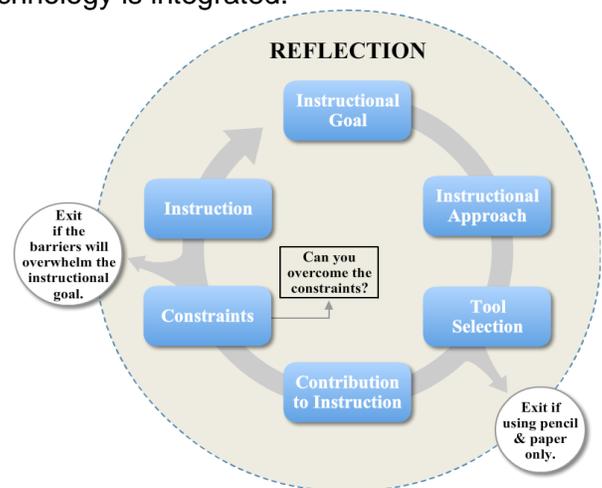
*Figure 1*. Technology Integration Planning Cycle (Hutchison & Woodward, 2014)

However, even when using a planning model such as the Technology Integration Planning Cycle, teachers may still have difficulty with a particular aspect of the planning process or the classroom implementation.  Additionally, teachers vary in their knowledge of the content they teach, in their knowledge of the best approaches for teaching the content, and in their knowledge of digital tools that can support their teaching of the content. Thus, even with a clear vision of how technology should be integrated, and a planning model to plan instruction involving digital technology, it can be difficult to move beyond barriers to integrate technology.  Therefore, I propose a process that asks teachers to consider the next step that they need to take to advance in their integration of technology, regardless of where they are in that process.  This approach is described in the section that follows.

**What is your next step?**
   Perhaps you are a teacher that integrates technology daily in a variety of ways and you are ready to try new apps and websites that will advance your students' opportunities to learn with technology even further.  Perhaps you are a teacher who occasionally integrates technology, but you would like to integrate digital tools on a more regular basis so that your students can steadily build their digital skills in order to complete more complex tasks.  Perhaps you are a teacher who rarely or never integrates technology into instruction and you want to start integrating for the first time.  Wherever you are on this continuum, one of the best ways to move forward is to consider your next step. You can determine the best next step for you by asking questions presented in Figure 2. There are limitless ways that these questions could be answered, but some possible scenarios and considerations are considered subsequently.

- Q1: How am I doing in regards to integrating digital technology?

- Q2: What, if anything, is stopping me from moving forward?

- Q3: How can I use the resources available to me?

- Q4: What is the next step I need to take to integrate digital technology into my instruction?

- Q5: How can I get what I need to take the next step?

*Figure 2.* Determining your next step for technology integration.

**Question 1: How am I doing in regards to integrating technology?**
Some possible responses to this question might be:

A. Really great! Things are going so well that I want to integrate technology even more.
B. Just okay. I need to learn more about how to use the iPads that are sitting in my classroom
C. Not well. I don't really like technology and am frustrated that I have to teach with it.
D. Things aren't going at all because I have no technology available to me in my classroom.

Regardless of which of these responses most closely resembles your response, there are steps that can be taken to continue improving your integration of technology.

**Question 2: What, if anything, is stopping me from moving forward?**
Some possible responses to this question might be:

A. Though things are great, I don't know any other ways to use technology beyond what I am already doing.

B. Although I learned about some interesting ways to use technology in my recent professional development workshop, I haven't taken the time to further explore how I can integrate them into my instruction.

C. I'm not sure how to start.

D.  I don't have technology available to me. How can I integrate it?

Although each of these possible responses represent challenges that teachers commonly face when it comes to integration, they can all often be overcome by accessing resources that are available through a variety of sources.

