HOW CAN PRIMARY TEACHERS USE DIGITAL RESOURCES TO ENHANCE READING INSTRUCTION?

by

Gabrielle Harteneck

A capstone project submitted in partial fulfillment of the requirements for the degree of Master of Arts in Literacy Education.

Hamline University

Saint Paul, Minnesota

August 2021

Capstone Project Facilitator(s): Julianne Scullen, Ed.S Content Expert: Amy Pearson

CAPSTONE PROJECT

Digital Resources for Primary Students

Introduction

Technology is in a constant state of evolution. Within the past decade technology has exploded, and its effect has dramatically changed the basis for how people read, write, collaborate and communicate in today's world. The realm of literacy is in a state of change attributed largely to the enhancements of mobile devices including cell phones, e-readers, tablets, and online websites, most notably social networking sites. It is imperative that classroom instruction aligns with everyday life. Students need to understand how to navigate in today's digital world, especially as society's grasp on technology is continually increasing. This includes young students. Learning and understanding how educators can integrate digital resources to support the development of today's learning goals leads to the question, *how can primary teachers use digital resources to enhance reading instruction?*

Project Overview

To answer the question, how can primary teachers use digital resources to enhance reading instruction?, I have created a website to help teachers locate quality digital resources that support the development of standards-based learning goals. The website includes a basic overview of information about the Common Core State Standards (CCSS), college and career readiness, along with twenty-first century literacy instruction. This information identifies why integration of digital technology is important, and how its use supports student learning goals. Another portion of the website includes a basic overview of the SAMR Model (Puentedura, 2014), which can help educators think about how technology impacts and supports student learning. The bulk of the website is

resources that teachers can use. Each resource aligns with the CCSS and includes a link to the exact standards it targets. The resources have also been evaluated using the SAMR Model (Puentedura, 2014) and the sophistication level is listed. There is a portion of the website that is dedicated to redefinition, the highest, most transformative tier of the SAMR Model (Puentedura, 2014). Resources at this tier enables students to demonstrate their knowledge in a way that uses creation, critical thinking, collaboration and communication, which are characteristics that CCSS aim to develop in all learners.

Purpose

The most important purpose of my Capstone Project is to illustrate and express how important high-quality experiences with digital technologies are for young learners. It is imperative that instruction includes a variety of literacy experiences. The success of young learners in the 21st century is dependent on developing proficiency in both traditional and digital literacies (Gambrell & Morrow, 2015, p. 93). The motive behind this project was bringing together an array of quality digital resources that support standards-based learning goals.

Audience

This Capstone Project is intended to reach and support educators who are interested in integrating digital resources into their classroom instruction. The website has been crafted with primary teachers in mind. However, teachers at other grade levels and content areas can also use the relevant information on this website. This website was designed with the hope that educators will use it as a motivational platform and be inspired to take the resources presented into their classrooms, or adapt the content to meet the needs of their students.

Website Specifications

The website, Digital Resources for Primary Students, which can be found at https://primarydigitalresources.weebly.com, answers the question, *how can primary teachers use digital resources to enhance reading instruction?*

The *SAMR Model* portion of the website (see Figure 1), describes Dr. Ruben Puentedura's framework for technology integration. The model can help educators consider how technology impacts, supports and enhances student learning. The different tiers (see Figure 2) encourage educators to consider why technology is being employed and how to use it more efficiently (Rosen, 2011). The SAMR Model (Puentedura, 2014) can also be used by educators to "... specifically name their intended level of technology use and select apps that either redesign tasks or create new, previously unimagined, learning tasks" (Israelson, 2015, p.342).

What is the SAMR Model?

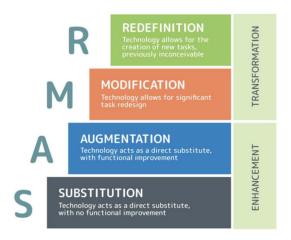
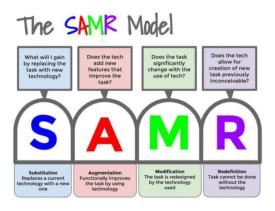


Figure 1. Website SAMR Model page.

What are the four tiers?



Substitution, the lowest tier, is where technology "acts as a direct tool substitute, with no functional change" (Puentedura, 2014). This means that technology is a direct replacement. This tier is the least innovative

 Classroom Example: A teacher substitutes an eBook for a physical copy of the text.

