

Title of Study: *Evaluating the Effectiveness of Student-Created Digital Portfolios in Creating a Culture of Self-Efficacy in Kindergarten Classrooms*

Dates of Study: 2018-2019

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Purpose of the Action Research: *The purpose of this action research project is to assess the efficacy of implementing the Seesaw app into a kindergarten classroom to improve student mastery of Common Core Math and English Language Arts standards and increase student independence in regularly reflecting on and sharing out new knowledge.*

Research Question/Hypothesis: *In what ways do student-centered digital portfolios increase engagement and self-efficacy? Will consistently utilized digital portfolios through the Seesaw app change the learning climate in a kindergarten classroom?*

The Existing Need: *In the South Coastal Unified School District, parents and teachers alike have concerns over the effective and purposeful usage of technology in the classroom. One of the few assets we have in a school is time, and wasting this resource on “drill and kill” worksheets or digital apps camouflaged as educational, is a disservice to our students. The problem is that readily available digital learning tools are not presently applied to kindergarten environments in my school district.*

Research Connection: *The literature review explored different pedagogical approaches to developing self-efficacy in kindergarten students with a focus on digital portfolios. The research included a discussion of the constructivist learning theory of Maria Montessori, iPads, technology-mediated immediate feedback, and the TPACK model for technology integration. The literature review allowed for a study of the origins, methodology, risk factors, and considerations in pursuing a systematic implementation of digital portfolios in kindergarten classroom environments. The research indicates that while technology may be an invaluable resource in school applications, its efficacy relies almost entirely on a teacher’s ability to curate appropriate applications and implement them purposefully. This literature review also justified the need for additional research into digital portfolios through the Seesaw app, building upon the knowledge base of previous related literature, as no conclusive study could be found with a singular focus.*

Participants: *Five kindergarten classes with 22 total students who attend a public elementary school*

Sex: *12 males and 10 females*

Grade: *Kindergarten*

Intervention: *The intervention will take place over a six week period in the spring semester. As the intervention is dependent on student understanding of the Seesaw iPad app, I will provide four consecutive mini-lessons, once a week for the first month of the intervention wherein I instruct students in the requisite skills to utilize the app for a digital portfolio. The mini-lessons will follow the progression of creating your account and logging in, taking photos and adding voice, introduction to the drawing tool, and Wow Work. In addition to these mini-lessons, the classroom teacher will provide regular reinforcement to the students. The intervention will involve establishing a Seesaw space in the classroom complete with a portable tote of six iPads with the Seesaw app preloaded and two copies of the class QR code posted in easily accessible locations to facilitate student logins. Throughout the intervention, both the classroom teacher and myself will hold the expectation that students will add individualized content to their Seesaw digital portfolios at least twice a week, with a minimum of one English Language Arts-related post and one math-related post.*

Results: *The data support both intellectual and socio-emotional growth throughout the duration of the intervention. Much of the literature I summarized in Section 2: Review of Literature extol the merits of technology as an incredible classroom tool. While comparing the student posts at the beginning of the intervention to the end, clear indicators of growth are evident. As my data shows, technology may not be the only answer to the student achievement gap starting in kindergarten, but it may help close it.*

Conclusions: *The results of my action research study clearly demonstrated the efficacy of implementing the Seesaw app in a kindergarten class to build self-efficacy. Students were engaged throughout the intervention and its component mini-lessons, and started transitioning from content consumers to content creators. Implications for me primarily include a resolute justification for my role as a Teacher on Special Assignment (TOSA) Technology Coach. The data support the benefits touted in both research and my daily practice that technology not only helps, but does so in profound ways.*

Recommendations: *Future research will include repeating the intervention with fidelity in additional kindergarten classrooms through the district. Word travels fast in small districts, and given the perceived success of this intervention, several other kindergarten teachers have contacted me to work with them in implementing the Seesaw app. I would also like to see a classroom begin the year with the Seesaw center established in order to better analyze the effects of a year-long application of Seesaw, including the use of its parent portal feature, wherein parents may access all student content and respond individually. Additionally, A question for further inquiry is, should a teacher implement this for an entire school year, will students fatigue of using the app therefore negating its aggregate effects of building self-efficacy and 21st century skills?*