Running Head: REFUELING STALLED OUT 1:1 INITIATIVES 1

Back on the Road to Success: Refueling stalled out 1:1 Initiatives

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REFUELING STALLED OUT 1:1 INITIATIVES 2

Abstract

This paper explores five articles related to the factors needed to implement and sustain district wide 1:1 initiatives. The focus is on schools who have implemented 1:1 technologies consecutively for two or more years. Often, these initiatives start off with a bang, but quickly find efforts to sustain driving forces stalling out. The articles address the roles of campus stakeholders throughout the implementation process, the common pitfalls contributing to an initiatives lack of success and suggestions for continued improvement of 1:1 initiatives at the secondary level.

REFUELING STALLED OUT 1:1 INITIATIVES 3

Back on the Road to Success: Refueling stalled out 1:1 Initiatives

 For campus administrators, the beginning of a new school year brings with it a range of emotions. Feelings of eagerness mixed with anxiousness often surround a campus as everyone awaits the announcement of the schoolwide initiatives the campus will undertake. This undertaking is not always welcomed with open arms as faculty and staff navigate their way through the “voluntary/mandatory” aspects of the initiatives. Getting faculty and staff to understand the differences in a program versus a system can be somewhat challenging. Perhaps the easiest way campuses can prepare the mindset for implementing a new initiative is to define a program as something that tends to go away after time and a system is something that is here to stay. This understanding paves a smooth way for implementing most campus wide initiatives, especially those involving 1:1 technologies.

 Stakeholders with a “program” mentality were often the first ones to spread 1:1 negativity by doing just enough to get by until the storm passes and then it is off to the next one, while those invested in the 1:1 “system” did everything in their power to sustain its drive. No matter the mentality of the stakeholders, 1:1 initiatives seemed to be stalling out at an alarming rate. Through a thorough review of related literature, I hope to shed some light on possible causes and solutions to this phenomenon plaguing many districts.

 Deccord (2015) recounts that in several conversations with campus administrators regarding their 1:1 initiatives, principals believe they have given the initiative everything it needs to be successful, yet, teachers are reluctant to get on board. It is interesting that the first level of blame

REFUELING STALLED OUT 1:1 INITIATIVES 4

from the principal tends to fall on the teacher. Deccord (2015) goes on to state all of the positives in place for a successful 1:1 roll-out, such as, every student and teacher has a device, a stable wi-fi network with filtering capabilities for safe social media interaction along with instructional technology specialists readily available to assist the teachers. While principals give teachers much leeway in tech implementation, research still shows a need for explicit requirements and expectations for teacher use of the devices. Deccord (2015) found that if no one is tracking the hours of classroom time dedicated to technology integration, then chances are nothing is getting done. From an administrator stand point, what needs to happen for initiatives to succeed? Most principals surveyed claimed a shared well-defined vision for technology-aided teaching and learning is what sustains an initiatives success. Sharing such a vision can be a much needed catalyst for campus climate change.

 With a failing 1:1 initiative, it is easy to point to the device as the culprit. Issues such as charging, infrastructure capabilities and overall ruggedness of the device are definite problems in the hands teenagers and adults alike, but is it really the device that slows the initiative or is it a disconnect to using the device as a learning tool? Barseghian (2011) points to the importance of 1:1 initiatives staying true to learning as well as teaching by identifying three key technology trends for schools to look for in the near future. One up and coming trend is using technology as a means of collaboration. Through on-line collaboration, teachers and students are learning more from each other and in various ways than ever before. The rise of safe social media in the classroom opens many doors for teacher and student collaboration worldwide. Secondly, Barseghian (2011) attributes tech-powered classrooms as another connector of

REFUELING STALLED OUT 1:1 INITIATIVES 5

teaching and learning. From interactive tools such as, Voki, LiveMocha and VoiceThread to creating personal digital media and e-portfolios, teachers are better preparing students for real life situations by developing problem solving and critical thinking skills. Lastly, Barseghian (2011) credits blended learning with becoming the most significant new trend in educational technology. With so many ways to implement blended learning, Barseghian (2011) believes the best examples of blended learning programs involve teachers who use home-time online discussions and collaborative projects as fuel for content and discussion in the classroom.

 What do these trends mean for the entire learning community? Barseghian (2011) found that teacher’s roles are shifting from owners of information to facilitators and guides to learning, administrators are raising expectations for class time usage, students are more eager to participate in assignments involving technology and parents are becoming more globally aware of the support needed to foster their child’s 21st century skills.