The next step, **augmentation**, is when technology is a direct substitute, but provides "functional improvement" (Puentedura, 2014). A student's experience is enhanced by digital features at this level.

 Classroom Example: Students use features that are built-in to an eBook or digital resource. This could include, but is not limited to, a text-to-speech feature, highlighting tool, altering font size, and utilizing a built-in dictionary.

Figure 2. Website SAMR Model page continued.

An additional page on the website titled *Common Core*, provides background on the Common Core State Standards (see Figure 3) and seeks to establish a need for technology integration in primary classrooms. Minnesota specific standards have been highlighted to demonstrate how technology is embedded into learning goals, even at the primary level.

Common Core State Standards



Figure 3. Website Common Core page.

The next portion of the website, *Pre-reading Skills*, contains specific digital resources that support the development of strong phonemic or phonological awareness, as

well as phonics and decoding skills. Resources in this section also allow students to establish knowledge of print concepts. This portion of the website provides a detailed outline of each resource including cost, which tier of the SAMR Model it reaches, and the specific Common Core State Standards the resource aligns to (see Figure 4).

PRE-READING RESOURCES

Before a student can comprehend a text and read fluently there are skills that must be developed.

Resources on this page target the development of key foundational skills.

Pre-Reading Skills:

- Print Concepts
- Phonological and Phonemic Awareness
- · Phonics and Decoding
 - Letter Identification & Sound Recognition



Figure 4. Website pre-reading resources page.

An additional page titled *Comprehension Resources*, includes meaningful digital resources that allow students to increase comprehension. Similar to the previous section, resources on this page outline cost, which tier of the SAMR Model the resource reaches, and the standards the resource targets (see Figure 5).

COMPREHENSION RESOURCES



RAZ-Plus

Cost: \$216.00 USD / teacher for 1 calendar year

SAMR Model: Substitution - Modification

Common Core Connection: Click here

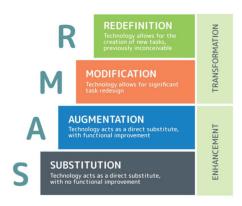
Description: Raz-Plus is part of the Learning A-Z family of products.

This resource provides students in grades K-6 access to a virtual

Figure 5. Website comprehension resources page.

The final portion of the website is titled *R: Redefinition* (see Figure 6). This page focuses on redefinition, the top tier of the SAMR Model (Puentedura, 2014). Resources on this page enable students to demonstrate their knowledge in a way that uses creation, critical thinking, collaboration and communication. These activities transform how students can share their understanding.

Redefinition Resources



Redefinition, the top tier of the SAMR Model (Puentedura, 2014), enables students to demonstrate their knowledge in a way that uses creation, critical thinking, collaboration and communication. These activities transform how students can share their understanding (Harteneck, 2021). This sophisticated tier engages students in meaningful experiences that "open new doors for student learning" (Best, 2015).

The resources listed below target the top tier of the SAMR Model (Puentedura, 2014) and allow student

Figure 6. Website R:Redefinition page.

Conclusion

The goal of this Capstone Project was focused on answering the question: *How can primary teachers use digital resources to enhance reading instruction?* As this project has demonstrated, technology can be used to enhance literacy instruction. Many authors and professionals agree that preparation for the realities of the modern world must include an array of literacy experiences. Educators need to blend 21st century literacy practices with more traditional approaches in order to prepare all students for success after their K-12 education. In order to accomplish this, teachers need access to high quality digital resources that support the development of standards-based learning goals in order to prepare students for the demands of a technologically driven world.

