

Action Research Project - Chapter 2: Literature Review

Carolyn Joyce Freitag

Drexel University

EDAM 528

LITERATURE REVIEW

Part I: An Introduction to the Problem

Currently, this researcher has designed tutoring sessions that should meet the needs of early readers. However, some of the students are still reluctant to engage in reading enough to develop the skills necessary to sustain independent reading. In *Research on Reading: A Cautionary Tale*, the researchers note that while direct instruction has its place in reading instruction, it is best to teach to each child's needs (Camilli & Wolfe, 2004). In addition, studies have found that time spent reading correlates with student reading scores. The more time spent reading, the more advanced the student's reading level (Gambrell, 2011; John T. Guthrie, 2004). Students will need to develop skills to read for the content area subjects as well as for pleasure, so it is important to employ an intervention that will turn the reluctant reader on to reading.

Since it has been this researchers experience that technology increases student engagement, employing a strategy that utilizes technology as well as a student's particular learner strengths would be ideal.

Part II: The Research Questions

The literature review will address the following questions:

- What does an engaged reader look like?
- How can the iPad be used to improve reading engagement?
- How can Howard Gardner's theory of multiple intelligences be used to improve reading engagement?

Part III: The Literature Review

The purpose of this study is to determine if student engagement in reading among a group of first and second grade students will improve with the use of iPad applications that accommodate their specific learner strengths. Therefore, this literature review will use books, previous research, and scholarly journal articles to explore historical and current studies pertaining to reading engagement, iPads, and multiple intelligences.

Reading Engagement

John T. Guthrie and Allan Wigfield were significant contributors to the study of reading engagement. They and their colleagues describe an engaged reader as one who is motivated and able to employ reading strategies in order to purposely engage with text (1997). Guthrie explains that engaged readers behave quite differently in the classroom than disengaged readers. Teachers can easily identify them, primarily by their “desires for learning through literacy” (2004, p. 1). Pinnell and Fountas expand on this even further when they explain that the motivation to read is something specific to each individual. Reading engagement can be achieved when a teacher is able to build on a reluctant reader’s intrinsic motivation to read (2009).

Since the focus of this study is improving my students’ reading engagement, it is important to find a reliable way of measuring reading engagement. Wigfield and Guthrie developed a Reading Engagement Index that was used in a study that they undertook to study engagement and its role in reading comprehension (2008). The students complete this questionnaire by rating each statement numerically. The rating scale was completed before and after the intervention. They explain that it was first used to measure the effectiveness of a professional development intervention on a group of fourth grade students (J. T. Guthrie, 2014).

LITERATURE REVIEW

In another study, the researcher modified the questionnaire for use with first graders and used it to measure the effectiveness of reading workshop on reading engagement (Elliott, 2012). This modified version uses the same questions, but instead of using a number rating for each statement, the researcher replaced them with happy and sad faces. As with Wigfield and Guthrie's Reading Engagement Index, the students rated the statements both before and after the interventions.

iPads

Even though the iPad was not introduced until the spring of 2010, there are several studies documenting its use in the classroom as an intervention. One such study explored student engagement in learning with and without iPads. The study sought to find out which types of activities led to transformative teaching and learning through self-reported student engagement surveys. With the self-surveys the students reported a higher level of emotional engagement with the iPads, but it did not increase behavioral engagement (Bloemsma, 2013).

A study documented in *The Reading Teacher* tells how a teacher was able to introduce 21st century technologies as well as meet her literacy goals. Over a three-week period, the classroom teacher integrated iPads into her fourth grade classroom along with print and digital literacy skills. She chose apps that would allow her students to reach their literacy goals using different approaches. Through this study, the teacher learned how to use iPads with her lessons. (Hutchison, Beschorner, & Schmidt-Crawford, 2012).

A third study grew out of a tutoring project for a pre-service teacher. The teacher researcher used an iPad as part of an intervention strategy for a 5th grade boy with ADHD who struggled with reading. Over a six-week period, the researcher developed lessons that incorporated apps or uploaded material that would engage the student in the learning process. The results of the

LITERATURE REVIEW

student's assessments show that he improved by one full year in 6 weeks and demonstrated an improved attitude toward learning. A six-month follow up revealed that the student was still making noticeable progress (McClanahan, Williams, Kennedy, & Tate, 2012).

Multiple Intelligences

As a developmental psychologist, Howard Gardner introduced his theory of multiple intelligences in 1983 hoping to challenge the idea of one form of intelligence. Recognizing the educational implications in this theory, educators embraced it.

In this 1989 study, Gardner examines how multiple intelligence has been put into practice in three different schools, each targeting a different age group and focus of intelligence. The researcher and his colleagues had been attempting to create assessment instruments to judge the effectiveness of the programs. At the time of this report, only one of them had been field-tested. They were attempting to measure intelligences beyond the verbal linguistic intelligences that had previously been studied. However, the research and the development of the assessment instruments proved to be costly as well as time consuming. Although, they did have positive results that supported some of the major claims of the theory: young children do exhibit different strengths and weaknesses (Gardner & Hatch, 1989).

There have been several books published over the years to demonstrate how teachers can use multiple intelligences to differentiate instruction in their classrooms. One worth mentioning is *The Multiple Intelligences of Reading and Writing: Making the Words Come Alive*. In addition to providing an overview of Gardner's theory, the author provides hundreds of ideas and resources for differentiating instruction throughout the curriculum to cater to a student's specific strengths (Armstrong, 2003).