 A study conducted by Market Intel Group for Edgenuity specifically identifies the teacher’s role in classroom technology integration. In the Teachers’ Dream Classroom survey, Edgenuity (2016) proposes to enrich the technology experience for classroom teachers by addressing the top three most important roles technology should play in the classroom. Edgenuity (2016) ranks them in order as, providing a variety of learning tools or modalities, making the learning experience more engaging, and diversifying the learning experience.

 This report was chosen for review due to its recent date of publication and thorough data analysis. The methodologies are concise and easy to understand in layman’s terms.

REFUELING STALLED OUT 1:1 INITIATIVES 6

 Although, the survey questions were directed towards middle school teachers (6-8) and high school teachers (9-12), the survey could be modified to represent grades below sixth that are 1:1. What can be done better to help teachers become more comfortable with technology in the classroom? According to the study, teachers identified the key elements needed to help achieve their dream classroom are more time in the school day to plan, research and collaborate, new and different strategies to engage students, such as blended learning, and better/more technology in the classroom. Of the teachers surveyed, only 16% of teachers give their school an ‘A’ grade for integrating technology into the classroom; over one-half grade their school with a ‘B’. With more schools going 1:1, future studies need to address why most teachers only give their 1:1 initiative a grade of “C” or worse.

 In a related article, McNeil (2016) indicates that thirty-one percent of teachers surveyed through Edgenuity gave their school a 'C,' 'D,' or 'F' grade. Almost half of teachers considered the technology they do have to be outdated. These results lead us to think that 1:1 initiatives are hindered more by the device rather than the teacher’s willingness to implement technology with fidelity. Contrary to this notion, McNeil (2016) goes on to state that despite billions of dollars spent on digital content and an influx of technology into their classrooms, evidence shows that teachers have been slow to integrate technology to transform instruction. Researchers have pointed out that access is no longer the main obstacle, but instead there are now issues like teachers lacking an understanding of how educational technology works, expanding teachers' knowledge of new technology-driven instructional practices, and school-based factors and

REFUELING STALLED OUT 1:1 INITIATIVES 7

problematic policies. These ideas present a small gap in research due to teachers placing blame on the device and device proponents blaming the teacher for lack of buy-in to the initiative. Perhaps, closing this gap lies somewhere in professional development. Various research has indicated that the effectiveness of professional development has a direct impact on the success of a one-to-one program (Sauers & Mcleod, 2012).

 Sauers & Mcleod (2012) summarize the factors needed for 1:1 success by advising that teachers and administrators should carefully consider the outcomes that they would like to see and then design their implementation, training, and assessment efforts accordingly. The research presented in this review thus far, aligns nicely with the advice of Sauers & Mcleod. The articles addressed the roles of campus stakeholders throughout the implementation process, the common pitfalls contributing to an initiatives lack of success and suggestions for continued improvement of 1:1 initiatives at the secondary level. For many schools experiencing a stalled out 1:1 initiative, getting back on the road to success is not as hard as it seems. A collective effort and commitment to always connect technology to learning from all stakeholders will add a little fuel to the technology tank. In no time, 1:1 initiatives will be back up and running smoothly.

 Once back on the road to 1:1 success, it helps to know in what direction you are headed. Most classroom technology integration research points to the teacher as the make or break factor in an initiative. Teachers have the power to continuously connect technology to learning, taking what they already do in the classroom and making it more intentional. My earlier hypothesis was if more teachers used their district device for personal and professional productivity, then more students would do the same. This is a great educated guess, but something is still

REFUELING STALLED OUT 1:1 INITIATIVES 8

missing…the connection to learning. When a 1:1 initiative gets back on track, you can usually attribute that to an increase in device usage. Congratulations! Teachers and students are using their devices more, but are they using them with the right intentions? Is there a connection to learning? Grinager (2006) argues that today’s students, surrounded by digital technology since infancy, differ fundamentally from previous generations of learners the U.S. educational system was designed to teach. This notion implies that technology in education at all levels uses the tools students are accustomed to using outside the classroom, further engaging students in the learning process. Grinager (2006) goes on to explain the impact of technology on today’s learner versus the learner of yester year by distinguishing the differences between a “digital native” and a “digital immigrant”. Grinager (2006) defines “Digital Natives and Digital Immigrants” as the difference between young people who have spent their lives in a digital world and past generations who have incrementally adjusted to the proliferation of technology in society. The current generation of students who are proceeding through K-12 education are digital natives, and some argue that, by spending their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and other tools and devices of the digital age, they are fundamentally different from those who have adapted to use of these tools over time. Digital natives are accustomed to receiving information rapidly; can parallel process and multi-task; prefer viewing graphics before text; and function best when networked. Grinager (2006).