REFERENCES

- ABCya.com, L.L.C. (2021). https://www.abcya.com
- ABCya.com, L.L.C. (2021). Common Core Standards. ABCya!. https://www.abcya.com/standards/
- ABCya.com, L.L.C. (2021). [Photograph]. https://www.abcya.com
- Best, J. (2015, October 9). The SAMR model explained (With 15 practical examples). 3P Learning. https://www.3plearning.com/blog/connectingsamrmodel/
- Best, J. (2015, October 9). [Photograph]. The SAMR Model explained (with 15 practical examples). https://www.3plearning.com/blog/connectingsamrmodel/
- Brittain, P., & Common Sense Media. (2021, May 13). Freckle. Common Sense Education. https://www.commonsense.org/education/website/freckle
- Ciancio, D. (2021). Review of Lalilo's English literacy program. WestEd.
- Common Core State Standards Initiative. (2021). About the standards. https://www.corestandards.org/about-the-standards/
- Common Core State Standards Initiative. (2021). Standards in your state. https://www.corestandards.org/standards-in-your-state/
- Common Core State Standards Initiative. (2021). [Map]. Standards in Your State. http://www.corestandards.org/standards-in-your-state/
- Erickson, L. (2015, November). See how SAMR works in real classrooms. Mimio Classroom Technology Blog. https://blog.mimio.com/see-how-samr-works-in-real-classrooms
- Epic! Creations, Inc. (n.d.). Epic Books for Kids. https://www.getepic.com
- Explain Everything. (n.d.). Make yourself clear with world's best digital whiteboard. https://explaineverything.com
- Explain Everything. (n.d.). Pricing | Explain Everything pricing, plans, and FAQ. https://explaineverything.com/pricing/
- Explain Everything. (n.d.). [Photograph]. Make yourself clear with world's best digital whiteboard. https://explaineverything.com
- Gambrell, L. B., & Morrow, L. M. (2015). Best practices in literacy instruction (5th ed.). Guilford Publications.

- Gewertz, C. (2015, September 30). The Common Core explained. Education Week. https://www.edweek.org/teaching-learning/the-common-core-explained/2015/09
- Grandview C-4 School District. (n.d.). The SAMR Model [Photograph]. Instructional Technology. https://www.csd4tech.com/samr.html
- Hsu, Y. (2006). Better educational website interface design: The implications from gender-specific preferences in graduate students. British Journal of Educational Technology, 37(2), 233-242.
- International Literacy Association. (2019). Digital resources in early childhood literacy development [Position statement and research brief]. http://literacyworldwide.org/statements
- Israelson, M. H. (2015). The app map: A tool for systematic evaluation of apps for literacy learning. The Reading Teacher, 69(3), 339349.
- Isaacs, E. (2017). How can primary teachers use technology, primarily iPads, to differentiate language arts instruction to increase instruction? [Master's thesis]. https://digitalcommons.hamline.edu/hse_cp/49
- IXL Learning. (2021). IXL Language arts. https://www.ixl.com/ela/
- IXL Learning. (2021). IXL skill plan | Minnesota academic standards: Kindergarten. https://www.ixl.com/ela/skill-plans/minnesota-academic-standards-kindergarten
- IXL Learning. (2021). IXL skill plan | Minnesota academic standards: Grade 1. https://www.ixl.com/ela/skill-plans/minnesota-academic-standards-grade-1
- IXL Learning. (2021). IXL skill plan | Minnesota academic standards: Grade 2. https://www.ixl.com/ela/skill-plans/minnesota-academic-standards-grade-2
- IXL Learning. (2021). [Photograph]. https://www.ixl.com.
- Kamijo, M. M. (2017, November). Evaluating Mobile Learning Activities. TESOL Connections.
 http://newsmanager.com/partners.com/tesolc_mobi/issues/2017-11-01/2.html
- Lalilo. (2021). Research-based phonics and comprehension program. https://lalilo.com
- Lalilo. (2021). [Photograph]. Research-based phonics and comprehension program. https://lalilo.com