**Question 3: How can I use the resources available to me?**
Some possible responses to this question might be:

A.  I can develop a professional learning network through Twitter to learn about ways that other teachers are integrating technology into their instruction. This will likely give me the ideas that I need to try something new.
B.  I have no idea how to use Twitter, but I do have a wonderful instructional coach who will likely be able to help me if I just ask.
C.  There are professional development opportunities on this topic available through my school district.  I can finally get around to signing up for one of those workshops!
D.  I don't have technology to use in my classroom, but I certainly would use it if I did. I can ask my instructional coach or principal to help me brainstorm about ways to find funding to get technology for my classroom.

After considering the resources that are available to you, you are likely ready to determine the next step that you can take to improve your integration of technology into the classroom.

**Question 4: What is the next step I need to take to better integrate digital technology into my instruction?**
    Each teacher's next step will be different, but, based on the possible responses presented for the previous three questions, this section provides some possible next steps.

*If your situation most closely resembles Answer A from the first three questions:*
A great next step for you may be to develop a professional learning network by following professionals with similar interests on Twitter, by connecting with other teachers in your district who are interested in integration, or by utilizing resources providing by professional organizations

such as the International Society for Technology in Education (www.iste.org) or the International Reading Association (www.readwritethink.org). If you choose to use Twitter to develop your network, it is important to know whom to follow. Some relevant people or groups to follow are listed below:
- @TIPcycle
- @IRAToday
- @Edudemic
- @Edutopia
- @Isteconnects

*If your situation most closely resembles Answer B from the first three questions:*
A possible next step for you may be to plan a time when you will consider how you can better integrate technology and generate a list of questions or ideas that you have. After you have determined what you need help with, schedule a meeting with your instructional coach, another colleague, or someone else who can help you with integration to ask questions and brainstorm ideas for your classroom. After taking these initial steps, you may be ready to use the Technology Integration Planning Cycle (Hutchison & Woodward, 2014) to begin planning to integrate technology into your instruction.

*If your situation most closely resembles Answer C from the first three questions:*
It's time to sign up for a professional development workshop! Even if nothing is available through your school or district, there are many ways to learn more through online webinars, massively open online courses (MOOCs), professional conferences, and online courses. After you familiarize yourself with a few tools, you may be ready to use the Technology Integration Planning Cycle (Hutchison & Woodward, 2014) to begin planning to integrate technology into your instruction.

*If your situation most closely resembles Answer D from the first three questions:*
It's time to start searching for ways to acquire technology resources for your classroom. One approach to getting tools for your classroom is to search for grant funding through a site such as www.getedfunding.com.

**Conclusion**
    Wherever you are in regards to your integration, there are always steps you can take to continue to improve the quality of your integration. By asking and answering the questions presented in this

article, you can determine how to continue developing your technological, pedagogical, and content knowledge to better support your students' learning through technology integration.  In conclusion, I challenge you to answer this question: What is your next step?

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# Technology

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## Column Editor

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## Fun and Engaging Literacy Websites for Today's Classrooms
**Megan Moreland**

The enormity of the world wide web can be overwhelming for teachers in today's classroom. Too many options create challenges for teachers when deciding which literacy websites best engage learners and motivate them to read. I interviewed several classroom teachers and asked them to recommend their most favorite digital classroom resources. The following is a list of websites that I compiled based on their recommendations.

Bookflix
http://auth.grolier.com/login/bookflix/login.php

Bookflix, a website sponsored by Scholastic, contains a plethora of fiction/non-fiction book pairings. While this website does require a subscription, the diversity of the resources proves a wonderful classroom resource that support student reading. This website offers many popular titles of beloved children's books presented in an engaging digital format. Some of the highlights include: a) many of the books have both Spanish and English versions; b) the books could be read aloud or silently with captions at the bottom of the screen for ease of reading; and c) additional resources such as author information, fun learning activities related to each book, and links for further research are provided. Furthermore, the books can be connected to a Smartboard, and the pages can be easily manipulated on the Smartboard to keep students captivated.

Kahoot
https://getkahoot.com/

Kahoot is a game based interactive classroom tool that can be used with computers or smartphones. Creating a free username and password is very easy and takes less than thirty seconds. Teachers can create quizzes with a colorful backdrop of their choice. These quizzes include pictures or teacher created questions. Students then compete with one another in the