 Evidence of the methods in which a digital native learns brings up a unique question. Is the current U.S. education system designed to effectively teach digital natives? Educators may need

REFUELING STALLED OUT 1:1 INITIATIVES 9

to consider adjusting both teaching methodology and content to better engage digital natives in learning.

 De Bruyckere, Kirschner and Hulshof (2016), address five popular myths surrounding “digital natives” and present the research findings that dispel them. **Myth 1: New technology is causing a revolution in education.** Research shows that simply giving out devices to students and teachers has a horrible track record for 1:1 success, but using the technology tools to connect teachers and students to learning makes all the difference. **Myth 2: The Internet belongs in the classroom because it is part of the personal world experienced by children.**  Research further noted that being motivated because of the medium did not help learning as much as the chosen pedagogical approach. **Myth 3: Today’s “digital natives” are a new generation who want a new style of education.** The term digital native coined in 2001 as a means of classifying the technologically innate has evolved over the last 15 years into more of a prediction rather than a substantiated claim. During this recent predicted evolution, researchers concluded that students use a large quantity and variety of technologies for communicating, learning, staying connected with their friends, and engaging with the world around them. But they are using them primarily for “personal empowerment and entertainment.” More importantly, researchers describe that the students are “not always digitally literate in using technology to support their learning. This is particularly evident when it comes to student use of technology as consumers of content rather than creators of content specifically for academic purposes” De Bruyckere, Kirschner and Hulshof (2016). **Myth 4: The Internet makes us dumber.** The authors cite findings from a recent review article in *The Neuroscientist* that paints a disturbing picture of what is happening

REFUELING STALLED OUT 1:1 INITIATIVES 10

to digital natives: *Growing up with Internet technologies, “Digital Natives” gravitate toward “shallow” information processing behaviors characterized by rapid attention shifting and reduced deliberations. They engage in increased multitasking behaviors that are linked to increased distractibility and poor executive control abilities. Digital natives also exhibit higher prevalence of Internet-related addictive behaviors that reflect altered reward-processing and self-control mechanisms. Recent neuroimaging investigations have suggested associations between these Internet-related cognitive impacts and structural changes in the brain.* **Myth 5: Young people don’t read anymore.** Trends show that when people think that young people today read less, it’s not about reading online content or text messages, it’s about reading books. De Bruyckere, Kirschner and Hulshof (2016). 1:1 teachers face a unique challenge in finding the balance between traditional methods and technology driven literacy practices. De Bruyckere, Kirschner and Hulshof (2016) conclude by suggesting teachers, administrators, and politicians must learn to become knowledgeable and aware consumers being ever mindful that if something sounds too good to be true, it probably is.

 The shift towards digital learning is not only happening in grades K-12. More higher education institutions are recognizing the influx of undergrads coming to college with the 21st century skills needed to be successful. Kole (2016) writes that for college and graduate programs, technology has created a completely new platform for learning – online. Not only do online options foster innovation, resourcefulness, and a collaborative approach to learning, but they position graduates for a seamless transition into a high-tech workplace. Kole (2016) insists that advances in technology have redefined the learning process. So much so, that technological

REFUELING STALLED OUT 1:1 INITIATIVES 11

advances require potential employees to have a specific technological skillset. What better way to prepare for a tech savvy job than with a tech savvy education? Kole (2016).

 The benefits of a tech savvy education do not stop at graduate or post graduate levels. Today’s medical institutions are also capitalizing on the possibilities of what on-line and blended learning can do for its medical students, nurses and doctors. Dankbaar and de Jong (2014) claim that for health care and medical education, with its growing demands on physicians competencies and decreasing supply of hospital-based patients, more flexible, scalable and engaging learning opportunities are essential to meet the new demands. Traditional models of classroom-based learning as dominant training model no longer meet the current needs of health care institutions. The role of technology-enhanced learning in health education has grown rapidly; over 90 % of medical schools in the USA and Canada use online course materials for medical education. Dankbaar and de Jong (2014)

 Whether it be from Kindergarten to Medical school, they is no denying that technology in education is here to stay. However, Ecoff (2015) indicates that before moving forward with technology integration, every school must first have a great, robust and adaptable academic curriculum. Only then can you begin to find ways in which technology can help to elevate the problems. It’s important to never force fit technology – if it’s not supplementing what’s already happening in the classroom or a teacher’s goals for the school year, the addition will become more of a barrier to learning than a catalyst Ecoff (2015). Changing the way teachers connect technology to learning promotes sustainable and positive growth for any stalled out 1:1 initiative continuing it down the road to success.

REFUELING STALLED OUT 1:1 INITIATIVES 12

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