- Langevin, S., & Common Sense Media. (2020, April 21). Explain Everything whiteboard. Common Sense Education. https://www.commonsense.org/education/app/explain-everything-whiteboard
- Larson, L. C. (2015). E-books and Audiobooks. The Reading Teacher, 69(2), 169-177.
- LAZEL, Inc. (2021). Headsprout grows kids' reading skills! Headsprout. https://www.headsprout.com
- LAZEL, Inc. (2021). Headsprout curriculum and grade correlations. Headsprout. https://www.headsprout.com/main/ViewPage/name/curriculum-correlations/
- LAZEL, Inc. (2021). Differentiated Instruction. Your Way. Raz-Plus. https://www.raz-plus.com
- LAZEL, Inc. (2021). Common core standards. Raz-Plus. https://www.raz-plus.com/curriculum-correlations/commoncore/
- LAZEL, Inc. (2021). [Photograph]. Headsprout. https://www.headsprout.com
- LAZEL, Inc. (2021). [Photograph]. Raz-Plus. https://www.raz-plus.com
- Lix, C., & Common Sense Media. (2015, September). Teach your monster to read. Common Sense Education. https://www.commonsense.org/education/app/teach-your-monster-to-read
- Melski, K. (2020, October 3). SAMR in the library. Teaching and Learning with Mrs. Melski Blog. https://karenmelski.org/2020/10/03/samr-in-the-library/
- Minnesota Department of Education. (2021). Academic standards (K-12). https://education.mn.gov/mde/fam/stds/
- Minnesota Department of Education. (2018, August 15). Minnesota K-12 academic standards in English language arts (2010). https://education.mn.gov/mde/dse/stds/ela/
- Minnesota Department of Education. (2020, August). 2020 Minnesota K-12 English language arts standards (commissioner approved draft). https://education.mn.gov/mde/dse/stds/ela/
- Model Teaching. (2021, April 26). Three examples of incorporating technology into the classroom using the SAMR model.

 https://www.modelteaching.com/education-articles/technology-in-the-classroom/i ncorporating-technology-into-the-classroom-using-the-samr-model

- National Council of Teachers of English. (2019, November 7). Definition of literacy in a digital age. https://ncte.org/statement/nctes-definition-literacy-digital-age/
- Ng, W. (2014). Critical design factors of developing a high-quality educational website: Perspectives of pre-service teachers. Issues in Informing Science and Informational Technology, 11, 101+.
- Padlet. (n.d.). It's a starry night. Make something stellar. https://padlet.com
- Padlet. (n.d.). [Photograph]. It's a starry night. Make something stellar. https://padlet.com
- Pohlonski, E., & Common Sense Media. (2021, January 11). IXL. Common Sense Education. https://www.commonsense.org/education/website/ixl
- PowerSchool. (2021, April 13). SAMR model: A practical guide for K-12 classroom technology integration.

 https://www.powerschool.com/resources/blog/samr-model-a-practical-guide-for-k-12-classroom-technology-integration/
- Puentedura, R. (2014, September 24). SAMR and bloom's taxonomy: Assembling the puzzle. Common Sense Education.

 https://www.commonsense.org/education/articles/samr-and-blooms-taxonomy-assembling-the-puzzle
- Renaissance Learning, Inc. (2021). Reach every student at their level. Freckle by Renaissance Differentiation Platform for K-12. https://freckle.com/en-us/
- Rosen, L. D. (2011). Rewired: Understanding the iGeneration and the way they learn. The Education Digest, 2022.
- Seesaw. (2021). Seesaw- Demonstrate and Share Learning. https://web.seesaw.me
- Seesaw. (2021). [Photograph]. Seesaw- Demonstrate and Share Learning. https://web.seesaw.me
- Schrock, K. (2013, November 9). Resources to support the SAMR Model. Kathy Schrock's Guide to Everything. https://www.schrockguide.net/samr.html
- Terada, Y. (2020, May 4). A powerful model for understanding good tech integration. Edutopia.

 https://www.edutopia.org/article/powerful-model-understanding-good-tech-integration
- Terada, Y. (2020, May 4). The SAMR Model [Photograph]. Edutopia.

 https://www.edutopia.org/article/powerful-model-understanding-good-tech-integration

- The Usborne Foundation. (n.d.). Teach Your Monster to Read. https://www.teachyourmonstertoread.com
- The Usborne Foundation. (n.d.). What does each game cover? Teach Your Monster to Read.

 https://www.teachyourmonstertoread.com/about-the-game/what-does-each-game-cover
- The Usborne Foundation. (n.d.). [Photograph]. Teach Your Monster to Read. https://www.teachyourmonstertoread.com
- United States Department of Health and Human Services. (2006). Research-based web design and usability guidelines. Retrieved from https://guidelines.usability.gov/
- VanderBorght, M., & Common Sense Media. (2021, June 13). Lalilo. Common Sense Education. https://www.commonsense.org/education/website/lalilo
- VanderBorght, M., & Common Sense Media. (2021, August 4). Epic! Kids' books and videos. Common Sense Education. https://www.commonsense.org/education/app/epic-kids-books-and-videos
- WestEd. (2020). Review of Lalilo's English literacy program.