LITERATURE REVIEW

In a very recent study, the author, a university professor, informally surveyed a group of k-12 teachers that were enrolled in graduate education courses. With this survey she hoped to find out their backgrounds in multiple intelligence theory as well as if and how they applied this theory to their own teaching and if they felt the course on multiple intelligences was relevant and worth taking. This survey determined that the teachers in this study valued multiple intelligences theory as a way of differentiating instruction to meet the needs of their students. They were able to address the different ways that their students learned and plan lessons that utilized this information. They were able to address the different ways that their students learned best (Adcock, 2014).

Part IV: Summary

Since the 2010 introduction of iPads, there have been several studies documenting their effectiveness as a learning tool (Garwood, 2013; Hutchison et al., 2012; Kolarcik, 2013; McClanahan et al., 2012; Swanson, 2013). Likewise, differentiating instruction with multiple intelligences has been researched (Gardner & Hatch, 1989; Shaffer, 2001; Adcock, 2014).

McKenzie has written several books on differentiating instructional technologies using results of multiple intelligence surveys (McKenzie, 2004, 2005, 2012).

There has been little mention in literature of using iPad apps and multiple intelligence interventions together. Those that do employ both interventions were not focused on reading engagement (Collaco, 2013; Gillispie, 2013).

The project outcomes for this action research would be to match iPad apps to each student's dominant intelligences as measured by a multiple intelligence survey. These iPad apps will be incorporated into lesson plans for each of the six students in the 5-week study. The results will

LITERATURE REVIEW

be evaluated by comparing pre and post study reading engagement surveys and observation rubrics.

Teachers understand the importance of teaching to the needs of each student. Through this action research project, this researcher hopes to build a catalog of lessons that utilize the use of the iPad and learner specific apps to share with the teaching community, so that they will have tools not only to inspire the reluctant reader, but also to create lifelong learners.

Works Cited

- Adcock, P. K. (2014). The Longevity of Multiple Intelligence Theory in Education. *Delta Kappa Gamma Bulletin*, 80(4), 50-57.
- Armstrong, T. (2003). *The multiple intelligences of reading and writing : Making the words come alive*. Alexandria, Va: Association for Supervision and Curriculum Development.
- Bloemsma, M. S. (2013). *Student engagement, 21st century skills, and how the iPad is*. (Dissertation/Thesis), ProQuest Dissertations Publishing.
- Camilli, G., & Wolfe, P. (2004). Research on reading: A cautionary tale. *Educational Leadership*, 61(6), 26-29.
- Collaco, L. (2013). *Discovering the intersections of multiple intelligences and universal design with iPad applications*. (3587236 Ed.D.), Saint Louis University, Ann Arbor. ProQuest Dissertations & Theses Full Text database.
- Elliott, A. E. (2012). *Effects on first graders' independent reading engagement using readers' workshop*. (1529241 M.A.T.), Saint Mary's College of California, Ann Arbor. ProQuest Dissertations & Theses Full Text database.
- Gambrell, L. B. (2011). Seven rules of engagement: What's most important to know about motivation to read. *The Reading Teacher*, 65(3), 172-178. doi: 10.1002/trtr.01024
- Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school: Educational implications of the theory of multiple intelligences. *Educational Researcher*, 18(8), 4-10. doi: 10.2307/1176460
- Garwood, J. E. (2013). *One-to-one iPads in the elementary classroom: Measuring the impact on student engagement, instructional practices, and teacher perception*. (3608079 Ed.D.), Western Illinois University, Ann Arbor. ProQuest Dissertations & Theses Full Text database.
- Gillispie, M. (2013). *From notepad to iPad : Using apps and web tools to engage a new generation of students*. Florence, KY, USA: Taylor and Francis.
- Guthrie, J. T. (2004). Teaching for literacy engagement. *Journal of Literacy Research*, 36(1), 1-29. doi: 10.1207/s15548430jlr3601_2
- Guthrie, J. T. (2014). Reading Engagement Index.
- Guthrie, J. T., & Wigfield, A. (1997). *Reading engagement: Motivating readers through integrated instruction*. Newark, Del: International Reading Association.
- Hutchison, A., Beschoner, B., & Schmidt-Crawford, D. (2012). Exploring the use of the iPad for literacy learning. *The Reading Teacher*, 66(1), 15-23. doi: 10.1002/trtr.01090
- Kolarcik, T. N. (2013). *Implementation of Apple's iPad as an Instructional Tool in the Elementary Language Arts Classroom: A Phenomenological Case Study*. (3584651 Ph.D.), Robert Morris University, Ann Arbor. ProQuest Dissertations & Theses Full Text database.

LITERATURE REVIEW

- McClanahan, B., Williams, K., Kennedy, E., & Tate, S. (2012). A breakthrough for Josh: How use of an iPad facilitated reading improvement. *TechTrends*, 56(3), 20-28.
- McKenzie, W. (2004). Standards-based lessons for tech-savvy students: A multiple intelligences approach (pp. 126). Worthington, OH: Linworth Publishing Incorporated.
- McKenzie, W. (2005). Technology and multiple intelligences (pp. 31-43). Eugene, OR: International Society for Technology in Education.
- McKenzie, W. (2012). *Intelligence quest: project-based learning and multiple intelligences*. Eugene, Oregon: International Society for Technology in Education.
- Pinnell, G. S., & Fountas, I. C. (2009). *When readers struggle: Teaching that works*. Portsmouth, NH: Heinemann.
- Swanson, L. C. (2013). *Impact of iPads on reading fluency in a sixth-grade reading classroom*. (1523827 M.S.), Southwest Minnesota State University, Ann Arbor. ProQuest Dissertations & Theses Full Text database.
- Wigfield, A., Guthrie, J. T., Perencevich, K. C., Taboada, A., Klauda, S. L., McRae, A., & Barbosa, P. (2008). Role of reading engagement in mediating effects of reading comprehension instruction on reading outcomes. *Psychology in the Schools*, 45(5), 432-445. doi: 10.1002/pits.20307