



One-to-One is Done: 1:1 iPad Implementation Analysis

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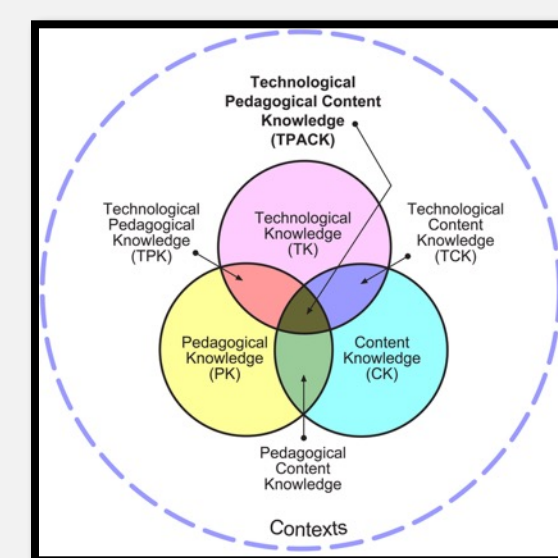
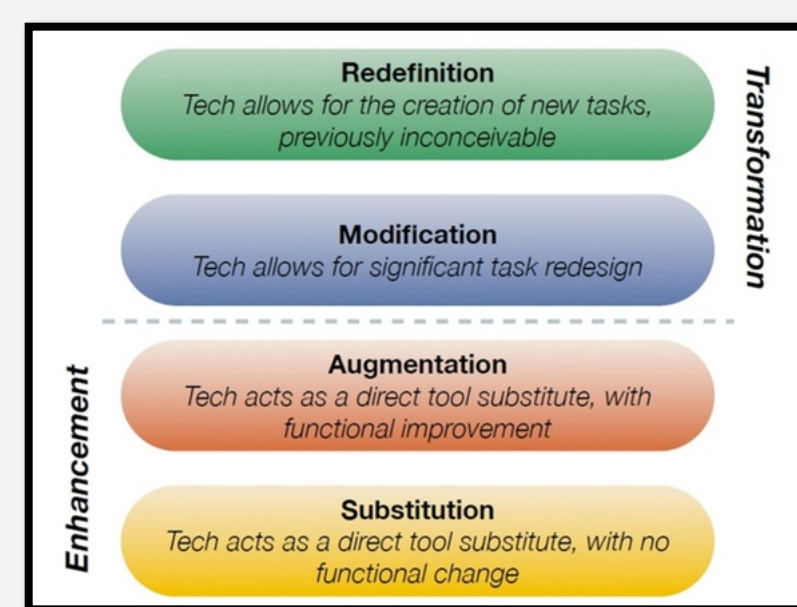
INTRODUCTION

The purpose of this phenomenological study was to explore the teachers' experience using iPads in the classroom in 1:1 implementation as a small private middle school. A 1:1 implementation is generally defined as one device (iPad) to one student ratio for all academic tasks. The pragmatic purpose of this study in simplest terms is to assess "what works?" and "what doesn't?", in evaluating the *implementation* and its *outcomes*. Assessment is appropriately utilized for two main purposes, to either "prove" or "improve", in this study both purposes are beneficial objectives

Objective as stated from the Curriculum Director prior to 1:1 implementation:
"With these devices teachers are able to target instruction to their students' individual levels. With the iPads they are able to get an immediate understanding of each student's comprehension of the course work."

SAMR and TPACK: Related literature and conceptual review directly supported by two primary models **technology integration promoting engaged learning**. Both models below focus on the significance of utilizing **technology as a tool** to aide in learning. Whether the tiered Blooms supported SAMR Model, or the Venn-like TPACK; both modalities strongly indicate that technology is not beneficial by itself, but only transformative when combined with effective pedagogy.

Specific to this study, an iPad can be limiting as a consumable "Flappy Birds" level, yet the iPad provides additional capabilities when used to show cell mutation as part of a scaffold lesson in Science.



SAMR Model, Substitution Augmentation Modification Redefinition
Image the creation of Dr. Ruben Puentedura, Ph.D. <http://www.hipposus.com/rrpweblog/>

TPACK Model, Technological Pedagogical Content Knowledge
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RESEARCH QUESTIONS

- What are the goals of using iPads in the classroom 1:1?
- What are the ways teachers are using iPads?
- What are the challenges that the teachers observe?
- What are the opportunities and advantages that the teachers observe?

FINDINGS: EMERGENT THEMES

Training

"I would recommend more training for everybody. More training for even us, I mean, I feel better about it but not anywhere competent enough so I would recommend lots of training"

"So, you need ongoing training because a lot of the things that you have questions about, you do not realize until you encounter them and then if you cannot fix them"

Technical Issues and Infrastructure

Discovered reoccurring causal technology subthemes: technical down time, additional technical support, timing of training; each provided challenges in the first year of 1:1 implementation.

Classroom Management

"There are a lot more things you have to worry about because it is more dangerous. And these kids are have not even figured out some of the more dangerous things. Because it is not just like passing notes, like when they used to write notes and pass notes"

"Actually a huge advantage, another thing is that the kids seem much organized."

Applications and Software

Moodle was reported as a crucial necessity in providing a course framework and "base" for all course information.

MobyMax with its ability to differentiate instruction was consistently touted as highly beneficial in reaching students at their individual Math levels. Reoccurring reports of learning benefits from **Quizlet**, **Prezi** and **iMovie** were discovered.

RECOMMENDATIONS AND IMPLICATIONS

As new 1:1 iPad implementations are being planned for launch in the upcoming 2015-2016 academic year, the findings of this study inform best practices in iPad/technology integration for next year. Two main classes are directly affected by these findings: (1) the same 6th grade teachers that were participants for this first year, will launch their 2nd 1:1 implementation with their incoming 6th graders and (2) the 7th grade teachers next year, who are new to the 1:1 implementation, but with the previous 6th graders that are accustomed to the 1:1 implementation from this first year study.

Much can be gleaned from the experiences of the teacher participants, "What worked?", "What didn't?" and "How can we plan accordingly?"

Based on the findings above, significant focus should be placed on proper training, technical support and reliable infrastructure, classroom management teaching strategies and use of Casper Suite Focus, and installation of the reported "best" iPad applications that aide engaged learning.

METHODS

For the purpose of this study, I took a phenomenological post-positivist approach. The participants of this study were the teachers and the phenomenon of study evaluated was iPad usage in the classroom.

Participants

I utilized a purposeful sampling with site and participation within three sixth grade classrooms at a small private catholic middle school located in Billings, Montana. The sampling size was three 6th grade teachers at the school, as the participants. The sampling participants were selected largely because of their access and participation in the experience where the 1:1 implementation occurred. Additionally, access was available since it is where I (as the researcher) teach.

Data Collection

I collected data through observations and through two sets of interviews. The second follow-up set up interviews served as a form of member-checking, provided the teachers an opportunity to read through my data collection and offer any additional pertinent information, and also provided opportunity for corrections or clarifications.

Validity

Purposeful validity was strengthened in this study through three main components: triangulation (grounding credibility), thick description (allowing transferability) and respondent validation (ensuring reliability).

SELECTED REFERENCES

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